# 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	Recruitment status No longer recruiting	<ul><li>Prospectively registered</li></ul>		
26/11/2019		☐ Protocol		
Registration date	Overall study status	Statistical analysis plan		
12/12/2019	Completed	[X] Results		
Last Edited	Condition category	[] Individual participant data		
17/11/2020	Other			

## 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

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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 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
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes