Does a door-to-door delivery strategy increase the utilisation of insecticide-treated bed nets in the Maniema province, Democratic Republic of Congo?

Submission date	Recruitment status No longer recruiting	Prospectively registered		
30/08/2018		☐ Protocol		
Registration date 18/02/2019	Overall study status Completed	Statistical analysis plan		
		[X] Results		
Last Edited 22/03/2023	Condition category Other	[] Individual participant data		

Plain English summary of protocol

Background and study aims

Malaria remains a major public health problem in the world, although significant progress has been made in recent decades. In the World Health Organization African Region countries, more than 40% of malaria-attributed deaths occur in the Democratic Republic of Congo (DRC) and Nigeria. There is a huge gap between possession and effective use of insecticide-treated bed nets (ITNs) in DRC. The difference between possession and use of ITNs and the risk of household loss can be corrected by using the "door to door" strategy combined with the "hang up" method, which is done by installing ITNs on the beneficiaries' beds. We aim to investigate the effect of the door to door distribution strategy of ITNs combined with the "hang up" method in the context of mass ITNs distribution campaigns in DR Congo.

Who can participate?

Children aged under 5, pregnant mothers or family members of either of these, living in the Maniema province

What does the study involve?

Participants will be randomly allocated to either the intervention or the control group. Households in the intervention group will receive insecticide-treated bed nets, delivered to their door and hung up outside their house. Households in the control group will be given a token and informed of a specific place within their community where they can collect a net from.

What are the possible benefits and risks of participating?

The possible benefit to participants taking part is that they could be protected from malaria. There are no known risks to participants taking part in this study.

Where is the study run from?

School of Public Health, Kinshasa University (Democratic Republic of Congo)

When is the study starting and how long is it expected to run for? March 2013 to December 2018

Who is funding the study?
The Episcopal Church Center (USA)

Who is the main contact? Professor Yan Jin jinyan1024@gmail.com

Contact information

Type(s)

Scientific

Contact name

Prof Yan Jin

ORCID ID

http://orcid.org/0000-0002-6118-2069

Contact details

Department of Microbiology, Dongguk University College of Medicine, Dongdae-Ro 123 Gyounju Korea, South 38066

Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers
NMPC112015

Study information

Scientific Title

Effect of long lasting insecticide-treated nets distribution with door-to-door delivery strategy combined with hang-up method on the utilisation of nets in the Maniema province, Democratic Republic of Congo

Study objectives

We expect that the long lasting insecticide treated nets (LLINs) utilisation rate will be significantly higher among those who received the door-to-door distribution of nets combined with hang-up methods.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Kinshasa University, 09/09/2013, ESP/CE/071/13

Study design

Interventional single-centre repeated cross-sectional experimental cluster randomised controlled trial

Primary study design

Interventional

Secondary study design

Cluster randomised trial

Study setting(s)

Community

Study type(s)

Treatment

Participant information sheet

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

Health condition(s) or problem(s) studied

Health behaviours, attitude, and knowledge about malaria prevention, particularly mosquito net utilisation

Interventions

Health areas will be randomly allocated into either the intervention or the control group in a 1:1 ratio using a computer-generated block randomisation list. In intervention communities, all households receive one visit by members of the village health team. The team deliver ilong lasting insecticide treated bed nets (LLINs) to every household, door-to-door. The nets will be hung-up inside their house. In control communities, the village health team notify the community of the availability of LLINs from one place in the community, and provide them with tokens. LLINs are then distributed to those who visit this specific place.

Intervention Type

Behavioural

Primary outcome measure

Under 5 children's utilisation of the LLINs during the previous night, assessed by a cross-sectional household survey at the baseline and 12 months after the distribution of LLINs

For the evaluation of the interventions, two cross-sectional household surveys were carried out. The baseline survey was done before the mass distribution in 2013. The end-line survey was conducted 12 months after the distribution of mosquito nets in 2015. The primary outcome is the utilization of insecticide-treated mosquito nets of under-five children at the time of the survey. The measurement was done through direct observation.

Secondary outcome measures

The following are assessed by a cross-sectional household survey at the baseline and 12 months after the distribution of LLINs:

- 1. Pregnant women's utilisation of the LLINs during the previous night
- 2. Family member's utilisation of the LLINs during the previous night

Overall study start date

20/03/2013

Completion date

31/12/2018

Eligibility

Key inclusion criteria

Anyone who fits any of the following criteria may participate in this study:

- 1. Children aged under 5
- 2. Pregnant mothers
- 3. Family members of the above

Participant type(s)

All

Age group

All

Sex

Both

Target number of participants

2100 households

Key exclusion criteria

N/A

Date of first enrolment

20/09/2013

Date of final enrolment

30/08/2015

Locations

Countries of recruitment

Congo, Democratic Republic

Study participating centre

School of Public Health, Kinshasa University

Avenue de l'Université Kinshasa Congo, Democratic Republic BP 127 Kinshasa XI

Sponsor information

Organisation

Dongguk University

Sponsor details

Department of Microbiology, Dongguk University College of Medicine, Gyeongju, Korea. 123, Dongdae-Ro, Gyeongju-si, Gyeongsangbuk-do, Korea Gyeongju-si Korea, South 38066

Sponsor type

University/education

Website

http://med.dongguk.ac.kr/

ROR

https://ror.org/057q6n778

Funder(s)

Funder type

Other

Funder Name

The Episcopal Church Center

Results and Publications

Publication and dissemination plan

Planned publication in a high-impact peer-reviewed journal

Intention to publish date

01/12/2018

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are not expected to be made available.

IPD sharing plan summary

Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		27/08/2021	22/03/2023	Yes	No