

The safe use of dating applications (apps) among men who have sex with men: developing and testing an interactive web-based intervention to reduce risky sexual behaviours

Submission date	Recruitment status	[X] Prospectively registered
27/04/2020	No longer recruiting	[X] Protocol
Registration date	Overall study status	<input type="checkbox"/> Statistical analysis plan
28/04/2020	Completed	[X] Results
Last Edited	Condition category	<input type="checkbox"/> Individual participant data
11/11/2024	Infections and Infestations	

Plain English summary of protocol

Background and study aims

Over the past two decades, significant changes have occurred in how men who have sex with men (MSM) find partners, moving from the traditional approach (in person at gay bars) to the Internet and now to smartphone dating applications (apps). Notably, both international and local studies have found a high prevalence of sexually transmitted infections (STIs) and risky sexual behaviours, such as condomless anal sex, substance misuse in conjunction with sex ('chemsex') and group sex, among MSM dating app users. Although the use of dating apps is an emerging sexual risk factor, little effort has been expended on the promotion of safe sex and good sexual health among the users of those apps. Previous studies in various populations have found that interactive web-based interventions can improve sexual health knowledge, attitudes and sexual behaviours. Therefore, the aim of the proposed study is to develop and evaluate the effectiveness of an interactive web-based intervention in improving the sexual health of MSM dating app users in Hong Kong.

Who can participate?

Adult men over 18 years who are homosexually active and use dating apps.

What does the study involve?

Chinese MSM dating app users who have had sex in the past 12 months will be recruited and randomly allocated into either the intervention ($n = 200$) or control group ($n = 200$). Subjects in the intervention group will receive the web-based intervention containing interactive content that (1) encourages a positive attitude towards consistent condom use and HIV/STI testing and negative attitude towards chemsex and group sex; (2) positions condom use and regular HIV/STI testing as normative; and (3) targets improved perceived self-efficacy concerning condom use and negotiation and HIV/STI testing. The control group will receive only web-based information without sexual health components. Subjects in both groups will be evaluated at baseline and three and six months after baseline.

What are the possible benefits and risks of participating?

One possible benefit is that participants can enhance their sexual health knowledge. There is no significant risk in the study.

Where is the study run from?

School of Nursing, University of Hong Kong.

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

June 2020 to April 2022

Who is funding the study?

Research Grants Council (Early Career Scheme), University of Hong Kong.

Who is the main contact?

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Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

Clinical Trials Information System (CTIS)

Nil known

ClinicalTrials.gov (NCT)

Nil known

Protocol serial number

Nil known

Study information

Scientific Title

Safe use of dating applications (apps) among men who have sex with men: developing and testing an interactive web-based intervention to reduce risky sexual behaviours

Study objectives

Education regarding condom use and HIV/STI testing will result in (1) fewer risky sexual behaviours, (2) better efficacy in and positive attitudes towards condom use, and (3) more HIV and sexually transmitted infection (STI) testing.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approved 20/02/2018, Institutional Review Board of the University of Hong Kong/Hospital Authority Hong Kong West Cluster (Room 901, 9/F, Administration Block, Queen Mary Hospital, 102 Pokfulam Road, Hong Kong; +852 2255 4086; hkwirb@ha.org.hk), ref: HKU/HA HKW IRB: UW 18-152

Study design

Two-armed non-blinded randomized controlled trial

Primary study design

Interventional

Study type(s)

Quality of life

Health condition(s) or problem(s) studied

Safe sex to prevent sexually transmitted infections (STI)

Interventions

Chinese MSM dating app users who have had sex in the past 12 months will be recruited and randomly allocated into either the intervention ($n = 200$) or control group ($n = 200$). Subjects in the intervention group will receive the web-based intervention containing interactive content that (1) encourages a positive attitude towards consistent condom use and HIV/STI testing and negative attitude towards chemsex and group sex; (2) positions condom use and regular HIV/STI testing as normative; and (3) targets improved perceived self-efficacy concerning condom use and negotiation and HIV/STI testing. The control group will receive only web-based information without sexual health components. Subjects in both groups will be evaluated at baseline and 3 and 6 months after baseline.

Participants will be randomly assigned to either the intervention group or control group via computer-generated block randomisation (with blocks of size 4) on a 1:1 randomisation ratio; no stratification will be applied.

Intervention Type

Behavioural

Primary outcome(s)

Frequency of condomless anal sex measured using self-report, in the preceding 3 months (at baseline), at 3 months, and 6 months follow up

Key secondary outcome(s)

1. Frequency of group sex and chemsex measured using self-report, in the preceding 3 months (at baseline), at 3 months, and 6 months follow up
2. Self-efficacy in condom use measured using the validated traditional Chinese version of the Condom Self-Efficacy Scale at baseline, 3-month follow-up and 6-month follow-up
3. Attitudes towards condom use is measured by the UCLA Multidimensional Condom Attitudes Scale at baseline, 3-month follow-up and 6-month follow-up
4. Frequency of HIV and other STI testing measured using self-report, in the preceding 3 months (at baseline), at 3 months, and 6 months follow up

Completion date

06/04/2022

Eligibility

Key inclusion criteria

1. Men who have sex with men
2. Cisgender
3. Aged 18 or above
4. Current dating app users
5. HIV-negative
6. Sexually active
7. Able to read and understand Chinese

Participant type(s)

Other

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

Male

Total final enrolment

480

Key exclusion criteria

Does not meet inclusion criteria

Date of first enrolment

30/11/2020

Date of final enrolment
19/10/2021

Locations

Countries of recruitment
Hong Kong

Study participating centre
The University of Hong Kong
School of Nursing
4/F, William M.W. Mong Block
21 Sassoon Road
Pokfulam
Hong Kong
Hong Kong

Sponsor information

Organisation
University of Hong Kong

ROR
<https://ror.org/02zhqqq86>

Funder(s)

Funder type
University/education

Funder Name
University of Hong Kong

Alternative Name(s)
The University of Hong Kong, , Universitas Hongkongensis, HKU

Funding Body Type
Government organisation

Funding Body Subtype

Universities (academic only)

Location

Hong Kong

Results and Publications

Individual participant data (IPD) sharing plan

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

IPD sharing plan summary

Data sharing statement to be made available at a later date

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		09/11/2024	11/11/2024	Yes	No
Protocol article	protocol	27/05/2020	29/05/2020	Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes