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Integrating depression management in HIV care in Uganda

Submission date
25/08/2017

Recruitment status
No longer recruiting

Registration date
07/09/2017

Overall study status
Completed

Last Edited
19/01/2026

Condition category
Mental and Behavioural Disorders

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

Plain English summary of protocol

Background and study aims
Human immunodeficiency virus (HIV) is a virus that damages the cells in the immune system and weakens the body's ability to fight everyday infections and disease. When the immune system has been severely damaged by the HIV virus this leads to potentially life-threatening infections and illnesses, termed acquired immune deficiency syndrome (AIDS). Most HIV care in sub-Saharan Africa does not include mental health care despite HIV/AIDS being associated with a heavy burden of mental disorders. This study aims to develop and test a model for the integration of mental health care in public HIV care services in Uganda. The proposed model is based on the MANAS intervention which is a mental health integration model that was successfully tested in public primary health care in India among a non-HIV population. This study will have two components, firstly, to develop and adapt the intervention to the HIV care situation of Uganda, secondly, to test the adapted intervention.

Who can participate?
Patients aged 18 and over living with HIV attending HIV care at public health care facilities in the three study districts in central and south-western Uganda

What does the study involve?
Participating public health care facilities are randomly allocated to deliver either the new intervention or Enhanced Usual Care. The new intervention includes psychoeducation, the Healthy Activity Program, antidepressant medication and referral to a supervising specialist mental health worker. Enhanced Usual Care includes providing screening results and treatment guidelines to the attending clinicians with the option of referral to specialist mental health services. Symptoms of depression are assessed in both groups at 6 and 12 months.

What are the possible benefits and risks of participating?
The results from this study will directly inform the Uganda HIV care policy and guidelines which in 2016 called for the management of depression. On direct benefits to participants, they will be screened for depression and those found to have significant depressive symptoms will be managed (depression management is currently not part of the usual HIV care package in Uganda). Participants found to have significant symptoms will have the first options of either receiving psychotherapy (behavioural activation) or antidepressant medication (fluoxetine). To

guard against the unconfirmed risk of negative effects of antidepressants on the developing foetus, women who are pregnant and nursing (lactating) mothers will only be offered psychotherapy. Given that the study participants will all be taking antiretroviral therapy, there is the risk that those participants who are put on antidepressant medication may experience negative side effects as a result of interactions between the medications. In anticipation of this, all clinicians who will be prescribing antidepressant medication in this study will be taken through a refresher course on the use of antidepressants in HIV care.

Where is the study run from?
MRC/UVRI Uganda Research Unit on AIDS (Uganda)

When is the study starting and how long is it expected to run for?
February 2017 to February 2022

Who is funding the study?
Wellcome Trust (UK)

Who is the main contact?
Mr Richard Mpango

Contact information

Type(s)
Scientific

Contact name
Mr Richard Mpango

Contact details
51-59 Nakiwogo Street
Entebbe
Uganda
PO Box 49 Entebbe

Additional identifiers

Protocol serial number
205069/Z/16/Z

Study information

Scientific Title
Integrating the management of depression into routine HIV care in Uganda: a cluster randomised trial

Acronym
HIV+D trial

Study objectives

The primary hypothesis is that the HIV+ D depression management intervention will improve clinical and functional depressive disorder outcomes in persons living with HIV. The secondary hypotheses are that the intervention will improve adherence to antiretroviral therapy and cotrimoxazole, slow HIV disease progression, and will be cost-effective.

This study which will be undertaken in two phases:
1. The formative phase (18 months) which will develop and pilot the intervention model (HIV+D intervention)
2. The clinical trial phase (36 months) which shall undertake the cluster randomised trial

Ethics approval required
Old ethics approval format

Ethics approval(s)
1. Uganda Virus Research Institute Research and Ethics Committee, 02/05/2018, ref: GC/127/17/05/598
2. Uganda National Council of Science and Technology, 15/05/2017, ref: SS 4292

Study design
Cluster randomised trial

Primary study design
Interventional

Study type(s)
Treatment

Health condition(s) or problem(s) studied
Depressive disorders in HIV/AIDS

Interventions
This project will be organised under two broad phases:

Formative phase:
During this phase the HIV+D intervention will be developed. To do this, the MANAS intervention (which is a stepped care collaborative care delivery model coordinated by a lay health worker that was developed and successfully evaluated to treat depressive and anxiety disorders in public primary health care attenders in India) will be locally adapted to the HIV care situation of Uganda using Theory of Change based approaches. This will be undertaken in the non-trial district of Mpigi. Additionally during this phase, the Healthy Activity Program (which is a lay counsellor administered brief psychological treatment based on behavioural activation that was successfully developed and evaluated in India) will be locally adapted to the HIV care situation of Uganda using the methods by Chowdhary and colleagues (2016). The locally adapted HIV+D intervention shall then be evaluated for its acceptability and feasibility through a case series consisting of serial interviews with participating lay health workers, case managers, supervisors and exit interviews with adherent/non-adherent study respondents.

Cluster randomised phase:
The cluster randomised trial will involve 40 clusters (public health care facilities that provide HIV care) in the three trial districts of Wakiso, Masaka and Kalungu. The clusters will be stratified by type of health facility and within each stratum randomised in a 1:1 ratio to either the

Intervention arm to receive the HIV+D intervention or the Enhanced Usual Care arm. The intervention will include psychoeducation, the Healthy Activity Program, antidepressant medication and referral to a supervising specialist mental health worker. The control arm will comprise of provision of screening results and mhGAP treatment guidelines to the attending clinicians with the option of referral to specialist mental health services. The intervention is expected to be delivered in 6 months. Providing screening results and training of clinicians in depression management in the control arm is expected to improve case detection and management of depression. Referral pathways to specialist mental health services will be in place in both arms for persons who meet a priori criteria for referral which will include high risk for self-harm and those with severe depressive disorder.

HIV+D intervention
The HIV+ D intervention that is going to be offered to study participants in the Intervention arm of the cluster randomised trial will consist of the following 4 steps:
Step 1 (initiation of treatment): Patients screened to have 'significant' depressive disorder (DD) scores (a score of ≥10 on the depression screening instrument, Patient Health Questionnaire-PHQ-9) will be advised about results from the screening questionnaire and offered psychoeducation.
Step 2 (Management of moderate to severe cases): Patients who have moderate to severe DD (PHQ-9 score of 15-19) at first consultation or those who remain symptomatic at follow-up (PHQ-9 score ≥5) despite step 1. These will be given the choice of either Healthy Activity Program (HAP, a brief psychological treatment for depression that is based on behavioural activation, will consist of 6 sessions over a 12 week period) administered by a lay health worker or antidepressant medication (Fluoxetine 20mg/day for 6 months) administered by attending clinician.
Step 3 (Monitoring outcomes): Patients who remain symptomatic at follow-up despite step 2. These will be given both HAP and antidepressant medication concurrently.
Step 4 (Referral to specialist mental health worker): Patients who remain symptomatic at follow-up despite taking step 3 or have severe DD (PHQ-9 score of ≥20) at treatment initiation or are at high risk for suicide at any time (including treatment initiation). Continue all existing treatments and referred to mental health specialist.

Control arm
The control arm of the trial will receive Enhanced Usual Care (EUC) which will consist of usual care plus the provision of screening results and mhGAP treatment guidelines to the attending clinicians with the option of referral to specialist mental health services at the regional hospital.

Intervention Type
Behavioural

Primary outcome(s)
1. Mean depressive disorder (DD) symptom severity scores, assessed using the PHQ-9 at 6 months
2. Proportion of participants who fail to achieve remission from DD; proportion with PHQ-9 scores ≥5 at 6 months

Key secondary outcome(s))
1. The primary outcome measures at 12 months
2. The proportion of participants who are on ART at baseline and who have virological failure (defined as a viral load of 1,000 copies/ML or more) at 6 and 12 months
3. The proportion of participants who report having missed at least one dose of cotrimoxazole

prophylaxis in the past three days, assessed at 6 and 12 months
4. The mean CD4 count at 6 and 12 months
5. The proportion of participants who experience either a new WHO stage 3 or 4 event or death over the 12 months
6. Quality adjusted life years (QALYs), measured using the SF-6D (the Short-Form Six-Dimension) at quarterly intervals for 12 months
7. Days out of work and functional impairment, measured using the WHO-DAS29 at 6 and 12 months
8. Failure to recover from DD; proportion whose PHQ-9 scores are ≥5 on two consecutive occasions 3 months apart and who relapse after recovery

Completion date
01/02/2022

Eligibility

Key inclusion criteria
1. Adult patients living with HIV attending the study clinics
2. Aged >18 years
3. An established resident of the study area
4. Medically stable (not too ill to require emergency admission)
5. Conversant in Luganda (the predominant language spoken in the study area)
6. 'Screen positive' for a depressive disorder (DD) (a score of ≥10 on the PHQ-9)

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Mixed

Lower age limit
18 years

Upper age limit
100 years

Sex
All

Total final enrolment
1115

Key exclusion criteria
1. Adults who screen below the DD threshold score on the PHQ-9
2. Those who have severe cognitive or sensory impairments which hinder engagement with the research procedures

Date of first enrolment
02/02/2019

Date of final enrolment
01/02/2020

Locations

Countries of recruitment
Uganda

Study participating centre
MRC/UVRI Uganda Research Unit on AIDS
51-59 Nakiwogo Street
Entebbe
Uganda
PO Box 49 Entebbe

Sponsor information

Organisation
MRC/UVRI Uganda Research Unit on AIDS

ROR
https://ror.org/04509n826

Funder(s)

Funder type
Charity

Funder Name
Wellcome Trust

Alternative Name(s)

Funding Body Type
Private sector organisation

Funding Body Subtype
International organizations

Location
United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan
The MRC/UVRI Unit is committed to the principle of sharing data with bona fide researchers and has developed a data sharing policy (see link: http://www.mrcuganda.org/sites/default/files /publications/MRC_UVRI_Data_sharing_policy_December2015.pdf). The policy recognizes the need to make maximum use of data collected using public funding while protecting the intellectual property rights of the study team (by allowing the study team time to publish the findings of the study including the main results of the cluster randomized trial) and also ensuring that the privacy of trial participants is protected. All bona fide researchers who are given access to the data will sign data sharing agreements which will restrict the use of the data to answering pre-specified research questions which will form part of the application for data sharing. The Study Advisory Group will be responsible for overseeing both requests for data sharing and for ensuring that bona fide researchers who are given access to the data comply with the terms of the data sharing agreement (e.g. by reading draft manuscripts derived from the data). Informed consent will be obtained from all study participants. All the information given by study participants will be kept confidential and only study staff will have access to this information. Responses will be anonymized so that names will not be linked to responses. All information will be stored in a secure manner and you will not be identified by the records that the study will keep.

IPD sharing plan summary
Other

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		15/01/2026	19/01/2026	Yes	No
Protocol article		12/05/2021	17/05/2021	Yes	No
Other publications	The translation and the validation process for cultural and linguistic appropriateness of the OxCAP-MH tool	07/04/2021	03/12/2024	Yes	No
Statistical Analysis Plan	version 5	07/02/2023	10/02/2023	No	No