

# 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

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

## 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?

Dr Edmond Pui Hang Choi  
h0714919@connect.hku.hk

## Contact information

**Type(s)**

Scientific

**Contact name**

Dr Edmond Pui Hang Choi

**ORCID ID**

<https://orcid.org/0000-0001-9062-3540>

**Contact details**

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

+852 3917 6600

h0714919@connect.hku.hk

## Additional identifiers

**EudraCT/CTIS number**

Nil known

**IRAS number**

**ClinicalTrials.gov number**

Nil known

## Secondary identifying numbers

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

## Secondary study design

Randomised controlled trial

## Study setting(s)

Community

## Study type(s)

Quality of life

## 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

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 measure**

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

### **Secondary outcome measures**

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

### **Overall study start date**

01/10/2017

### **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

### **Age group**

Adult

**Lower age limit**

18 Years

**Sex**

Male

**Target number of participants**

400

**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

**Sponsor details**

School of Nursing

4/F, William M.W. Mong Block

21 Sassoon Road

Pokfulam  
Hong Kong  
Hong Kong  
-  
+852 3917 6600  
nursing@hku.hk

**Sponsor type**  
University/education

**Website**  
<https://nursing.hku.hk/>

**ROR**  
<https://ror.org/02zhqgq86>

## **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**

**Publication and dissemination plan**  
Results will be published in peer-reviewed journals.

**Intention to publish date**  
31/12/2023

**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?
<a href="#">Protocol article</a>	protocol	27/05/2020	29/05/2020	Yes	No
<a href="#">Results article</a>		09/11/2024	11/11/2024	Yes	No