# Assessment of the impact of mentorship /supportive supervision to support health care workers learning

Submission date	Recruitment status	[X] Prospectively registered
26/07/2017	No longer recruiting	[_] Protocol
<b>Registration date</b>	Overall study status	[] Statistical analysis plan
01/08/2017	Completed	[_] Results
Last Edited	Condition category	[_] Individual participant data
01/08/2017	Pregnancy and Childbirth	[] Record updated in last year

# Plain English summary of protocol

#### Background and study aims

Skills and drills training for health care providers in maternal and newborn health is widely used in Sierra Leone but there is little knowledge on the extent of retention of knowledge and skills (K&S), factors that facilitate or prevent K&S retention after in-service training at primary health care level. Previous studies show significant increase in knowledge and skills immediately after training compared to before the training but also significant reduction 3 and 6 months later. Mentorship and supportive supervision have been shown to help health care workers develop competence after training in high income countries but few studies have been conducted on the effect of mentorship in low resource settings. The aim of this study is to see if mentorship improves healthcare workers knowledge and skills retention after training.

Who can participate?

Health care workers who are working in the study area

What does the study involve?

All participants receive seven two day training modules about their health care skills. Areas are randomly allocated to one of two groups over eight months. Participants in the first area receive 10 mentorship visits over eight months. Those in the second area do not receive these visits. Participants are followed up three and six months after the to assess their knowledge and skills.

What are the possible benefits and risks of participating?

Health care workers who take part in the trainings are expected to benefit from improved knowledge and skills after the training. It is also expected that these improvements will be translated to improved quality of care for women and newborns who use the service. The mentorship/supportive supervision is expected to complement the effect of the training in the improvement of quality of care.

Trained mentors/supervisors will benefit from training in mentorship and supportive supervision. These transferable skills can improve their overall capacity to provide quality supervision and support for their teams. There may be some risk to provision of clinical services, when staff are attending trainings. This will be minimised because trainings will take place at or

very close to facilities where participants work. Also participants will be trained in batches to ensure that service provision is uninterrupted.

Where is the study run from? This study is being run by the Liverpool School of Tropical Medicine (UK) and takes place in Sierra Leone.

When is the study starting and how long is it expected to run for? February 2017 to July 2018

Who is funding the study? Johnson and Johnson (USA)

Who is the main contact? Dr Charles Ameh

# **Contact information**

**Type(s)** Scientific

**Contact name** Dr Charles Ameh

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# Additional identifiers

EudraCT/CTIS number

**IRAS number** 

ClinicalTrials.gov number

Secondary identifying numbers NA

# Study information

Scientific Title

The effect of a new post training mentorship/supportive supervision training package on knowledge and skills retention in Sierra Leone - a Cluster randomized controlled trial

## **Study objectives**

Research question:

Does mentorship improve the knowledge and skills retention of primary health care workers after training compared to those who do not have mentorship after training?

Study aim:

The aim of this study is to determine the effect of mentorship on knowledge and skills retention post skills and drills training.

## **Ethics approval required**

Old ethics approval format

## Ethics approval(s)

1. Liverpool School of Tropical Medicine Research Ethics committee, 13/06/2017, ref: 17-025 2. Sierra Leone Scientific and Ethics review Committee, 13/07/2017, no reference number

**Study design** Multi centre cluster randomised controlled trial

**Primary study design** Interventional

**Secondary study design** Randomised controlled trial

**Study setting(s)** Community

# Study type(s)

Other

## Participant information sheet

Not available in web format, please use contact details to request a participation information sheet.

# Health condition(s) or problem(s) studied

In service training of primary health care workers providing maternal and newborn care in the clusters and centres included.

## Interventions

Randomisation is based on the 4 geographical provinces in Sierra Leone (north, south, east and west). Each province is randomly allocated a number and 2 provinces randomly selected to either the control group (north and east province) or intervention group (south and west province). 250 health workers (in 7 districts) of the 500 trained receive mentoring/supportive supervision (intervention group) and 250 will not (control group).

