# Health promotion program of eating habits among firefighters in Hong Kong

Submission date	Recruitment status	<ul><li>Prospectively registered</li></ul>		
08/04/2019	No longer recruiting	[X] Protocol		
Registration date	Overall study status	Statistical analysis plan		
10/04/2019	Completed	[X] Results		
Last Edited	Condition category	[] Individual participant data		
09/07/2024	Nutritional, Metabolic, Endocrine			

#### Plain English summary of protocol

Background and study aims

Firefighters' health is affected by the high prevalence rate of obesity and cardiovascular diseases, which also are the common risk factors of sudden cardiac death. The aim of this study is to enhance healthy eating among firefighters through healthy eating education programme.

#### Who can participate?

Current Hong Kong Fire Services Department male firefighters aged over 18 years.

#### What does the study involve?

This will be a randomized control trial study. Participants will be randomly assigned into either control (health promotion pamphlet) or intervention (health promotion pamphlet and education materials through WhatsApp) groups. Healthy eating knowledge was assessed by selfadministrative questionnaire and anthropometric measurements were recorded at three different time points.

#### What are the possible benefits and risks of participating?

The possible benefits are: the findings of this study will be set as a foundation of a bigger research project, which can be lead to a longitudinal study to observe the sustainability of firefighters' healthy eating habit. There are no possible risks involved in this study.

#### Where is the study run from?

The Hong Kong Polytechnic University, Hong Kong.

When is the study starting and how long is it expected to run for? September 2018 to October 2019

#### Who is funding the study?

Hong Kong Polytechnic University funded the project.

#### Who is the main contact?

Dr. Kin Cheung, kin.cheung@polyu.edu.hk

# **Contact information**

#### Type(s)

Scientific

#### Contact name

Ms Winnie Ng

#### Contact details

No. 8 Hung Lok Road Hung Hom Kowloon Hong Kong Hong Kong 852 (852) 2766-6773 winnie.wm.ng@connect.polyu.hk

## Additional identifiers

#### **EudraCT/CTIS** number

Nil known

#### **IRAS** number

#### ClinicalTrials.gov number

Nil known

#### Secondary identifying numbers

HSEARS20180527001-01

# Study information

#### Scientific Title

A feasibility study of a WhatsApp-delivered transtheoretical model-based intervention to promote healthy eating knowledge and habits for firefighters in Hong Kong: A cluster randomized controlled trial

#### Acronym

**HPPEHK** 

#### Study objectives

Using the combination of WhatsApp and pamphlets is better than pamphlets alone in promoting healthy eating habit.

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Approved 13/08/2018, Human Subjects Ethics Sub-committee (HSESC) of the Hong Kong Polytechnic University (Room Z404, 4/F, Block Z, The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong; cherrie.mok@polyu.edu.hk; 852 2766 6378), ref: HSEARS20180527001-01

#### Study design

Two-armed pre-post test clustered randomized control trial feasibility study

#### Primary study design

Interventional

#### Secondary study design

Cluster randomised trial

#### Study setting(s)

Community

#### Study type(s)

Quality of life

#### Participant information sheet

See study outputs table

#### Health condition(s) or problem(s) studied

Obesity and cardiovascular diseases

#### **Interventions**

All participants are the firefighting teams' member of the Hong Kong Fire Services Department (HKFSD) and they come from more than one fire stations, which located in different districts in Hong Kong. Each fire station may consist of more than one firefighting teams. Each fire station will be treated as individual cluster and randomly assigned into either intervention or control groups using computer generated random numbers.

Participants in the control group will receive the stage-based promotion pamphlet at the baseline; whereas the participants in intervention group will receive both stage-based promotion pamphlet (same as the control group) and baseline stage-matched teaching material every two weeks by WhatsApp. Data includes anthropometric measurements (such as body height, body weight, waist circumference, hip circumference), demographic information (such as age, education level, marital status), working characteristics, eating habits, perception on healthy eating promotion programme, stage of change, decisional balance and self-efficacy. Anthropometric measurements will be recorded by a well-trained researcher using same set of measuring instruments throughout the measuring process. Other data will be collected using self-administrative questionnaire. Data will be collected in either University laboratory or fire stations at three different time points: T0 (Baseline), T1 (three months after the completion of 8-week intervention), and T2 (three months after T1).

