Implementation effectiveness of supporting ICUs

| Submission date | Recruitment status | Prospectively registered |
|-------------------|----------------------|--|
| 08/11/2016 | No longer recruiting | Protocol |
| Registration date | Overall study status | Statistical analysis plan |
| 14/11/2016 | Completed | Results |
| Last Edited | Condition category | Individual participant data |
| 10/11/2016 | Other | Record updated in last year |

Plain English summary of protocol

Background and study aims

Approximately 8% of all intensive care unit (ICU) patients die in the ICU, and 80% of these deaths occur after withholding or withdrawing the life sustaining treatment. The care given before, during and after ending the life sustaining treatment is called end-of-life care. End-of-life care (EOLC) is s complex care pathway, which involves many different professionals. This includes ICU nurses, however it is not yet clear what the role and responsibilities of ICU nurses are during EOLC. Therefore, a Dutch guideline was developed called 'End-of-life care in the ICU, nursing care'. This guideline could help ICU nurses in their care during EOLC. Before this guideline can be followed, it needs to be implemented (put in place). This can be a difficult process, and so a possible way to support the implementation is to train those who are going to use it. The aim of this study is to find out whether supporting the implementation of this guideline can better help nurses to follow it.

Who can participate?

ICU nurses working at participating medical centres who are experienced with EOLC and family members of patients who died 4-5 weeks ago.

What does the study involve?

Participating ICUs are randomly allocated to one of two groups. ICU nurses in the first group take part in a four day training programme in which they are trained to implement the guildeline. This consists of a combination of lectures and workshops. ICUs in the second group are left to implement the guideline by themselves. At the start of the study and then after six and nine months, two ICU nurses from each ICU are interviewed about how well they are able to follow the guideline. In addition, family members of patients who died 4-5 weeks ago are also interviewed and complete a number of questionnaires about their experiences of end of life care in the ICU.

What are the possible benefits and risks of participating? There are no direct benefits or risks involved for those participating. Where is the study run from?

The study is run from HAN University of Applied Sciences and takes place in 13 medical centres (Netherlands)

When is the study starting and how long is it expected to run for? June 2014 to December 2015

Who is funding the study?

Foundation Innovation Alliance, Regional Attention and Action for Knowledge circulation (Netherlands)

Who is the main contact? Dr Lilian Vloet lilian.vloet@han.nl

Contact information

Type(s)

Public

Contact name

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers 2013-15-16p

Study information

Scientific Title

Effectiveness of supporting intensive care units on implementing the guideline 'End-of-life care in the intensive care unit, nursing care': a cluster randomised controlled trial

Study objectives

Supporting ICUs leads to better adherence of the guidelines for end-of-life care.

Ethics approval required

Old ethics approval format

Ethics approval(s)

CMO Radboudumc Nijmegen, 19/02/20195, ref: 2014-1363

Study design

Cluster randomised controlled trial

Primary study design

Interventional

Secondary study design

Cluster randomised trial

Study setting(s)

Hospital

Study type(s)

Other

Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet in Dutch

Health condition(s) or problem(s) studied

Nursing guidelines

Interventions

Participating ICUs are randomly allocated to two groups (manual generated randomization with random allocation concealment), without stratification of ICU size.

Both the intervention and control groups made their own implementation plan and implemented the guideline on their own ICU, with a project team.

Intervention group: ICUs are supported by a training program focusing on implementation processes and strategies and sharing experiences and best practices from other intervention sites. Training takes place over 4 days and consists of a combination of lectures and workshops which cover:

- Day 1: Development of specific implementation plan and context analysis
- Day 2: Context analysis and Implementation strategies
- Day 3: Implementation strategies and Implementation plan
- Day 4: Implementation plan and Embedding and monitoring

Control group: ICUs receive no support during the implementation and have to implement the guideline by themselves without supervision from the research group.

