Investigating ways of encouraging fishermen in Malawi to access schistosomiasis and HIV testing and treatment

Submission date 28/09/2020	Recruitment status No longer recruiting
Registration date 05/10/2020	Overall study status Completed
Last Edited 17/12/2024	Condition category Infections and Infestations

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

Plain English summary of protocol

Background and study aims

Both HIV infection and schistosomiasis (infection with a parasitic flatworm caught by contact with fresh water) are major public health problems worldwide, with 1.8 million new HIV infections each year and up to 110 million untreated schistosomiasis (bilharzia) cases globally. The Rift Valley in Africa suffers a high rate of both HIV infection and schistosomiasis, but both are treatable if the infection is diagnosed. Lake fishermen are more at risk of HIV and schistosomiasis increases the risk of HIV infection 3 to 4 times in women. The link between HIV and genital schistosomiasis is not yet established in men, but it is biologically plausible. There are local initiatives to control HIV in fishing communities, but these might not reach everyone and it is not known whether HIV and schistosomiasis can be tackled together effectively. The aim of this trial is to identify the best methods of delivering integrated HIV and schistosomiasis services for fishermen, particularly investigating the effect of using social networks, HIV self-test kits and beach clinic services.

Who can participate?

Male adult (aged 18 years or older) fishermen resident in the Mangochi lake district of Malawi

What does the study involve?

Boat teams of fishermen will be randomly allocated to one of three arms. The first group will be given a leaflet explaining the importance of receiving treatment for schistosomiasis (a drug called praziquantel) and HIV services for fishermen. The second group will receive the leaflet and will have it explained to them by a fellow fisherman who has been trained as a peer educator. The third group will receive the leaflet and will have it explained to them by a fellow fisherman who has been trained as a peer educator and will also provide HIV self-test kits to the group.

A beach clinic will be set up as part of the trial. The clinic will provide HIV services including HIV testing and referral for treatment at the nearest HIV treatment clinic, and treatment for schistosomiasis without a diagnosis (presumptive treatment) for all trial arms. 9 months following delivery of the trial services, fishermen will provide a urine sample to assess the

percentage of fishermen cured from genital schistosomiasis as well as answering questions on whether they started HIV treatment for those with a positive HIV test result.

What are the possible benefits and risks of participating?

Potential risks include discomfort with some questions on the questionnaire. Treatment for schistosomiasis may lead to headache, nausea, abdominal pain, dizziness, drowsiness, fatigue, weakness, joint/muscle pains, loss of appetite, vomiting, sweating, itching. These are usually mild and transient, lasting from 30 minutes to up to 4 hours. Serious side effects that are very rare include bloody diarrhoea, fever, irregular or slow heartbeat or seizures/convulsions. There are no side effects to using oral HIV self-test kits. However, misunderstandings between the wider fishermen group and the peer educator may occur and could lead to physical violence or abuse.

There are no direct benefits for participating in the trial.

Where is the study run from? Malawi Liverpool Wellcome Trust Clinical Research Programme (Malawi)

When is the study starting and how long is it expected to run for? August 2019 to December 2024

Who is funding the study? Wellcome Trust (UK) and the National Institute for Health Research (UK)

Who is the main contact? Dr Augustine Choko, achoko@mlw.mw

Contact information

Type(s) Scientific

Contact name Dr Augustine Talumba Choko

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Additional identifiers

EudraCT/CTIS number

Nil known

IRAS number

ClinicalTrials.gov number Nil known

Secondary identifying numbers WT 216458/Z/19/Z

Study information

Scientific Title

Creating demand for fishermen's schistosomiasis and HIV services (FISH): piloting and delivery of a 3-arm cluster randomized control trial (cRCT) in Malawi

Acronym

FISH

Study objectives

HIV self-testing (HIVST) promoted by peer educators (PE) or provided by peer-distributoreducators (PDE) will achieve higher coverage of health interventions (recent HIV testing, linkage to voluntary male medical circumcision [VMMC] and antiretroviral therapy [ART] as indicated, and praziquantel) than beach-side services alone, and will leave men with increased understanding of the benefits of early treatment and prevention for both diseases.

