Understanding engagement with an app targeting harmful drinking: Development and evaluation of the BRANCH smartphone app

| Submission date | Recruitment status No longer recruiting | Prospectively registered | | |
|-------------------|-----------------------------------------|--------------------------------------------|--|--|
| 23/07/2018 | | ☐ Protocol | | |
| Registration date | Overall study status | Statistical analysis plan | | |
| 26/07/2018 | Completed | [X] Results | | |
| Last Edited | Condition category | [] Individual participant data | | |
| 17/12/2018 | Other | | | |

Plain English summary of protocol

Background and study aims

Excessive alcohol consumption accounts for approximately 3 million deaths per year and is the third highest risk factor for ill-health, behind only smoking and high blood pressure. In the UK when young adults drink at hazardous or harmful levels, their consumption is the highest amongst all age groups. Young adults are reluctant to seek professional help for mental health problems when necessary. When they do seek help via primary care, harmful drinking in younger adults is under-identified by doctors. Therefore, finding ways to reduce harmful alcohol consumption in this population is a challenge. Electronic screening and brief interventions (eSBI) are typically delivered via the internet and smartphone apps, including tools such as alcohol screening, feedback on drinking and information on risks and advice for cutting down, and have shown to be effective in reducing harmful alcohol-use. However, a major issue with the eSBI app is sufficiently engaging individuals with the app, with the app not being used as frequently as necessary.

The aim of this study was to develop a smartphone app called 'BRANCH', which included new strategies to target harmful drinking, and to examine whether it improved use of the app, along with whether it reduced harmful drinking.

Who can participate?

18-30 year olds from the UK who drink alcohol at a harmful level and have a smartphone

What does the study involve?

The study involves comparing a comprehensive version of the app 'BRANCH', to a basic version. The comprehensive version includes screening and personalised feedback for alcohol use, the option to set a goal to reduce alcohol use, and information on alcohol risks and advice for cutting down, along with new strategies such as tailoring to motivations for cutting down reminders and a Twitter style newsfeed. The basic version just includes screening and personalised feedback for alcohol use, the option to set a goal to reduce alcohol use, information on alcohol risks and advice for cutting down. Participants are allocated at random to either the basic or comprehensive version of the app, and asked to use it to record their alcohol use.

What are the benefits and risks of participating?

The possible benefit to participants is that taking part could potentially reduce their harmful alcohol use and therefore reduce their risks of alcohol-related disease. There are no known risks to participants taking part in this study.

Where is the study run from? King's College London

When is the study starting and how long is it expected to run for? January 2015 to December 2017

Who is funding the study?

- 1. Medical Research Council (MRC) (UK)
- 2. Collaboration for Leadership in Applied Heath Research and Care in South London (CLAHRC) (UK)

Who is the main contact? Joanna Milward joanna.milward@kcl.ac.uk

Study website

n/a

Contact information

Type(s)

Scientific

Contact name

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Contact details

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

Study information

Scientific Title

Development and evaluation of a smartphone app targeting harmful drinking in young adults: How do we promote engagement to improve clinical outcomes?

Acronym

BRANCH

Study objectives

- 1. Null hypothesis: The addition of EPSs in an app targeting harmful drinking in young adults would not result in a significant increased use measured by number of logins compared to the same app including only core-components and basic strategies 28 days post randomisation.
- 2. Null hypothesis: Users of the comprehensive version of the app would not show a significant reduction in harmful drinking score as measured by the AUDIT C score compared to users of the basic version at 6-month post randomisation.
- 3. Null hypothesis: Engagers in the intervention arm who logged into BRANCH more than once would not show a significant reduction in harmful drinking as measured by the AUDIT C score compared to non-engagers in both treatment arms.

Ethics approval required

Old ethics approval format

Ethics approval(s)

King's College London University Ethics Committee, 09/08/2016, RESCMR-16/17-2896

Study design

Interventional single-centre randomised controlled trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Internet/virtual

Study type(s)

Treatment

Participant information sheet

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

Health condition(s) or problem(s) studied

Harmful drinking

Interventions

This trial uses an electronic screening and brief intervention app targeting harmful drinking in young adults aged 18-30. Participants will be randomised into either the intervention or control group using an online automated system.

Participants in the intervention group receive a comprehensive version of the app, including screening and personalised feedback for alcohol use, the option to set a goal to reduce alcohol use, information on alcohol risks and advice for cutting down and novel engagement promoting strategies. These include a social Twitter-style newsfeed, tailoring to motivations for cutting down and goals via the newsfeed, a social teams section based on the principles of gamification, extended infographic information on advice for cutting down and in-app reminders on the newsfeed.

Participants in the control group receive a basic version of the app including screening and personalised feedback for alcohol use, the option to set a goal to reduce alcohol use, information on alcohol risks and advice for cutting down. Minimal engagement promoting strategies included. For example, all participants received an app which was multimedia, interactive, with single exposure delivery of information. The basic version included no tailoring, gamification, reminders or social features. All other features of the app remained the same, including the branding, overall look and feel and aesthetic design.

Intervention Type

Behavioural

Primary outcome measure

Number of logins over the 28 day study period

Secondary outcome measures

Harmful alcohol consumption, assessed using the Alcohol Use Disorders Identification Test for Consumption (AUDIT-C) at the baseline and after 6 months

Overall study start date

01/09/2015

Completion date

23/06/2018

Eligibility

Key inclusion criteria

- 1. Aged 18-30 years old
- 2. Harmful level of drinking (scored \geq 7 on AUDIT-C)
- 3. Living in UK
- 4. Owns a smartphone

Participant type(s)

Other

Age group

Adult

Lower age limit

18 Years

Upper age limit

30 Years

Sex

Both

Target number of participants

564

Key exclusion criteria

N/A

Date of first enrolment

01/01/2017

Date of final enrolment

30/12/2017

Locations

Countries of recruitment

England

United Kingdom

Study participating centre King's College London

ASB
4 Windsor Walk
Denmark Hill
London
United Kingdom
SE58BB

Sponsor information

Organisation

King's College London

Sponsor details

Franklin Wilkins Building Waterloo Road London England United Kingdom SE1 9NH 020 7836 5454 pnm@kcl.ac.uk

Sponsor type

University/education

Website

https://www.kcl.ac.uk/index.aspx

ROR

https://ror.org/0220mzb33

Funder(s)

Funder type

Not defined

Funder Name

Medical Research Council

Alternative Name(s)

Medical Research Council (United Kingdom), UK Medical Research Council, MRC

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

United Kingdom

Funder Name

South London Collaboration for Leadership in Applied Heath Research and Care in (CLAHRC)

Results and Publications

Publication and dissemination plan

We intend to publish in a peer reviewed journal and disseminate the findings at academic conferences.

Intention to publish date

01/11/2018

Individual participant data (IPD) sharing plan

The data sharing plans for the current study are unknown and will be made available at a later date

IPD sharing plan summary

Not provided at time of registration

Study outputs

| Output type | Details | Date created | Date added | Peer reviewed? | Patient-facing? |
|-----------------|---------------------------|--------------|------------|----------------|-----------------|
| Results article | qualitative study results | 13/12/2018 | | Yes | No |