Firefighters' characteristics and their eating habit are collected at three time points: baseline, T0, 3-months after the completion of 8-weeks intervention, T1 and 3-months after T1, T2. The effects of health promotional program on firefighters' eating habit and health knowledge will be assessed by comparing the outcomes within individual groups at different time points. Furthermore, comparison between intervention (WhatsApp and pamphlets) and control (pamphlets) groups will also conducted.

#### Intervention Type

Other

#### Primary outcome measure

Eating habit will be assessed using self-administrative questionnaire, which developed on the basis of the Promoting Healthy Lifestyles: Alternative Models' Effects (PHLAME). Data will be collected at three timepoints: baseline, T0, 3-months after the 8-weeks intervention, T1 and three months after T1, T2.

#### Secondary outcome measures

- 1. Anthropometric measurements (body height, body weight, waist circumference, hip circumference) measured by the researcher at three timepoints (baseline, T0, 3-months after the 8-weeks intervention, T1 and three months after T1, T2) using reliable instruments
- 2. Demographic information (age, education level, marital status) at baseline

#### Overall study start date

01/07/2018

#### Completion date

29/02/2020

# **Eligibility**

#### Key inclusion criteria

- 1. Male
- 2. Aged 18 years or older;
- 3. Currently working for the HKFSD as firefighters
- 4. Own a smart phone, which able to access internet

#### Participant type(s)

Healthy volunteer

#### Age group

Adult

#### Lower age limit

18 Years

#### Sex

Male

#### Target number of participants

Total of 30 participants are required. There are 15 participants per cluster

#### Total final enrolment

48

#### Key exclusion criteria

None

#### Date of first enrolment

01/09/2018

#### Date of final enrolment

31/05/2019

### Locations

#### Countries of recruitment

Hong Kong

# Study participating centre The Hong Kong Polytechnic University

Hung Hom Kowloon Hong Kong Hong Kong 852

#### Study participating centre

Hong Kong Fire Services Department Staffs General Association

Flat A, 2/F, Cheng Hong Building.

47-57 Temple Street

Yaumatei

Kowloon

Hong Kong

Hong Kong

852

# Sponsor information

#### Organisation

Hong Kong Polytechnic University

#### Sponsor details

School of Nursing
The Hong Kong Polytechnic University
Hung Hom
Kowloon
Hong Kong
Hong Kong

852 (852) 2766-6773 kin.cheung@polyu.edu.hk

#### Sponsor type

University/education

#### **ROR**

https://ror.org/0030zas98

# Funder(s)

#### Funder type

University/education

#### **Funder Name**

Hong Kong Polytechnic University

#### Alternative Name(s)

The Hong Kong Polytechnic University, , Hong Kong PolyU, Government Trade School, Hong Kong Technical College, Hong Kong Polytechnic, , , Hēunggóng Léihgūng Daaihhohk, PolyU, HKPU

#### **Funding Body Type**

Government organisation

#### **Funding Body Subtype**

Universities (academic only)

#### Location

Hong Kong

#### **Results and Publications**

#### Publication and dissemination plan

Planned publication in a high-impact peer-reviewed journal such as Journal of Clinical Nursing.

#### Intention to publish date

31/12/2020

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

The datasets generated and/or analysed during the current study will be published as a supplement to the results publication

#### IPD sharing plan summary

# Published as a supplement to the results publication

# Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol article	protocol	12/06/2020	15/06/2020	Yes	No
Results article		01/06/2021	31/10/2022	Yes	No
Participant information sheet			09/07/2024	No	Yes