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

Submission dateRecruitment status[X] Prospectively registered17/03/2016No longer recruiting[X] Protocol

Registration date Overall study status [X] Statistical analysis plan

17/03/2016 Completed [X] Results

Infections and Infestations

Last Edited Condition category [] Individual participant data

Background and study aims

Plain English summary of protocol

20/11/2024

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

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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

- 1. Aged 16 to 24 inclusive
- 2. Received a positive chlamydia or gonorrhoea test result or have been diagnosed with NSU in the last 2 weeks
- 3. Own a personal mobile phone
- 4. 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
Results article		28/09/2022	29/09/2022	Yes	No
HRA research summary			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