# A randomised controlled trial of a safer sex intervention delivered through mobile phone messaging

Submission date 17/03/2016	<b>Recruitment status</b> No longer recruiting
<b>Registration date</b> 17/03/2016	<b>Overall study status</b> Completed
Last Edited 20/11/2024	<b>Condition category</b> Infections and Infestations

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

#### Plain English summary of protocol

#### Background and study aims

Sexually transmitted infections (STIs) are common in young people. Easy-to-treat conditions such as chlamydia or gonorrhea are particularly common, and can lead to major health problems if left untreated. Practicing safe sex by using condoms and getting tested for STIs before they stop using condoms with a new partner, lowers the risk of getting an infection. Likewise, people with an infection are less likely to get another infection if they tell their partner. These practices can be very difficult for young people however. The use of text messages offering support has been shown to be very effective in other areas, such as quitting smoking, as so it is possible that it could also help encourage safe sex, getting tested for STIs and helping people to tell their partner if they are infected. The aim of this study is to find out whether delivering support using text messages over the course of one year is an effective way of reducing STIs by promoting safe sex and regular STI testing.

#### Who can participate?

Young adults aged between 16 and 24 who have had a positive chlamydia or gonorrhoea test in the last two weeks and own a mobile phone.

#### What does the study involve?

Participants are randomly allocated to one of two groups. Participants in the first group receive regular text messages for one year (one-two per day for one month, two-three per week for the second month and then two-five per month for the rest of the study). These messages are tailored to individual participants based on gender, sexual orientation and which STI they have been diagnosed with. The messages contain information about treatment for their STI as well as promoting condom use to encourage safe sex. The messages also offer support on how to tell their partner so that they can be tested and treated. Participants in the second group receive a monthly text message for a year, asking them to provide information about any changes in the contact details. These participants receive usual care and are free to seek treatment and support as needed. After one year, participants are re-tested in order to find out how many have an STI. The number of participant's partners who also came for treatment is also recorded.

What are the possible benefits and risks of participating?

Participants may benefit from the trial as they may find the messages helpful and may learn about safer sex behaviours. There are very few risks in taking part. Completing the questionnaires and providing a sample will take up some time. It is possible that the messages could be read by someone other than the participant. Participants are advised to password-lock their phones and delete messages after they read them. Data will be collected regarding whether other people viewed messages and whether the participant was happy/unhappy about this. Data will be collected about involvement in road traffic accidents as they are the only demonstrated harm resulting from text messaging.

Where is the study run from? London School of Hygiene and Tropical Medicine (UK)

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

Who is funding the study? National Institute for Health Research (UK)

Who is the main contact? Professor Caroline Free Caroline.Free@lshtm.ac.uk

### **Contact information**

**Type(s)** Public

**Contact name** Prof Caroline Free

**Contact details** London School of Hygiene and Tropical Medicine Keppel Street London United Kingdom WC1E 7HT +44 (0)207958 8109 Caroline.Free@lshtm.ac.uk

### Additional identifiers

**EudraCT/CTIS number** Nil known

IRAS number

**ClinicalTrials.gov number** Nil known

### Secondary identifying numbers

CPMS 20710

### Study information

#### Scientific Title

Safetxt: A randomised controlled trial of an intervention delivered by mobile phone messaging to reduce sexually transmitted infections (STI) by increasing sexual health precaution behaviours in young people

#### **Study objectives**

The aim of this study is to establish the effectiveness of a safer sex intervention delivered by mobile phone messaging on STI infection at 1 year; partner notification and condom use at 4 weeks; and partner notification, condom use and STI testing at 1 year.

#### Ethics approval required

Old ethics approval format

**Ethics approval(s)** London - Riverside Research Ethics Committee, 16/10/2015, ref: 15/LO/1665

**Study design** Randomized controlled trial

**Primary study design** Interventional

Secondary study design Randomised controlled trial

#### Study setting(s) Other

**Study type(s)** Treatment

#### 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

Topic: Infectious Diseases; Subtopic: Infectious Diseases; Disease: Infectious Diseases and Microbiology

#### Interventions

Participants will be randomly allocated, using a remote computer based randomised system, to a safer sex intervention delivered by text messaging or to a control group. The allocation will be by simple randomisation.

Control group: Participants receive a monthly text message asking the participant to provide information about changes in postal or email addresses

Intervention group: Participants receive regular messages delivered by text message to influence safer sex behaviours. The intervention employs education, enabling and incentivising behaviour change functions and twelve behaviour change techniques identified in effective face to face safer sex interventions. The information on safer sexual practices is in accordance with existing guidelines. The intervention text message content has been developed in collaboration with young people and has been shown to be acceptable, comprehensible and relevant. Participants will be sent messages at the following frequencies:

1. 4 messages per day for days 1-3

2. 1-2 messages per day for days 4-28

3. 2-3 messages per week for month 2

4. 2-5 messages per month for months 3-12

#### Intervention Type

Other

#### Primary outcome measure

Cumulative incidence of Chlamydia and gonorrhoea infection at one year assessed by NAAT (nucleic acid amplification test) tests: urine for men with pharyngeal and anal swabs for MSM (men who have sex with men) and self-taken vulvo-vaginal swab for women.

#### Secondary outcome measures

Current secondary outcome measures as of 30/10/2019:

Measured at 4 weeks:

Behaviours:

1. Whether participants took the (prescribed antibiotic) treatment and avoided sex for 7 days after treatment, self-reported on 4-week questionnaire

2. Whether they told the last person they had sex with before testing positive, that they needed to get treatment, self-reported on 4-week questionnaire

3. Clinic attendance by partner for treatment, identified from clinic records

4. Condom use at last sex, self-reported on 4-week questionnaire

Process outcomes – scores of the theoretical constructs underlying the components of the intervention (behaviour change mediators):

- 1. Attitudes towards partner notification, self-reported on 4-week questionnaire
- 2. Self–efficacy in telling a partner about an infection, self-reported on 4-week questionnaire
- 3. Self–efficacy in negotiating condom use, self-reported on 4-week questionnaire
- 4. Correct condom use self-efficacy, self-reported on 4-week questionnaire
- 5. Knowledge related to STIs, self-reported on 4-week questionnaire

#### Measured at 1 year:

STIs:

1. Diagnosed with any STI after joining the trial according to self-report confirmed by postal test results and clinic records, self-reported on 1-year questionnaire

#### Behaviours:

- 1. Condom use at last sex, self-reported on one year questionnaire
- 2. Number of sexual partners since joining the trial, self-reported on one year questionnaire
- 3. Sex with someone new since joining the trial, self-reported on one year questionnaire

4. Condom use at first sex with most recent new partner, self-reported on one year questionnaire

5. Self-reported sexually transmitted infection testing for self - prior to first sex with most recent new partner, self-reported on 1-year questionnaire

6. Sexually transmitted infection testing for self - prior to first sex with most recent new partner, confirmed according to clinic record that testing occurred

7. Participant's report as to whether their most recent new partner was tested for sexually transmitted infection prior to sex with them, self-reported on 1-year questionnaire

8. Number of sexual partners since joining the trial, self-reported on 1-year questionnaire

9. Reading and sharing of intervention content, self-reported on 1-year questionnaire

10. Number of text messages read, self-reported on one year questionnaire

11. Whether anyone else read the messages, if yes how did the participant feel about them reading the messages? Self-reported on 1-year questionnaire

12. Reading someone else's messages in the trial (to be reported for control group participants), self-reported on 1-year questionnaire

13. Someone else in the trial reading participants' messages (to be reported for intervention group participants), self-reported on 1-year questionnaire

Potential harms:

1. Car accident where the participant was the driver in the past year, self-reported on one year questionnaire

2. Experience of partner violence in the past year, self-reported on one year questionnaire

Previous secondary outcome measures:

1. Clinic attendance by partner for treatment is determined at 4 weeks

2. Whether participants took the treatment and avoided sex for 7 days after treatment is determined at 4 weeks

#### Overall study start date

19/08/2015

#### **Completion date**

06/05/2020

## Eligibility

#### Key inclusion criteria

 Aged 16 to 24 inclusive
 Received a positive chlamydia or gonorrhoea test result or have been diagnosed with NSU in the last 2 weeks
 Own a personal mobile phone
 Able to provide informed consent

Participant type(s) Patient

**Age group** Adult

**Lower age limit** 16 Years **Upper age limit** 24 Years

**Sex** Both

**Target number of participants** Planned Sample Size: 6250; UK Sample Size 6250

**Total final enrolment** 6248

**Key exclusion criteria** Known to be a sexual partner of someone already recruited to the trial.

**Date of first enrolment** 01/04/2016

Date of final enrolment 27/11/2018

### Locations

**Countries of recruitment** England

United Kingdom

**Study participating centre London School of Hygiene and Tropical Medicine** Keppel Street London United Kingdom WC1E 7HT

### Sponsor information

**Organisation** London School of Hygiene and Tropical Medicine

**Sponsor details** Keppel Street London England United Kingdom WC1E 7HT

**Sponsor type** University/education

#### ROR

https://ror.org/00a0jsq62

### 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**

#### Publication and dissemination plan

The research findings will be published in high impact research journals and presented at international conferences. Findings will be disseminated to all service collaborators and participants in the trial, using our existing communication links. In addition, research findings will be presented to the general public via the media (newspaper, radio and TV). The study team will liaise with the LSHTM and NIHR marketing and communications teams to endure that the results are disseminated to the public via broader media and through the LSHTM Clinical Trials Unit social media links.

If the intervention is proven effective, research findings will also be presented to potential implementing organisations in the UK including Public Health England and the chlamydia screening programme. Dr Free is an advisor to a number of WHO m-health working groups and

will ensure the results are disseminated to WHO and other organisations which support the implementation of effective health interventions internationally.

#### Intention to publish date

31/10/2020

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

The datasets generated during and/or analysed during the current study are/will be available upon request

#### IPD sharing plan summary

Available on request

#### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol article	protocol	08/03/2020	11/03/2020	Yes	No
Statistical Analysis Plan	version v6	10/06/2020	19/06/2020	No	No
<u>Results article</u>		28/09/2022	29/09/2022	Yes	No
<u>HRA research summary</u>			20/09/2023	No	No
Results article	Qualitative results	24/10/2023	26/10/2023	Yes	No
Other publications	Secondary data analysis	07/11/2024	20/11/2024	Yes	No