Youth Concussion Awareness Network (You-CAN): A peer-led approach to raising concussion awareness in Canadian high schools

Submission date	Recruitment status No longer recruiting	Prospectively registered	
23/12/2019		[X] Protocol	
Registration date	Overall study status Completed Condition category	Statistical analysis plan	
14/01/2020		☐ Results	
Last Edited		☐ Individual participant data	
07/02/2020	Injury, Occupational Diseases, Poisoning	Record updated in last year	

Plain English summary of protocol

Background and study aims

Concussions are on the rise in youth and are a matter of public health concern. Concussions often go unreported, and youth with concussion feel that their peers do not understand their experiences. The Youth Concussion Awareness Network (You-CAN) is a peer-led concussion education program designed to be delivered in the high school setting. The aim of this study is to understand if participating in You-CAN is feasible and if it impacts high school students' intent to report a concussion and provide social support to a peer following a concussion.

Who can participate?

Canadian high schools (whose school board has been randomly selected and has granted approval for the study). Any student who attends the participating high schools can participate in the study.

What does the study involve?

High schools will be randomly assigned to one of 3 groups:

- 1. You-CAN led by school staff and the research team
- 2. You-CAN led by school staff
- 3. Normal school concussion curriculum comparison group

Schools in groups 1. and 2. will develop a Concussion Council and have access to the You-CAN web portal, which houses guidelines for creating a council and up-to-date, evidence-based concussion resources. The Concussion Council will plan and lead a week-long concussion awareness campaign and present at the year-end showcase. All schools will complete a school-wide survey at the beginning and end of the school year to understand more about what students know, think and feel about concussions.

What are the possible benefits and risks of participating?

There are no direct risks of participating in this research study. There are no direct benefits of participating in the research, however, this research will help the research team learn more about what high school students know, think and feel about concussions; and if a peer-led education program has an effect on what students know, think and feel about concussions.

Where is the study run from? Holland Bloorview Kids Rehabilitation Hospital (Canada)

When is the study starting and how long is it expected to run for? May 2017 to March 2021

Who is funding the study?
The Canadian Institutes of Health Research (CIHR) (Canada)

Who is the main contact?
Nick Reed, nick.reed@utoronto.ca

Contact information

Type(s)

Public

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Additional identifiers

EudraCT/CTIS number

Nil known

IRAS number

ClinicalTrials.gov number

Nil known

Secondary identifying numbers

Nil known

Study information

Scientific Title

Investigating the effects of a peer-led concussion education program for high school-aged youth on improving concussion reporting and social support compared to the usual school year

Acronym

You-CAN

Study objectives

- 1. You-CAN will result in improved concussion knowledge, attitudes, subjective norms, perceived behavioural control, intent to report a concussion to an adult, and intent to provide social support to a peer amongst Canadian high school students.
- 2. You-CAN will be an acceptable approach to advancing concussion knowledge sharing in Canadian high schools.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approved 13/03/2019, Holland Bloorview Research Ethics Board (150 Kilgour Road, Toronto, ON, Canada, MG4 1R8; +1 4164256220 ext. 3248; awilliams@hollandbloorview.ca), ref:18-826

Study design

Three-arm, cluster randomized controlled trial

Primary study design

Interventional

Secondary study design

Cluster randomised trial

Study setting(s)

School

Study type(s)

Quality of life

Participant information sheet

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

Health condition(s) or problem(s) studied

Concussion in high school

Interventions

Once schools consent to participate, three size-matched schools will be randomly assigned (sequential cluster random sampling to be completed using R software) to one of three study arms:

- 1. You-CAN led by school staff (school-led You-CAN)
- 2. You-CAN led by school staff and research team (research-led You-CAN)
- 3. Normal school concussion management and education comparison group.

