

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

<b>Submission date</b> 26/11/2019	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 12/12/2019	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 17/11/2020	<b>Condition category</b> Other	<input type="checkbox"/> 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  
edward.tan@radboudumc.nl

## Contact information

**Type(s)**  
Public

**Contact name**  
Mr Edward Tan

**ORCID ID**  
<http://orcid.org/0000-0002-9978-249X>

**Contact details**  
Radboud University Nijmegen Medical Centre  
Department of Emergency Medicine internal postal code 619  
PO Box 9101  
Nijmegen  
Netherlands  
6500 HB  
+31 243610492  
edward.tan@radboudumc.nl

## Additional identifiers

**EudraCT/CTIS number**  
Nil known

**IRAS number**

**ClinicalTrials.gov number**  
Nil known

**Secondary identifying numbers**  
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

**Secondary study design**

Randomised controlled trial

**Study setting(s)**

Hospital

**Study type(s)**

Treatment

**Participant information sheet**

No participant information sheet available.

**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 measure**

Score on practical examination in pediatric basic life support, one week after the training session.

**Secondary outcome measures**

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

**Overall study start date**

01/01/2013

**Completion date**

31/12/2016

## Eligibility

**Key inclusion criteria**

Students in their clinical rotation before entering the pediatric rotation

**Participant type(s)**

Health professional

**Age group**

Adult

**Sex**

Both

**Target number of participants**

200

**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

## Sponsor details

Department of Surgery

PO Box 9101

Nijmegen

Netherlands

6500 HB

+31 243619908

edward.tan@radboudumc.nl

## Sponsor type

Hospital/treatment centre

## Website

<http://www.umcn.nl>

## 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

## Publication and dissemination plan

Submit for publication in medical journal.

## Intention to publish date

01/01/2020

## 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?
<a href="#">Results article</a>	results	13/11/2020	17/11/2020	Yes	No