

Mobile mental health app usability test

Submission date 17/08/2025	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered
Registration date 20/08/2025	Overall study status Completed	<input type="checkbox"/> Protocol
Last Edited 20/08/2025	Condition category Mental and Behavioural Disorders	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
		<input type="checkbox"/> Individual participant data
		<input checked="" type="checkbox"/> Record updated in last year

Plain English summary of protocol

Background and study aims

Mobile mental health apps present unique opportunities to democratize mental health care by expanding access to services, especially in underserved populations. However, evidence-based mobile mental health apps developed in the Ethiopian setting are scarce; therefore, this study assesses the feasibility and effectiveness of a mobile mental health solution app, a locally adapted app addressing depression and anxiety. This study aims to determine the feasibility and effectiveness of a newly developed mobile mental health solution app among individuals with depression and anxiety in Ethiopia.

Who can participate?

Patients aged 20 to 45 years with depression and anxiety

What does the study involve?

Participants were requested to complete several tasks, which included:

1. Accessing mental health information (covering concepts like depression, anxiety, and psychiatric emergencies)
2. Self-assessment by answering 21 multiple-choice questions to gauge levels of depression, anxiety, and psychological distress
3. Self-care techniques (such as mindfulness, meditation, progressive muscle relaxation, and breathing exercises)
4. Applying psychological first aid techniques
5. Reviewing mental well-being tips
6. Recording medication details (including type, dosage, and frequency) and setting reminders for medication and appointments
7. Updating their profiles and medication information in the app
8. Tracking and reviewing their symptoms and medication usage

Upon completion of the 4-week usage period, participants were asked to complete a paper-based survey during a scheduled appointment.

What are the possible benefits and risks of participating?

Possible benefits could be gaining insight or being aware of depression and anxiety. Risk could be the time devoted to using the app.

Where is the study run from?

Felege Hiwot Comprehensive Specialized Hospital (Ethiopia)

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

January 2025 to June 2025

Who is funding the study?

University of Wollongong (Australia)

Who is the main contact?

Yonas Deressa Guracho, ydg487@uowmail.edu.au

Contact information

Type(s)

Public, Scientific, Principal investigator

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Study information

Scientific Title

Usability evaluation and preliminary efficacy of mobile mental health solution apps in low-income settings: pre- and post-trial

Study objectives

To determine the usability and efficacy of a newly developed mobile mental health solution app among individuals with depression and anxiety in Ethiopia

Ethics approval required

Ethics approval required

Ethics approval(s)

approved 04/07/2025, University of Wollongong Human Research Ethics Committee (University of Wollongong, Wollongong, 2522, Australia; +61 (0)2 4221 3386; uow-humanethics@uow.edu.au), ref: 2023/122

Study design

Usability test, preliminary pre- and post-test design

Primary study design

Interventional

Study type(s)

Other, Efficacy

Health condition(s) or problem(s) studied

Depression and anxiety

Interventions

Interventions were conducted for 4 weeks. Participants were requested to complete several tasks, which included:

1. Accessing mental health information (covering concepts like depression, anxiety, and psychiatric emergencies)
2. Self-assessment by answering 21 multiple-choice questions to gauge levels of depression, anxiety, and psychological distress
3. Self-care techniques (such as mindfulness, meditation, progressive muscle relaxation, and breathing exercises)
4. Applying psychological first aid techniques
5. Reviewing mental well-being tips
6. Recording medication details (including type, dosage, and frequency) and setting reminders for medication and appointments
7. Updating their profiles and medication information in the app
8. Tracking and reviewing their symptoms and medication usage

Upon completion of the 4-week usage period, participants were asked to complete a paper-based survey during a scheduled appointment.

Intervention Type

Device

Phase

Phase I

Drug/device/biological/vaccine name(s)

Mobile Mental Health app usability test

Primary outcome(s)

1. Ease of use, satisfaction with the interface and usefulness assessed using the 18-item self-administered Mobile App Usability Questionnaire (MAUQ) at the end of the intervention
2. Depression, anxiety, and stress assessed using the Depression Anxiety Stress Scales – Short Form (DASS-21) scale before and after the intervention

Key secondary outcome(s)

Mental health knowledge evaluated using a 20-item mental health knowledge questionnaire before and after the intervention

Completion date

20/06/2025

Eligibility

Key inclusion criteria

1. Individuals who self-reported having a diagnosis of major depressive disorder or anxiety disorder. In addition, the Depression Anxiety Stress Scales-21 (DASS-21) was used to assess the level of depression, anxiety, and stress. Therefore, study participants with a mild-moderate level of depression (10-20), anxiety (8-14), or stress (15-25) were included in the study
2. Participants who consented to use the Mobile Mental Health Solution App for 4 weeks
3. Individuals who were receiving follow-up treatment for depression or anxiety during the data collection period
4. Individuals who had at least 3 months of follow-up or had received treatment for at least three visits were included in the study

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

20 years

Upper age limit

45 years

Sex

All

Total final enrolment

40

Key exclusion criteria

1. Individuals who had other mental disorders or comorbidities were excluded from the study.
2. Individuals with a Mini-Mental State Examination questionnaire score of less than 24 were excluded from the study

Date of first enrolment

10/05/2025

Date of final enrolment

10/06/2025

Locations

Countries of recruitment

Ethiopia

Study participating centre

Felege Hiwot Comprehensive Specialized Hospital

Shmbit Kebele 13

Bahir Dar

Ethiopia

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Sponsor information

Organisation

University of Wollongong

ROR

<https://ror.org/00jtmb277>

Funder(s)

Funder type

University/education

Funder Name

University of Wollongong

Alternative Name(s)

University of Wollongong, Australia, UOW

Funding Body Type

Government organisation

Funding Body Subtype

Universities (academic only)

Location

Australia

Results and Publications

Individual participant data (IPD) sharing plan

The data-sharing plans for the current study are unknown and will be made available at a later date

IPD sharing plan summary

Data sharing statement to be made available at a later date

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Study website	Study website	11/11/2025	11/11/2025	No	Yes