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Research on the training of medical students receiving pediatric basic life support (PBLS) training, provided by either peer-instructors (students) or expert-instructors (pediatrician)

Submission date
26/11/2019

Recruitment status
No longer recruiting

Registration date
12/12/2019

Overall study status
Completed

Last Edited
17/11/2020

Condition category
Other

[_] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

Plain English summary of protocol

Background and study aims
It is known that healthcare professionals, who are skilled in resuscitation techniques, may fail to apply these techniques successfully unless they have an adequately strong belief in their own capabilities. The present study was conceptualized with the idea of potentially combining the advantages of peer teaching with improved self-efficacy.
Peer-led basic life support training in medical school may be an effective and valued way of teaching medical students, but yet no research has been conducted to evaluate the effect on the self-efficacy of medical students. High self-efficacy stimulates healthcare professionals to initiate and continue basic life support when necessary despite challenges.

Who can participate?
Students in their clinical rotation before entering the pediatric rotation at Radboud UMC.

What does the study involve?
Medical students receive pediatric basic life support (PBLS) training, provided by either peer-instructors (student instructors) or expert-instructors (pediatricians).

What are the possible benefits and risks of participating?
None

Where is the study run from?
Radboud University Medical Center, The Netherlands

When is the study starting and how long is it expected to run for?
January 2015 to January 2016

Who is funding the study?
Radboud University Medical Center, The Netherlands

Who is the main contact?
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Contact information

Type(s)
Public

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Additional identifiers

Clinical Trials Information System (CTIS)
Nil known

ClinicalTrials.gov (NCT)
Nil known

Protocol serial number
Radboudumc01

Study information

Scientific Title
Peer-led pediatric resuscitation training: effects on self-efficacy and skill performance

Study objectives
The primary aim of the study is to compare the PBLS-related self-efficacy of medical students who were trained by either expert-instructors (pediatricians) or peer-instructors. We will also compare the skill performance of these two groups by assessing their pass rates on a simulated PBLS exam.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Confirmation that no ethical approval is required by Radboud UMC, because the study does not fall within the remit of the Medical Research Involving Human Subjects Act (WMO), received 12 /12/2019.

Study design
Randomized controlled trial

Primary study design
Interventional

Study type(s)
Treatment

Health condition(s) or problem(s) studied
Training of pediatric basic life support

Interventions
Medical students receive pediatric basic life support (PBLS) training, provided by either peer-instructors (student instructors) or expert-instructors (pediatricians). The students are randomly assigned (using an independent statistician) to the peer-instructor group or expert-instructor group. All students receive two hours of PBLS training in groups of maximum 15 students. Directly after this training, self-efficacy is assessed with a newly developed questionnaire, based on a validated scoring tool. A week after each training session, students perform a practical PBLS exam and complete another questionnaire to evaluate skill performance and self-efficacy, respectively.

Intervention Type
Behavioural

Primary outcome(s)
Score on practical examination in pediatric basic life support, one week after the training session.

Key secondary outcome(s))
Self-efficacy and skill performance regarding pediatric resuscitation in general and compressions and ventilations in particular, measured by questionnaire directly after the training session.

Completion date
31/12/2016

Eligibility

Key inclusion criteria
Students in their clinical rotation before entering the pediatric rotation

Participant type(s)
Health professional

Healthy volunteers allowed
No

Age group
Adult

Sex
All

Total final enrolment
213

Key exclusion criteria
Does not meet inclusion criteria

Date of first enrolment
01/01/2015

Date of final enrolment
01/01/2016

Locations

Countries of recruitment
Netherlands

Study participating centre
Radboud University Medical Centre
PO Box 9101
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6500 HB

Sponsor information

Organisation
Radboud University Medical Center

ROR
https://ror.org/05wg1m734

Funder(s)

Funder type
Hospital/treatment centre

Funder Name
Radboud Universitair Medisch Centrum

Alternative Name(s)
Radboudumc, Radboud University Medical Center, Radboud University Nijmegen Medical Center, RUNMC

Funding Body Type
Private sector organisation

Funding Body Subtype
Universities (academic only)

Location
Netherlands

Results and Publications

Individual participant data (IPD) sharing plan
The datasets generated during and/or analysed during the current study will be stored in a non-publically available repository.

IPD sharing plan summary
Stored in repository

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	13/11/2020	17/11/2020	Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes