# Phone call based educational intervention for diabetes management

Submission date	Recruitment status  No longer recruiting	<ul><li>Prospectively registered</li></ul>		
28/02/2022		☐ Protocol		
Registration date	Overall study status	<ul><li>Statistical analysis plan</li></ul>		
06/04/2022	Completed	[X] Results		
Last Edited	Condition category	Individual participant data		
12/06/2023	Nutritional, Metabolic, Endocrine			

#### Plain English summary of protocol

Background and study aims

Diabetes is a serious condition where the blood sugar level is too high. In spite of various awareness programs and educational camps, the number of individuals with diabetes is increasing at an alarming rate. Uncontrolled diabetes would lead to various diabetes-associated complications such as heart disease, eye disorders, kidney issues, and neurological disorders. The disease burden is not only directly from diabetes but also from various diabetes-associated conditions.

Diabetes can be self-managed to a great extent by adopting lifestyle behaviours such as diet control, physical activities, periodic doctor visits and investigations and medication adherence. These practices require the involvement of patients in self-care practices. Empowering patients with the education and awareness required to manage diabetes is very important. Traditional educational programs on diabetes management have lacked accessibility, approachability and availability. The aim of this study is to identify the impact of telephone call based diabetes education on the control of blood sugar and knowledge of diabetes.

Who can participate?
Patients with type 2 diabetes

What does the study involve?

Participants are randomly allocated to the case group or the control group. The case group receive diabetes management education through weekly phone calls for a period of 12 months. Control group participants do not receive any education. Blood sugar and knowledge of diabetes management among the groups will be compared at the start of the study and after 4, 8 and 12 months to find the impact of phone call based education.

What are the possible benefits and risks of participating?

Participants can get their HbA1C tests conducted free of cost as an incentive to participate in the study. Case group participants get diabetes management education through phone calls leading to increased knowledge of diabetes. No risks are involved in the study.

Where is the study run from?

JSS Hospital Mysore, Karnataka (India)

When is the study starting and how long is it expected to run for? February 2016 to February 2020

Who is funding the study? Investigator initiated and funded

Who is the main contact? Dr Kanakavalli K. Kundury kanakavalli.dhsms@jssuni.edu.in

## Contact information

#### Type(s)

Principal Investigator

#### Contact name

Dr Kanakavalli Kundury

#### **ORCID ID**

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#### Contact details

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### Additional identifiers

#### **EudraCT/CTIS** number

Nil known

#### IRAS number

#### ClinicalTrials.gov number

Nil known

#### Secondary identifying numbers

JSSMC/11/5976/2016-17

# Study information

#### Scientific Title

Studying the impact of providing diabetes education through phone calls on the control of hyperglycaemia and knowledge of diabetes

#### **Acronym**

Madhuram

#### **Study objectives**

Providing continuous education through phone calls reduces HbA1C values and enhances knowledge in individuals with diabetes

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Approved 30/11/2016, Institutional Ethical Committee, JSS Medical College (JSS Academy of Higher Education & Research, Sri Shivarathreeshwara Nagar, Mysore, Karnataka, 570015, India; +91 (0)821 2548337, 2548338; jssmc09@gmail.com), ref: JSSMC/11/5976/2016-17

#### Study design

Randomized controlled trial

#### Primary study design

Interventional

#### Secondary study design

Randomised controlled trial

#### Study setting(s)

Hospital

#### Study type(s)

Other

#### Participant information sheet

Not available in web format

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

Type 2 diabetes

#### **Interventions**

The study is conducted at a tertiary care teaching hospital for 12 months duration. Individuals with diabetes are recruited into the study with informed consent. The participants were randomly allocated to case and control groups using a random sampling method. The participants in the case group receive continuous diabetes education through phone calls. The educational intervention on diabetes includes disease awareness, diabetes management practices, diet control, medication adherence, the role of physical activity, periodic doctor visits, investigations and monitoring for diabetes-associated comorbid conditions. Orientation/reorientation camps are conducted once every 4 months and weekly phone calls are made to study subjects in the case group. The control group participants receive no education.

HbA1C investigations are conducted in both case and control groups four times during the study period. HbA1C values and knowledge among the case and control group participants are compared to assess the impact of the telephone call based educational intervention.

#### Intervention Type

Behavioural

#### Primary outcome measure

HbA1C values measured using ion exchange chromatography at baseline, 4, 8 and 12 months

#### Secondary outcome measures

Knowledge of diabetes management measured using a questionnaire at baseline, 4, 8 and 12 months

#### Overall study start date

01/02/2016

#### Completion date

28/02/2020

# **Eligibility**

#### Key inclusion criteria

- 1. Patients with type 2 diabetes
- 2. Having no complex disease conditions like cardiovascular diseases (CVDs), terminally ill conditions with cancer and AIDS
- 3. Participants should have a reasonable ability to operate mobile phones and speak in the local language or English
- 4. Able to give consent to participate in the study

#### Participant type(s)

**Patient** 

#### Age group

**Not Specified** 

#### Sex

Both

#### Target number of participants

455

#### Total final enrolment

273

#### Key exclusion criteria

Does not meet the inclusion criteria

#### Date of first enrolment

01/01/2019

#### Date of final enrolment

12/02/2019

# **Locations**

#### Countries of recruitment

India

# Study participating centre JSS Hospital

M.G.Road Mysore India 570004

# Sponsor information

#### Organisation

JSS Medical College and Hospital

#### Sponsor details

JSS Academy of Higher Education & Research Mysore India 5700015 +91 (0)821 2548337, 2548338 jssmc09@gmail.com

#### Sponsor type

University/education

#### Website

https://jssuni.edu.in/JSSWeb/WebHome.aspx

#### **ROR**

https://ror.org/02xf0fd83

# Funder(s)

#### Funder type

Other

#### **Funder Name**

Investigator initiated and funded

# **Results and Publications**

#### Publication and dissemination plan

Publication in a scientific journal

#### Intention to publish date

30/05/2022

#### Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are/will be available upon request from Dr Kanakavalli K. Kundury (kanakavalli.dhsms@jssuni.edu.in).

#### IPD sharing plan summary

Available on request

#### **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		10/02/2023	12/06/2023	Yes	No