Screening-homes to prevent malaria

Submission date	Recruitment status No longer recruiting	Prospectively registered		
27/06/2006		☐ Protocol		
Registration date	Overall study status	Statistical analysis plan		
31/08/2006	Completed	[X] Results		
Last Edited 25/09/2009	Condition category Infections and Infestations	Individual participant data		

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

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Contact details

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

G0400031

Study information

Scientific Title

Study objectives

A randomised-controlled trial will be conducted in Farafenni town in The Gambia to assess whether screening windows, doors and eaves or installing netting ceilings to local houses can substantially reduce exposure to malaria vectors compared to homes with no screening. Risk of malaria transmission will be assessed in each house by routine collections of mosquitoes using light traps and identifying which of the vectors are carrying malaria parasites. The acceptability of the interventions will be assessed through focus groups and questionnaires. Experimental huts will be used to determine whether any additional benefit can be achieved by impregnating torn screens with insecticide.

Therefore, the aims of this study are to:

- 1. Determine whether house screening will reduce house-entry by malaria mosquitoes by 50% in Gambian homes
- 2. Assess whether the protection differs in the two types of screening by more than 17%
- 3. Determine whether house screening will reduce severe anaemia by 50% in children sleeping in these homes
- 4. Find out whether these interventions are comfortable, durable and acceptable to local communities
- 5. Assess whether insecticide-treatment of the screens prolong protection if the screens are torn

Ethics approval required

Old ethics approval format

Ethics approval(s)

House screening intervention reviewed and approved by Gambian Government and Medical Research Council Laboratories Joint Ethics Committee (30/10/2004) and Durham University Ethics Advisory Committee (18/05/2005).

The anaemia prevalence study was reviewed and approved by the same committees on 10/02/2006 and 27/03/2006 respectively.

Study design

Randomised controlled trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Other

Study type(s)

Prevention

Participant information sheet

Health condition(s) or problem(s) studied

Malaria

Interventions

This is a three-armed trial comprising of two screening interventions (full screening of 200 homes and netting ceilings of 200 homes) and a control group without screening of 100 homes.

Intervention Type

Other

Phase

Not Specified

Primary outcome measure

- 1. Number of female mosquitoes (Anopheles gambiae) s.l./light trap/night
- 2. Haemoglobin density (g/dl)

Secondary outcome measures

Added as of 22/02/2007:

- 1. Prevalence of severe anaemia (defined as haemoglobin less than or equal to 8 g/dL)
- 2. Proportion of children with maleria parasites (Plasmodium falciparum prevalence)
- 3. Prevalence of high parasitemia (defined as equal to or greater than 5000 parasites/ul
- 4. Sporozoite rate estimations in trapped mosquitoes
- 5. Estimated entomological inoculation rate (EIR) i.e. mean number of sporozoite infective mosquitoes/house/season
- 6. Acceptability
- 7. Average indoor nightly temprature
- 8. Average rate of evaportaion indoors at night
- 9. Qualitative data from focus group discussions with household members
- 10. Proportion of residents willing to continue use of intervention
- 11. Proportion of residents willing to invest in intervention installation
- 12. Durability
- 13. Number of screens showing damage at 6 and 12 months after installation
- 14. Other
- 15. Number of Culex guinguefasciatus /light trap/night

Overall study start date

01/05/2005

Completion date

31/10/2008

Eligibility

Key inclusion criteria

Homes in Farafenni town and surrounding peri-urban villages in which at least one child sleeps.

Participant type(s)

Patient

Age group

Not Specified

Sex

Both

Target number of participants

500 homes

Key exclusion criteria

Houses that are:

- 1. More than a single storey
- 2. More than four rooms or that have a ceiling, screening or closed eaves

Date of first enrolment

01/05/2005

Date of final enrolment

31/10/2008

Locations

Countries of recruitment

England

Gambia

United Kingdom

Study participating centre School of Biological and Biomedical Sciences

Durham United Kingdom DH1 3LE

Sponsor information

Organisation

Medical Research Council Laboratories (The Gambia)

Sponsor details

Fajara

Banjul

Gambia

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tcorrah@mrc.gm

Sponsor type

Research council

ROR

https://ror.org/025wfj672

Funder(s)

Funder type

Research council

Funder Name

Medical Research Council (MRC) (UK)

Alternative Name(s)

Medical Research Council (United Kingdom), UK Medical Research Council, MRC

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

United Kingdom

Results and Publications

Publication and dissemination plan

Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	19/09/2009		Yes	No