Follow up for all ICUs involves interviewing two ICU nurses from each participating ICU after 6 and 9 months and interviewing relatives of patients who have died 4-5 weeks previously at 9 months.

Intervention Type

Other

Primary outcome measure

Adherence to guidelines for end-of-life care is measured by a questionnaire for ICU nurses applying 25 recommendations of the guideline at baseline, and after 6 and 9 months.

Secondary outcome measures

Experiences of ICU nurses and family of deceased patients are measured the Quality of Death and Dying (QDD) and Consumer Quality Index (CQI-R), relatives in the ICU (LAIZ 2016) questionnaires at 9 months.

Overall study start date

01/06/2014

Completion date

01/12/2015

Eligibility

Key inclusion criteria

Nurses:

- 1. Working in the ICU
- 2. Graduated as a ICU nurse
- 3. Dutch speaking
- 4. Experience with EOLC in the ICU

Family of deceased ICU patients:

- 1. Dutch speaking
- 2. Aged 18 years and over
- 3. 4-5 weeks after death of the patient
- 3. Contact person of the deceased patient

Participant type(s)

Mixed

Age group

Adult

Lower age limit

18 Years

Sex

Both

Target number of participants

11 clusters, 1500 ICU nurses, 60 family members

Key exclusion criteria

Nurses:

No experience with End-of-life care.

Family:

Family of patients who were organ donors.

Date of first enrolment

01/10/2014

Date of final enrolment

30/11/2014

Locations

Countries of recruitment

Netherlands

Study participating centre HAN University of Applied Sciences

Research department Emergency and Critical Care Kapittelweg 33 Nijmegen Netherlands 6525 EN

Study participating centre Radboud University Nijmegen Medical Centre

Geert Grooteplein Zuid 10 Nijmegen Netherlands 6525 GA

Study participating centre Medisch Spectrum Twente

Koningsplein 1 Enschede Netherlands 7512 KZ

Study participating centre Slingeland Ziekenhuis

Kruisbergseweg 25 Doetinchem Netherlands 7009 BL

Study participating centre Ommelander Ziekenhuis Groep Netherlands 9930 RA

Study participating centre Treant Zorggroep

Dr. G.H. Amshoffweg 1 Hoogeveen Netherlands 7909 AA

Study participating centre Nij Smellinghe

Compagnonsplein 1 Drachten Netherlands 9202 NN

Study participating centre Antonius Ziekenhuis

Bolswarderbaan 1 Sneek Netherlands 8601 ZK

Study participating centre Westfriesgasthuis

Maelsonstraat 3 Hoorn Netherlands 1624 NP

Study participating centre Antoni van Leeuwenhoek

Plesmanlaan 121 Amsterdam Netherlands 1066 CX

Study participating centre Meander MC

Maatweg 3 Amersfoort Netherlands 3813 TZ

Study participating centre Alrijne Ziekenhuis Leiderdorp

Simon Smitweg 1 Leiderdorp Netherlands 2353 GA

Study participating centre Albert Schweitzer Ziekenhuis

Albert Schweitzerplaats 25 Dordrecht Netherlands 3318 AT

Study participating centre Amphia Ziekenhuis

Langendijk 75 Breda Netherlands 4819 EV

Sponsor information

Organisation

HAN University of Applied Sciences

Sponsor details

Research Department Emergency and Critical Care Nijmegen Netherlands 6503 GL

Sponsor type

University/education

Website

www.laiz.nl

ROR

https://ror.org/0500gea42

Funder(s)

Funder type

Research organisation

Funder Name

Foundation Innovation Alliance, Regional Attention and Action for Knowledge circulation

Results and Publications

Publication and dissemination plan

Planned publication of study results in a peer-reviewed international journal, focusing on nursing sciences (journal of advanced nursing).

Intention to publish date

31/12/2016

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are/will be available upon request from Lilian Vloet (lilian.vloet@han.nl)

IPD sharing plan summary

Available on request