

# The role of text messages in helping people to change to a healthy lifestyle to stop them from getting diabetes type 2

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<b>Registration date</b> 04/06/2018	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 25/11/2019	<b>Condition category</b> Nutritional, Metabolic, Endocrine	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

Pre-diabetes is a condition where the person is not yet diabetic but is at a great risk to be so. A person with pre-diabetes has high blood sugar but not high enough to be called diabetic. A major way to stop a pre-diabetic from becoming diabetic is to have good amount of daily physical activity and eat a healthy diet. There are many ways to help people live a healthy lifestyle. The aim of this study is to see whether encouraging people through text messages helps them to eat healthily and move more.

### Who can participate?

People above the age of 18 who are pre-diabetic

### What does the study involve?

Participants are randomly allocated to one of two groups. One group is sent the text messages and the other group does not get any messages. Their blood sugar is measured to see which group benefited more. Both groups also get a standard education session on how to eat healthily and move more.

### What are the possible benefits and risks of participating?

The expected side effect is a little pain from the needle when taking blood to test blood sugar.

### Where is the study run from?

King Saud University Medical City (Saudi Arabia)

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

September 2018 to December 2020 (as of 19/10/2018)

### Who is funding the study?

King Abdulaziz City for Science and Technology (Saudi Arabia)

Who is the main contact?  
Dr Rasmieh AlZeidan

## Contact information

**Type(s)**  
Public

**Contact name**  
Dr Rasmieh Alzeidan

**Contact details**  
PO Box 102599  
Riyadh  
Saudi Arabia  
11685

## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**  
E-17-27607

## Study information

### Scientific Title

The effectiveness of the text messages to modify lifestyle prevent or delay the onset of type 2 diabetes mellitus among university employees and their families with impaired glucose tolerance in Saudi Arabia: a randomized controlled trial

### Study objectives

The trialists hypothesize that the intervention group will have a significant bigger reduction in HA1C than the control group.

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

IRB of King Saud University, College of Medicine, 03/10/2017, ref: E-17-27607

### Study design

Prospective parallel-group randomized controlled trial

### Primary study design

Interventional

## **Secondary study design**

Randomised controlled trial

## **Study setting(s)**

Hospital

## **Study type(s)**

Prevention

## **Participant information sheet**

Not available in web format, please use the contact details to request a patient information sheet

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

Pre-diabetes

## **Interventions**

A computer-generated randomization sequence (Matlab randperm version 6) based on Marsaglia's algorithm to randomly allocate patients (1:1) to individually tailored phone messaging or to a control group that received standard life modification advice at baseline visit only.

The intervention is lifestyle modification text messages that are tailored to the participant according to the Trans Theoretical Model (TTM) stage of change. Both control and intervention groups will receive a baseline standard lifestyle modification education session, and both groups take metformin tablets as prescribed by their treating physician.

## **Intervention Type**

Behavioural

## **Primary outcome measure**

1. Incident type 2 diabetes measured at the end of the study after 24 months
2. Hyperglycemia measured by HbA1c at baseline and 24 months

## **Secondary outcome measures**

1. Level of low density lipoprotein cholesterol (LDL-C) at baseline and 24 months
2. Systolic diastolic blood pressure at baseline and 24 months
3. Body weight at baseline, 12 months and 24 months
4. Physical activity level checked at every 6 month follow up visit and at 24 months
5. Fruit/vegetables intake portions consumed per day at 24 months
6. Incidence of myocardial infarction, stroke, death and re-hospitalization checked through subjects' electronic file at the end of the study

## **Overall study start date**

01/09/2018

## **Completion date**

31/12/2020

# Eligibility

## Key inclusion criteria

1.  $\geq 18$  years old
2. Speak and read Arabic or English as applicable
3. Use text messages on their mobile phones
4. Have prediabetes
5. HbA1c value between 5.7-6.4%

## Participant type(s)

Patient

## Age group

Adult

## Lower age limit

18 Years

## Sex

Both

## Target number of participants

600

## Key exclusion criteria

1.  $< 18$  years old
2. Pregnant women
3. Any subject who has overt diabetes

## Date of first enrolment

01/09/2018

## Date of final enrolment

30/09/2018

# Locations

## Countries of recruitment

Saudi Arabia

## Study participating centre

King Saud University Medical City

Saudi Arabia

11472

# Sponsor information

**Organisation**

King Saud University

**Sponsor details**

PO Box 102599

Riyadh

Saudi Arabia

11685

**Sponsor type**

University/education

**ROR**

<https://ror.org/02f81g417>

**Funder(s)****Funder type**

Government

**Funder Name**

King Abdulaziz City for Science and Technology

**Alternative Name(s)**

KACST

**Funding Body Type**

Government organisation

**Funding Body Subtype**

National government

**Location**

Saudi Arabia

**Results and Publications****Publication and dissemination plan**

Protocol and results to be published in a high impact peer reviewed journal.

**Intention to publish date**

31/12/2021

## Individual participant data (IPD) sharing plan

The access for data will be restricted to the minimal considering the patients' privacy and upon the approval of King Saud University IRB as it is not clear to what extent the trialists can share data from the legal point of view in Saudi Arabia.

## IPD sharing plan summary

Other

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Protocol article</a>	protocol	21/11/2019	25/11/2019	Yes	No