All participants in both the control and intervention group participate in seven two day training modules, evenly spaced over an eight month period. Participants in the control and intervention

groups are asked to complete knowledge and skills tests immediately prior to and after each training module. The seven 2-day RMNCAH modules based on the Sierra Leone basic package of essential health services (BPEHS) to improve reproductive, maternal, newborn, adolescent and child health (RMNCAH) services are antenatal care, care during labour and delivery, emergency obstetric and newborn care, postnatal care, family planning, adolescent sexual and reproductive health, and nutrition.

Participants from the intervention group receive 10 mentorship visits over the same eight month period. Participants are asked to keep a diary of each visit to record number, duration, purpose, challenges, and practice developments at each visit.

Mentors are asked to keep a log of all visits, including number of visits, duration, frequency, content and activities undertaken at each visit.

Participants from both the control and intervention groups are asked to complete knowledge and skills tests on modules 1 and 2 at three and 6 six months post baseline (the date of the training module) to assess retention of knowledge and skills.

Study participants in both study arms are reassessed at three and six-month post training. At the three and six-month reassessment points, all those who participated in the tests were then debriefed as a group, during which poorly performed/potentially life threatening skills were demonstrated and discussed.

A search of the literature shows there is no set standard for number of mentees per mentor. The UK Nursing and Midwifery Council recommend a maximum of three mentees per mentor. We will take advice from the Sierra Leone Chief Nursing and Midwifery Officer and the Sierra Leone Nurses and Midwives Board, and aim to have a maximum of 5 health care providers to one mentor receiving mentorship. Within the timescale and budget allowed for the study LSTM will be able to support a maximum of 45 supervisors/mentors. Assuming a maximum of six mentees per mentor there will be a total of 250 mentees.

## Intervention Type

Other

## Primary outcome measure

Changes in Knowledge and skills are measured using the 7 pre and post training module test and the knowledge and skills retention tests at 3 and 6 months post baseline for modules 1 and 2 only.

## Secondary outcome measures

1. Number and frequency of supervision/mentoring sessions is measured using the log book kept by the mentor and diary kept by the participant at eight months

2. Factors affecting retention of knowledge and skills is measured using both quantitative and qualitative data from the mentor log book and participant diary at 8 months (the end of the mentorship period)

3. Satisfaction of supervision measured using qualitative data from the mentor log book and participant diaries at 8 months

# Overall study start date

01/02/2017

# Completion date 31/07/2018

# Eligibility

# Key inclusion criteria

1. Health care providers of any gender and age who have attended the in -service capacity building training programme

2. District health management team supervisors working with health care providers at primary health care level in 4 provinces

**Participant type(s)** Health professional

**Age group** Adult

**Sex** Both

## Target number of participants

14 clusters in the 4 provinces of Sierra Leone: 125 primary health care workers in each Province (35-37 health care workers per cluster). 24 mentors in each of the intervention provinces (total 48)

## Key exclusion criteria

Health workers and supervisors/ mentors who do not wish to consent to take part in the study.

Date of first enrolment 03/08/2017

Date of final enrolment

30/09/2018

# Locations

**Countries of recruitment** England

Sierra Leone

United Kingdom

# Study participating centre

**Liverpool School of Tropical Medicine** Centre for Maternal and Newborn Health Wolfson Building Liverpool School of Tropical Medicine Pembroke Place, Liverpool L3 5QA Liverpool United Kingdom L3 5QA

# Sponsor information

**Organisation** Liverpool School of Tropical Medicine

Sponsor details Pembroke Place Liverpool England United Kingdom L3 5QA +44 151 70531000 lstmgov@lstmed.ac.uk

**Sponsor type** University/education

Website http://lstmed.ac.uk

ROR https://ror.org/03svjbs84

# Funder(s)

**Funder type** Industry

Funder Name Johnson and Johnson

# Alternative Name(s)

Johnson & Johnson, johnson & Johnson Services, Inc., Johnson&Johnson, , Johnson & Johnson Private Limited, , J&J, JNJ

**Funding Body Type** Government organisation

**Funding Body Subtype** For-profit companies (industry) **Location** United States of America

# **Results and Publications**

## Publication and dissemination plan

Results will be disseminated in Sierra Leone to the Ministry of Health and Sanitation and District Health Management teams; in peer reviewed journals and at academic conferences.

## Intention to publish date

31/07/2019

## Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are/will be available upon request from PI Charles Ameh Charles.Ameh@lstmed.ac.uk

#### IPD sharing plan summary

Available on request