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Nosocomial infection educational module for nurses

Submission date
19/05/2017

Recruitment status
No longer recruiting

Registration date
23/06/2017

Overall study status
Completed

Last Edited
27/10/2022

Condition category
Infections and Infestations

[_] Prospectively registered
[X] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

Plain English summary of protocol
Background and study aims
Nosocomial infections are infections that are contracted from being in a hospital. Infection can be easily spread by healthcare staff to different patients. Nosocomial infection is a major global health problem, and is considered as one of the leading causes of increased morbidity (illness) and mortality (death). Nursing education related to infection control measures can help nurses to make informed decisions to try and prevent or reduce nosocomial infections. Researchers have developed an educational plan for Yemeni nurses working in public hospitals. This plan needs to be evaluated for its effectiveness. The aim of the study is to increase the awareness and knowledge regarding nosocomial infection control measures among Yemeni nurses and subsequently helps them to maintain a high quality of care, and protect themselves, their patients and visitors as well.

Who can participate?
Nurses working at selected Yemeni hospitals.

What does the study involve?
Participating hospitals are randomly allocated to one of three groups. Those in the first group receive an audio-visual educational training and a training course for eight weeks to improve nurses' knowledge and practices regarding nosocomial infection controls. Those in the second group are given only the audio-video CD education module. Those in the last group are put on a waiting list to be given the same training and learning materials after the study is completed. Participants fill out questionnaires before the study and immediately after the programme as well as three months after the programme to assess their knowledge and practices for infection control.

What are the possible benefits and risks of participating?
There are no notable benefits or risks with participating.

Where is the study run from?
This study is being run by Ministry of Higher Education and Scientific Research (Yemen) and takes place in public hospitals in the Azal region of Yemen.

When is the study starting and how long is it expected to run for?
April 2015 to October 2016

Who is funding the study?
Ministry of Higher Education and Scientific Research (Yemen)

Who is the main contact?
Mr Gamil Alrubaiee

Contact information

Type(s)
Scientific

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers
UPM/TNCPI/RMC/1.4.18.1 (JKEUPM)/F2

Study information

Scientific Title
Effectiveness of nosocomial infection control education module for nurses in public hospital in Azal region, Yemen

Study objectives
1. There is a significant association between scores of nurses' knowledge and practice and the previous in-service training courses
2. There is a significant association between scores of nurses' knowledge and practice and the

previous working experience
3. There are significant differences in nurses' knowledge scores between the intervention groups and the wait-list group at baseline, immediately after and three months post-intervention
4. There are significant differences in practice scores between the intervention groups and the wait-list group at baseline, immediately after and three months post-intervention

Ethics approval required
Old ethics approval format

Ethics approval(s)
Ethics Committee for Research involving Human Subjects of University Putra Malaysia (JKEUPM), 06/02/2015, ref: UPM/TNCPI/RMC/1.4.18.1 (JKEUPM)

Study design
Single-blinded randomised community trial

Primary study design
Interventional

Secondary study design
Cluster randomised trial

Study setting(s)
Hospital

Study type(s)
Prevention

Participant information sheet

Health condition(s) or problem(s) studied
Nurses' knowledge and practices regarding nosocomial infection control measures before and immediately post-intervention and three months after.

Interventions
This study is conducted in three phases:

Phase one: Module & instrument development
Phase two: Module implementation
Phase three: Module evaluation

During the second phase of the study, the module implementation, participants are randomly assigned based on their hospital to one of three groups. Three arms are formed for the purpose of this study, two of them are intervention groups, while the third one is a wait list group (control group). Eight hospitals are allocated by the ratio 2:2, four hospitals are assigned to the wait list group, and the other four hospitals are allocated evenly to each of the two intervention groups. Assignment to the groups is done by simple randomisation using a table of random numbers generated by Computer. This study is single-blind trail, therefore the researcher is aware about the allocation, while the hospitals are not aware about it until the intervention started, after which blinding is not possible because the intervention hospitals receive the training course.

Three groups are formed for the purpose of this study, two of them are experimental groups, while the third one is a waitlist group, meaning no intervention are received by the participants in this group during the period of data collection but for ethical considerations the wait list group given the same training and learning materials after phase three. All participants fill out a questionnaire prior to the interventions.

Group 1 (Intervention group 1): Participants receive an educational module supported by audio-video CD and training course for eight weeks that aims to improve nurses' knowledge and practices regarding nosocomial infection control measures.

Group 2 (Intervention group 2): Participants are given only the educational module with audio-video CD and not the training course.

Group 3 (Wait list group): Participants receive no intervention during the period of data collection but for ethical considerations the wait list group given the same training and learning materials after phase three.

Participants are followed up with questionnaires immediately post-intervention and three month post-intervention. Correct, incorrect, and I don’t know statements are used to evaluate this dimension (30-items).

Intervention Type
Behavioural

Primary outcome measure
1. Nurse’s knowledge is measured using the NIs-Questionnaire at baseline, immediately post-intervention, and three month post-intervention
2. Nurses practices is measured using the NIs-Questionnaire at baseline, immediately post-intervention, and three month post-intervention

Secondary outcome measures
There are no secondary outcome measures.

Overall study start date
01/04/2015

Completion date
30/10/2016

Eligibility

Key inclusion criteria
1. Yemeni Fully employed nurses working in the selected hospitals
2. Both male and female
3. Have a three year diploma in nursing after secondary school

Participant type(s)
Health professional

Age group

Adult

Sex
Both

Target number of participants
540 NURSES

Total final enrolment
540

Key exclusion criteria
Foreign nurses

Date of first enrolment
08/06/2015

Date of final enrolment
12/12/2015

Locations

Countries of recruitment
Yemen

Study participating centre
Public hospitals
Azal Region
Sana'a
Yemen
2124

Sponsor information

Organisation
Ministry of Higher Education and Scientific Research

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Sponsor type
Government

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Funder(s)

Funder type
Government

Funder Name
Ministry of Higher Education and Scientific Research Yemen

Results and Publications

Publication and dissemination plan
Planned publication of the study protocol and then planned publication of the results in a high impact peer reviewed journal.

Intention to publish date
31/12/2017

Individual participant data (IPD) sharing plan
The datasets generated during and/or analysed during the current study are/will be available upon request from the researcher Gamil Ghaleb Ahmed Nasr, email address: arubaiee73@gmail.com

IPD sharing plan summary
Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Participant information sheet	protocol	02/09/2013	26/06/2017	No	Yes
Protocol article		01/12/2019		Yes	No
Results article		17/02/2021	27/10/2022	Yes	No