ISRCTN17357362 https://doi.org/10.1186/ISRCTN17357362

Prevention of Running-Related Injuries in the SportMedBC Vancouver Sun Run InTraining Program

Submission date
30/11/2017

Recruitment status
No longer recruiting

Registration date
06/12/2017

Overall study status
Completed

Last Edited
12/04/2019

Condition category
Injury, Occupational Diseases, Poisoning

[X] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

Plain English summary of protocol

Background and study aims
Running is a common and easily accessible form of physical activity, although it is associated with a high incidence of injury. Running-related injuries (RRIs) not only prevent individuals from accomplishing goals and participating in necessary physical activity for optimal health, but also result in societal and economic burdens such as increased healthcare utilization and absence from work. The SportMedBC Vancouver Sun Run 'InTraining Program' was designed in 1996 to train beginner and experienced runners to complete a 10km race and has run yearly since then. Although the InTraining Program was designed to prevent RRI, a study in 2003 found an injury incidence of 29.5% in this clinic. Due to the high popularity of the InTraining Program and its intention to train people to run a 10km race while minimizing injury, it is necessary to investigate how to appropriately prevent RRIs and manage them as early as possible. The three RRI risk factors with the strongest evidence for recreational runners include maladaptive training factors (too much to fast), history of prior injury in the last 12 months, and minimal running experience. Most recreational runners are not aware of the correct risk factors for RRI. There is current evidence to support programs to prevent RRIs including wearing comfortable running shoes, alternating between at least 2 different pairs, cross-training with different sports, maintaining load with under 30% (optimally <10%) increase in volume or intensity of running each week, and interval training with periods of faster and slower running or walking and running. To optimally minimize RRI, it has been suggested that prevention have a multifaceted approach. Online advice can promote multifaceted RRI prevention as it is convenient and can reach many people. The purpose of this study is to evaluate whether tailored online running injury prevention advice, in addition to general advice given at baseline, is more effective for decreasing the prevalence of running-related injuries in the 13 Week SportMedBC Vancouver Sun Run InTraining Program than general advice given at baseline alone.

Who can participate?
Adults aged 18 and older who has signed up for one of the running programs of the SportMedBC Vancouver Sun Run InTraining Program in 2018.

What does the study involve?
Clinics of the InTraining Program are blindly and randomly allocated to one of two groups. All participants receive an online questionnaire to fill out. Participants in the first group receive general running injury prevention advice on Weeks 1 and 2. Those in the second group receive the general running injury prevention advice as well as tailored running injury prevention advice biweekly during Weeks 3, 5, 7, 9, and 11. Participants receive a final questionnaire which includes information about perceptions, behaviours, running injury prevent advice they used and any barriers that prevented them from following the advice.

What are the possible benefits and risks of participating?
It is possible that participants may decrease their risk of sustaining a RRI by participating in this study. They will also help contribute to gaps in research about RRI prevention. There is a risk of RRI associated with running however we have no reason to believe that participating in this study will increase the risk of RRI.

Where is the study run from?
This study is being run by the SportsMedBC Vancouver Sun Run InTraining Program (Canada).

When is the study starting and how long is it expected to run for?
May 2017 to May 2018

Who is funding the study?
University of British Columbia (Canada)

Who is the main contact?
Miss Heather Hollman (Scientific)
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Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
H17-02617

Study information

Scientific Title
To determine whether tailored online evidence-based advice for Running-Related Injury (RRI) prevention, in addition to general advice at baseline, is more effective than general advice at baseline alone for runners of the SportMedBC Vancouver Sun Run InTraining Program to decrease prevalence of RRI and change the perceptions and behaviours of runners regarding RRI prevention interventions

Acronym
InTraining RRI Prevention

Study objectives
If tailored online evidence-based advice for RRI prevention, in addition to general advice at baseline, is given to runners of the SportMedBC Vancouver Sun Run InTraining Program, it will be more effective than general advice given at baseline alone to decrease prevalence of RRI and change the perceptions and behaviours of runners regarding RRI interventions.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Not provided at time of registration

Study design
Mixed method design single-centre randomized cluster trial,

Primary study design
Interventional

Study type(s)
Prevention

Health condition(s) or problem(s) studied
Running-related injuries, defined as running related (training or competition) musculoskeletal pain in the lower limbs that causes a restriction on or stoppage of running (distance, speed, duration, or training) for at least 7 days or 3 consecutive scheduled training sessions, or that requires the runner to consult a physician or other health professional.

Interventions
Before the InTraining Program commences, Clinic Coordinators are given study posters and a web link for the online consent form which includes study information and contact information of the primary investigators and co-investigators. In 2018, there will be 57 clinics with 57 Clinic Coordinators. The clinics are randomly and blindly allocated into control group or intervention group, using sealed envelopes.

Recruitment for the study occurs during Weeks 1 and 2 of the InTraining Program, where Clinic Coordinators email out the web link to their clinic members. This link takes clinic members to a web page that includes the study information and consent. Eligible participants are runners signed up for one of the running programs (LearnToRun10K, RunWalk10K, or Run10KStronger) of the InTraining Program in 2018, 18 years or older, who agree to participate through online informed consent, and provide their email address.