Arms 1. and 2. will participate in the You-CAN intervention. In addition to the You-CAN intervention, research-led arm 2. will participate in monthly video calls with the research team. The comparison arm 3. will not participate in the You-CAN intervention. All arms will complete the Concussion Reporting and Social Support Measure (CRSS-M) at baseline and 9 months and the school environment survey at baseline.

The You-CAN intervention will follow the Investigation, Plan and Prepare, Action, Reflection and Demonstration (IPARD) model of service-learning. Schools in arms 1. and 2. will create a concussion council at their school that will plan and deliver a week-long concussion awareness campaign. Students on the concussion council will access the You-CAN web portal that contains evidence-based concussion resources and instructions and timelines. Concussion councils will participate in an online showcase at 5 months where they will present their awareness campaign with the goal of sharing and celebrating each school's concussion awareness campaign with other participating schools from across Canada.

Intervention Type

Behavioural

Primary outcome measure

- 1. Student concussion knowledge measured by Concussion Reporting and Social Support Measure (CRSS-M) survey at baseline and 9 months
- 2. Student intent to report a concussion measured by (CRSS-M) survey at baseline and 9 months
- 3. Student intent to provide social support to a peer measured by (CRSS-M) survey at baseline and 9 months
- 4. Student demographic information measured by (CRSS-M) survey at baseline and 9 months
- 5. School demographic information measured by School Environment Survey (SES) at baseline

Secondary outcome measures

- 1. Web portal use measured by You-CAN Web Portal analytics at 2, 3, 4, 5, 6, 7, 8 and 9 months
- 2. Intervention and incident log assessed by field notes from monthly video calls at 2, 3, 4, 5, 6, 7, 8 and 9 months
- 3. Student-designed activities for concussion awareness campaign assessed by a campaign details survey at 5 months
- 4. Student-designed content assessed at a showcase including handouts, images, PowerPoints or videos at 5, 6, 7 and 8 months
- 5. Student opinion on online concussion showcase measured by post-showcase evaluation

survey at 8 months

- 6. Student and teacher opinion on interventions assessed in exit interviews at 9 months
- 7. Student report of additional engagement activities recorded on additional activities tracking sheet at 8 months

Overall study start date

01/05/2017

Completion date

01/03/2021

Eligibility

Key inclusion criteria

- 1. Students in primarily English-speaking schools
- 2. Students in co-ed schools
- 3. Students in grades 9-12
- 4. Students who have given written consent
- 5. Students on concussion councils who have given written consent and consent has been obtained from a parent/guardian

Participant type(s)

Healthy volunteer

Age group

Child

Sex

Both

Target number of participants

18 schools

Kev exclusion criteria

- 1. Students from schools with less than 100 students
- 2. Students from schools that only teach distance education
- 3. Students that are in an alternative school setting
- 4. Students from schools that already have an established concussion club
- 5. Students from schools where no other size-matched schools chose to participate.

Date of first enrolment

01/03/2019

Date of final enrolment

01/02/2020

Locations

Countries of recruitment

Canada

Study participating centre

Bloorview Research Institute, Holland Bloorview Kids Rehabilitation Hospital

150 Kilgour Rd Toronto Canada M4G1R8

Sponsor information

Organisation

Bloorview Research Institute, Holland Bloorview Kids Rehabilitation Hospital

Sponsor details

150 Kilgour Rd Toronto Canada M4G1R8 +1 4164256220 youcan@hollandbloorview.ca

Sponsor type

Hospital/treatment centre

Website

hollandbloorview.ca

Funder(s)

Funder type

Government

Funder Name

Canadian Institutes of Health Research

Alternative Name(s)

Instituts de Recherche en Santé du Canada, Canadian Institutes of Health Research (CIHR), CIHR_IRSC, Canadian Institutes of Health Research | Ottawa ON, CIHR, IRSC

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

Canada

Results and Publications

Publication and dissemination plan

The research team intends to publish the study protocol and results in a peer-reviewed journal.

Intention to publish date

01/01/2022

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 expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol article	protocol	05/02/2020	07/02/2020	Yes	No