

Single rescuer basic life support by lifeboat crewmembers

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What is the influence of protective gear on the performance of basic life support (BLS) by KNRM lifeboat crewmembers during a manikin simulation training

Ethische beoordeling	Positief advies
Status	Werving gestopt
Type aandoening	-
Onderzoekstype	Interventie onderzoek

Samenvatting

ID

NL-OMON21704

Bron

Nationaal Trial Register

Verkorte titel

KNMR-BLS

Aandoening

Basic life support, KNMR lifeboat, protective gear

Basic life support, KNMR reddingsboot, beschermende kleding

Ondersteuning

Primaire sponsor: University Medical Center Groningen, department of Anesthesiology

Overige ondersteuning: fund=initiator=sponsor

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

mean compression depth

mean compression rate

percentage of correct compression depth

percentage of not leaning on thorax

percentage of correct hand placement

ventilation frequency

mean ventilation volume of rescue breathing

hands off time.

Toelichting onderzoek

Achtergrond van het onderzoek

Lifeboat crews play an important role in the chain of survival for both drowning victims as well as non-drowning victims in cardiac arrest rescued from water.¹⁻³ As for all cardiac arrests, early initiation of high quality basic life support (BLS) is a major part of the chain of survival for these victims.⁴⁻⁶ The resuscitation protocol for drowning victims only deviates from the standard cardiac arrest protocol by advising the rescuer to start with ventilations instead of manual compressions.⁷ Several factors impact on the quality of BLS. In addition to factors such as fatigue and inadequate or decayed knowledge and skills,⁸⁻¹² the challenging and austere environment on board a rescue boat, can influence performance of lifeboat crews performing BLS.

The effects of wearing protective gear have been investigated for fire-fighters and show that work whilst wearing fire-fighter's protective gear consumes considerable extra energy.²¹ It has also been demonstrated that chest compressions are less effective when the person performing the compressions is wearing personal protection equipment such as that used during chemical, biological, radiation or nuclear incidents.²² These circumstances differ from the working environment lifeboat crews encounter. However, it does suggest that studying the effects of protective gear on the performance of resuscitation is necessary and valuable.

Doel van het onderzoek

What is the influence of protective gear on the performance of basic life support (BLS) by KNRM lifeboat crewmembers during a manikin simulation training

Onderzoeksopzet

not applicable

Onderzoeksproduct en/of interventie

Performing basic life support while wearing protective gear vs performing basic life support

not wearing protective gear.

Contactpersonen

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Wetenschappelijk

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- Being an active lifeboat crew member (including trainees/aspirants) of KNMR
- Age 18 years or older
- Informed consent provided.
- Passed BLS refresher course

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

- KNRM members who are not part of a lifeboat crew (office members, inspectors, board, etc.)
- (possible) pregnancy

- Physical restraints

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	Gerandomiseerd
Blinding:	Open / niet geblindeerd
Controle:	Placebo

Deelname

Nederland	
Status:	Werving gestopt
(Verwachte) startdatum:	10-10-2018
Aantal proefpersonen:	60
Type:	Werkelijke startdatum

Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

Wordt de data na het onderzoek gedeeld: Nog niet bepaald

Ethische beoordeling

Positief advies	
Datum:	10-10-2018
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL7324
NTR-old	NTR7540
Ander register	UMCG Research Register number : 201800216

Resultaten

Samenvatting resultaten

in progress