Ethics approval required

Old ethics approval format

Ethics approval(s)

 Approved 16/09/2020, University of Malawi College of Medicine Research and Ethics Committee, (Mahatma Gandhi Road, Chimutu Building Room # 822, P/Bag 360 Chichiri, Blantyre 3, Malawi; +265 01 871 911/01 874 377; comrec@medcol.mw), ref: P.03/20/2975
 Approved 14/04/2020, Liverpool School of Tropical Medicine Research Ethics Committee (Pembroke Place, Liverpool, L3 5QA, UK; +44 (0)151 705 3100; lstmrec@lstmed.ac.uk), ref: 20-027

Study design

3-arm open-label cluster randomized trial

Primary study design Interventional

Secondary study design Cluster randomised trial

Study setting(s) Community

Study type(s) Treatment

Participant information sheet

See additional files

Health condition(s) or problem(s) studied

HIV infection and/or schistosomiasis (Schistosoma haematobium) infection

Interventions

'Boat teams' will be randomised 1:1:1 using computerized restricted randomization (geographical spread, cluster size, traditional authority, and HIV and schistosomiasis estimates) at a public randomisation ceremony.

Arms:

1. Standard of care (SOC) arm with leaflets available at the shore explaining the importance of receiving presumptive treatment for schistosomiasis (praziquantel) and HIV services for fishermen

2. SOC plus a peer (peer-educator [PE]) explaining the leaflet to his fellow fishermen in a boat team

3. Peer-distributor-educator (PDE) arm with HIV self-test kits delivered to the boat team fishermen by the PDE in addition to the PDE explaining the leaflet

Intervention Type

Mixed

Primary outcome measure

All primary outcome measures will be assessed at 9 months of trial delivery

1. Number of boat-team fishermen who self-report starting ART

2. Number of boat-team fishermen who self-report undergoing VMMC

3. Number of boat-team fishermen who have at least one S. haematobium egg seen on light microscopy of the filtrate from 10 ml urine ('egg-positive').

Secondary outcome measures

All secondary outcome measures will be assessed at 9 months of trial delivery

1. Number of boat-team fishermen who self-report recent (last 9 months) HIV testing

2. HIV prevention knowledge score assessed using a questionnaire at endline (9 months after enrollment)

3. Schistosomiasis knowledge score assessed using a questionnaire at endline (9 months after enrollment)

4. Number of boat-team fishermen who self-report high-risk sex in the previous month

5. S. haematobium intensity assessed using urine sample at endline (9 months after enrollment)

Overall study start date

15/08/2019

Completion date 30/12/2024

Eligibility

Key inclusion criteria

1. Fisherman resident in a fishing community in Mangochi, Malawi

2. Aged 18 years or older

Participant type(s)

Mixed

Age group

Adult

Lower age limit

18 Years

Sex Male

Target number of participants 4,500

Key exclusion criteria

Already on HIV treatment
 Already taken praziquantel in the last 3 months

Date of first enrolment 01/01/2021

Date of final enrolment 30/10/2021

Locations

Countries of recruitment Malawi

Study participating centre Mangochi District Health Office Ministry of Health Mangochi District Hospital PO Box 42 Mangochi Mangochi Malawi 265

Sponsor information

Organisation Liverpool School of Tropical Medicine

Sponsor details Pembroke Place Liverpool England United Kingdom L3 5QA +44 (0)151 705 3100 Istmrec@lstmed.ac.uk

Sponsor type University/education

Website http://www.lstmed.ac.uk/

ROR https://ror.org/03svjbs84

Funder(s)

Funder type Charity

Funder Name Wellcome Trust

Alternative Name(s) Wellcome, WT

Funding Body Type Private sector organisation

Funding Body Subtype Trusts, charities, foundations (both public and private)

Location United Kingdom

Funder Name National Institute for Health Research

Alternative Name(s)

National Institute for Health Research, NIHR Research, NIHRresearch, NIHR - National Institute for Health Research, NIHR (The National Institute for Health and Care Research), NIHR

Funding Body Type Government organisation

Funding Body Subtype National government

Location United Kingdom

Results and Publications

Publication and dissemination plan

The results will be used to inform the Malawi Ministry of Health on HIV self-testing scale-up plans and integration of HIV and schistosomiasis services for fishermen, and will also be disseminated through the University of Malawi College of Medicine, and through conference presentations and publication in peer-reviewed journals.

Intention to publish date

01/01/2024

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study will be stored in a publically available repository (https://datacompass.lshtm.ac.uk/)

IPD sharing plan summary

Stored in repository

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Participant information sheet	version v1.3	26/08/2020	05/10/2020	No	Yes
Participant information sheet	version v1.3	26/08/2020	05/10/2020	Νο	Yes
Protocol article		07/01/2022	10/01/2022	Yes	No
<u>Protocol file</u>	version 1.4	11/01/2021	20/07/2022	No	Yes
Statistical Analysis Plan	version 0.1	20/07/2022	20/07/2022	Νο	Yes
Results article	Baseline survey findings	04/05/2023	09/05/2023	Yes	No