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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
30/08/2018

Recruitment status
No longer recruiting

Registration date
18/02/2019

Overall study status
Completed

Last Edited
22/03/2023

Condition category
Other

[_] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[X] Results
[_] 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
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Contact information

Type(s)
Scientific

Contact name
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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