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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?
Edward Tan
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# Contact information

### Type(s)
Public

### Contact name
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# Additional identifiers

### 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.

### Primary study design
Interventional

### Study design
Randomized controlled trial

### 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
Nijmegen
Netherlands
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 |