

# Assessing the feasibility of delivering a behavioural activation intervention to people with diabetes and depression in South Asia

<b>Submission date</b> 07/04/2022	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
<b>Registration date</b> 14/04/2022	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 10/01/2025	<b>Condition category</b> Mental and Behavioural Disorders	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

### Background and study aims

Type 2 diabetes is one of the most common chronic illnesses in South Asia. Among people with diabetes, the risk of having depression is two to three times higher. The presence of depression alongside diabetes is known to affect the quality of life and lead to poor health outcomes. Treatment of depression among individuals with diabetes is therefore needed, however, there is a lack of evidence on the type of treatments that may work in such individuals, specifically in South Asian settings. Behavioural activation (BA) is a low-cost treatment that can be delivered by non-mental health personnel in low resource settings. The aim of this study is to test the feasibility of delivering BA to patients with diabetes and depression in two South Asian countries, i.e. Bangladesh and Pakistan.

### Who can participate?

Adults aged 18 years and over with confirmed type 2 diabetes mellitus with mild, moderate or severe depression

### What does the study involve?

The researchers will identify adult patients from six health facilities in Bangladesh and Pakistan. Patients with confirmed diabetes will be screened for depression using a set of questions and then invited to participate in the study. Those who consent to participate will be randomly assigned to receive BA or usual care. Participants assigned to usual care will receive an information leaflet on depression, its treatment options and where to seek help. Participants assigned to BA will have six sessions (30-40 minutes each) with a trained counsellor over a period of 6 to 12 weeks, either face to face or over the phone. A questionnaire will collect information at the time of recruitment and at 3 and 6 months. Information on personal and household characteristics, health behaviours, diabetes, mental health and quality of life will be collected. Blood samples will be taken to evaluate diabetes control as well as overall physical health. To evaluate the feasibility, the researchers will report recruitment rates, reasons for non-participation, length of time taken to recruit all participants and retention of participants in the study at 3 and 6 months.

What are the possible benefits and risks of participating?

Given the nature of the treatment, participants are not expected to suffer any serious harm. The study procedures will be carried out by trained staff, and participants will be contacted regularly to check their well-being. Specialist support will be available through participating hospitals and referral services. Participants will benefit from free transport, lab tests and treatment.

Where is the study run from?

The trial is being run from the University of York (UK), with recruitment sites based in Peshawar and Rawalpindi in Pakistan, and in Dhaka and Sylhet in Bangladesh.

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

October 2021 to February 2023

Who is funding the study?

National Institute of Health Research (NIHR) (UK)

Who is the main contact?

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## Contact information

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## **Additional identifiers**

**Clinical Trials Information System (CTIS)**

Nil known

**ClinicalTrials.gov (NCT)**

Nil known

**Protocol serial number**

Version 1.2

## **Study information**

**Scientific Title**

A protocol for a randomised controlled, single-blinded, feasibility trial of an adapted behavioural activation intervention (DiaDeM) for people with depression and diabetes in South Asia

## **Acronym**

DiaDeM feasibility trial

## **Study objectives**

An adapted behavioural activation intervention for depression treatment will be feasible and acceptable to deliver and evaluate among adults with depression and diabetes in Bangladesh and Pakistan

## **Ethics approval required**

Old ethics approval format

## **Ethics approval(s)**

1. Approved 02/10/2020, Health Sciences Research Governance Committee (HSRGC, University of York, Department of Philosophy, Heslington, YO10 5DD, York, UK; +44 (0)1904 323253; smh12@york.ac.uk), ref: HSRGC/2020/409/B
2. Approved 12/12/2020, Diabetic Association of Bangladesh (122 Kazi Nazrul Islam Venue Shahbag, Dhaka, Bangladesh; +880 (0)58616641-50; email: not available), ref: BADAS-ERC/EC/20/00300
3. Approved 05/01/2021, National Bioethics Committee Pakistan (Pakistan Health Research Council, Shahrah-e-Jamhuriat, Off Constitution Avenue, Sector G-5/2, Islamabad, Pakistan; +92 (0) 51 9224325, +92 (0)51 9216793; nbcpakistan.org@gmail.com), ref: 4-87/NBC-578/20/1101
4. Approved 20/10/2020, Institutional Research and Ethics Forum of Rawalpindi Medical University (Research Unit, Main Campus, Tipu Road, Rawalpindi Pakistan; +92 (0)51 9330068; researchunit@rmur.edu.pk), ref: 242/IREF/RMU/2020
5. Approved 08/10/2020, Ethics Committee of Office of Research Innovation & Commercialization (ORIC) Khyber Medical University (KMU, Phase 5, Hayatabad, Peshawar Pakistan; +91 (0)9217258; oric@kmu.edu.pk), ref: DIR/KMU/UEC/25

## **Study design**

Parallel-arm assessor-blinded randomized controlled feasibility trial

## **Primary study design**

Interventional

## **Study type(s)**

Treatment

## **Health condition(s) or problem(s) studied**

Type 2 diabetes with confirmed mild, moderate or severe depression

## **Interventions**

A computer-generated blocked stratified (by country) randomisation sequence is created using Stata version 15, with an allocation ratio of 1:1.

Intervention: Behavioural Activation - structured individual therapy delivered by Behavioural Activation facilitators based in diabetes services, supported by a treatment manual and participant's and facilitator's booklets, with supervision by a mental health specialist. Six 30-40

minutes sessions over a period of 6 to 12 weeks will be offered. The sessions will be delivered either face to face or remotely according to the participant's preference. The 'optimised usual care' information leaflet will also be offered.

Control group: Provision of an 'optimised usual care' information leaflet, describing depression and its treatment and details of how to access help locally.

## **Intervention Type**

Behavioural

## **Primary outcome(s)**

1. Recruitment rates, assessed as the number of participants eligible, consenting and randomised out of those screened at recruitment. These will be assessed on the completion of the recruitments at all study sites.
2. Reasons for ineligibility/non-participation/non-consent of participants assessed through a review of trial screening logs. This will be assessed on the completion of the recruitments at all study sites
3. Retention rates for the feasibility trial: proportion of randomised participants who were successfully followed up at 3 and 6 months post-randomisation
4. Retention rates for the DiaDeM intervention: number of intervention sessions attended out of the total number of sessions offered. This will be assessed 6 months post-randomisation for all recruited and randomised participants.
5. Reasons for discontinuation of BA intervention sessions assessed through a review of the BA facilitators' logs. This will be assessed 6 months post-randomisation for all recruited and randomised participants. The logs will record the information regarding session appointments, attendance, drop-out and delivery. The qualitative analysis of the in-depth interviews of participants and facilitators during process evaluation will also provide additional information regarding the barriers affecting the intervention delivery.
6. The length of time taken to attain the required sample size will be assessed as the mean of the number of days taken from the date of commencement of recruitment till the date of last recruitment at each site
7. Data completeness for all the baseline and follow-up variables and tools at baseline, 3 and 6 months. Problem areas and solutions will be identified for DiaDeM-Work Stream 3 full trial

## **Key secondary outcome(s))**

There are no secondary outcome measures

## **Completion date**

23/11/2022

# **Eligibility**

## **Key inclusion criteria**

1. Adults ( $\geq 18$  years old) with confirmed type 2 diabetes mellitus
2. Score  $\geq 3$  on the PHQ-2 scale
3. Classified as having mild, moderate or severe depression (using a cut-off score of  $\geq 5$ ) on the PHQ-9
4. Confirmatory diagnosis of depression using the MINI mental-state examination scale
5. Willing to participate and able to attend therapy sessions in person or remotely.

## **Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Lower age limit**

18 years

**Sex**

All

**Total final enrolment**

128

**Key exclusion criteria**

1. Patients who are already receiving psychotherapy for depression
2. Lack the capacity to provide informed consent and/or to take part in therapy because of cognitive impairment, or severity of mental or physical illness

**Date of first enrolment**

26/03/2022

**Date of final enrolment**

26/05/2022

## **Locations**

**Countries of recruitment**

Bangladesh

Pakistan

**Study participating centre**

**BIRDEM General Hospital**

122 Kazi Nazrul Islam Ave

Dhaka

Bangladesh

Dhaka 1000

**Study participating centre**

**Sylhet Diabetic Hospital**

Puranlane Road

Sylhet  
Bangladesh  
Sylhet 3100

**Study participating centre**

**Sugar Hospital**

A-6 B/3, Phase 5

Peshawar

Pakistan

Peshawar, 25100

**Study participating centre**

**District Headquarters Hospital**

Kohat Development Authority (KDA)

Kohat

Pakistan

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**Study participating centre**

**Benazir Bhutto Hospital**

Murree Rd

Rawalpindi

Pakistan

Rawalpindi, 23000

**Study participating centre**

**District Headquarters Hospital**

Kashmiri Bazaar Road

Raja Bazar

Rawalpindi

Rawalpindi

Pakistan

Punjab 46000

## **Sponsor information**

**Organisation**

University of York

## Funder(s)

**Funder type**  
Government

**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

**Individual participant data (IPD) sharing plan**  
To maintain the scientific integrity of the study, data will not be released prior to the end of the trial, either for publication or oral presentation purposes, without the permission of the Project Management Team and the Chief Investigator. The full data-sharing plan will be made available at a later date.

**IPD sharing plan summary**  
Stored in non-publicly available repository, Data sharing statement to be made available at a later date

Study outputs					
Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>		06/12/2024	10/01/2025	Yes	No
<a href="#">Participant information sheet</a>	version 2.1	21/03/2022	12/04/2022	No	Yes
<a href="#">Participant information sheet</a>	Participant information sheet	11/11/2025	11/11/2025	No	Yes
<a href="#">Protocol (preprint)</a>		02/09/2022	10/01/2025	No	No
<a href="#">Protocol file</a>	version 1.2	03/03/2022	27/03/2024	No	No