Upon providing consent and their email addresses, study participants are emailed a baseline questionnaire, which includes questions on demographics, running experience, running injury history, current perceptions on running injury prevention and current running injury prevention behaviours practiced. After completing this questionnaire, participants are taken to a proceeding page which includes general online evidence-based running injury prevention advice.

On Weeks 3, 5, 7, 9, and 11 of the program, participants are emailed a Follow-up Questionnaire that asks about running exposure (number and time of running sessions) and whether or not they sustained a running injury in the past to weeks. Participants are sent either consent or intervention versions of the Follow Up Questionnaire, depending on which clinic location they select in the Baseline Questionnaire.

The Follow-Up Questionnaire for the intervention group also include the 4 questions from the Oslo Sports Trauma and Research Center Questionnaire for Health Problems (OSTRCQHP). After completing the questionnaire, participants in the intervention group are taken to another page where they see tailored online evidence-based running injury prevention advice that is tailored to their responses on the 4 questions of the OSTRCQHP. This method of tailoring advice is the same as the method used by Hespanhol et al. (2017).

On Week 13, all participants receive a Final Questionnaire which includes the same two questions about perceptions and behaviours, a question about the sources of running injury prevention advice that participants used the most, along with an open-ended question about barriers that prevented them from participating in running injury prevention advice.

All online advice is based on the most up-to-date research that supports prevention of running injuries.

Surveys are administered to the InTraining Program participants online using the secure REDCap electronic data capture tools hosted and supported by the Vancouver Coastal Health Research Institute at UBC.

Quantitative analysis includes an intention to treat analysis, be based on the percentage of respondents to each question, and be summarized using frequency distributions, medians, percentages, and 95% confidence intervals. An exploratory regression analysis are conducted to examine the association between running injuries sustained and responses such as age, gender, running group, running experience, running injury history, sources of running injury prevention advice most used, correct perceptions, and correct behaviours practiced.

Qualitative analysis includes a thematic analysis of the open-ended question.

Intervention Type
Behavioural

Primary outcome(s)

1. Prevalence of Running-Related Injuries Sustained are measured using the 5 Follow-Up Questionnaires at weeks 3, 5, 7, 9, and 11 and the Final Questionnaire at week 13
2. Number of running sessions not fully accomplished or completely missed due to a running injury are measured using the 5 Follow-Up Questionnaires at weeks 3, 5, 7, 9, and 11 and the Final Questionnaire at week 13

Key secondary outcome(s))
1. Number of correct responses on questions for perceptions and behaviours is measured using Final Questionnaire at week 13 and the changes in responses between the Baseline Questionnaire at week 1 or 2 and the Final Questionnaire at week 13
2. Number of responses to sources of RRI prevention advice most used is measured using the Final Questionnaire at week 13
3. Common barriers that prevent participants from participating in the recommended RRI prevention interventions are measured using an open-ended question on the Final Questionnaire at week 13

Completion date
01/05/2018

Eligibility

Key inclusion criteria
1. Participant must be signed up for one of the running programs (LearnToRun10K, RunWalk10K, or Run10KStronger) of the SportMedBC Vancouver Sun Run InTraining Program in 2018
2. 18 years or older
3. Agree to participate through online informed consent, and provide their email address.

Participant type(s)
Healthy volunteer

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 years

Sex
All

Key exclusion criteria
Participants in the SportMedBC Vancouver Sun Run InTraining Program who are not signed up for the running groups such as Clinic Coordinators, Run Leaders, and participants in the walking groups.

Date of first enrolment
22/01/2018

Date of final enrolment
04/02/2018

Locations

Countries of recruitment
Canada

Study participating centre
SportsMedBC Vancouver Sun Run InTraining Program
Vancouver
Canada
V5B 0A7

Sponsor information

Organisation
University of British Columbia

ROR
https://ror.org/03rmrcq20

Funder(s)

Funder type
University/education

Funder Name
University of British Columbia

Alternative Name(s)
University of British Columbia in Canada, UniversityofBC, The University of British Columbia (UBC), The University of British Columbia, UniBC, UBC

Funding Body Type
Government organisation

Funding Body Subtype
Universities (academic only)

Location

Canada

Results and Publications

Individual participant data (IPD) sharing plan

Participant level data will only be made available to the Primary Investigator, Co-Investigators, and Biostatistician of this study. This is in order to maintain confidentiality of the participants. Data will be stored on an encrypted encrypted computer hard disc with privacy protection in a locked filing cabinet at the Centre for Hip Health and Mobility in Vancouver that is only available to the Principal Investigator and Co-Investigators of this study.

IPD sharing plan summary

Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/05/2019	12/04/2019	Yes	No
Participant information sheet		05/12/2017	01/04/2019	No	Yes
Participant information sheet		05/12/2017	01/04/2019	No	Yes
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes