

Participant Information Sheet

Name of department: Biomedical Engineering

Title of the study: Prevalence of chronic ankle instability in female sport

Introduction

My name is Dr Lauren Forsyth, and I am a Research Associate in the Biomedical Engineering department at the University of Strathclyde. I am part of this international collaboration conducting the study alongside Patrick Rowe, a Lecturer at Victoria University, Dr Luke Donovan, an Assistant Professor at University of North Carolina in Charlotte, and Dr Rona Martin-Smith, a Research Assistant at the University of Strathclyde.

What is the purpose of this investigation?

Lateral ankle sprains are the most common lower limb injury, with 50% occurring during sport and physical activity and 50% occurring during other activities of daily life. The risk of re-sprain increases six-fold following one ankle injury, and for 1 in 5 individuals an initial ankle sprain results in chronic ankle instability (CAI). Concerningly, multidirectional field and court sports including netball, football, basketball, and volleyball have CAI prevalence rates as high as 80%.

CAI is a multi-faceted clinical condition associated with recurrent ankle sprains, pain, mechanical laxity, and/or perceived instability. The long term physiological and psychological effects of chronic conditions cause a substantial burden on an individual's ability to work and participate in physical and sport activities, therefore negatively affecting quality of life.

An estimated 1% of the world's population and 3.4% of people in the UK have symptomatic ankle OA. The prevalence increases people aged between 50-64 years old, those with routine manual occupations, and increases further in retired athletic populations. Individuals experience pain, functional limitations, social isolation, sick leave, and early retirement. Society is burdened by healthcare costs and workforce loss. Ankle OA is the outcome of a traumatic event in 80% of cases (eg. ankle sprain/chronic ankle instability).

Thus, despite lateral ankle sprains often being seen as benign injuries and <26% reported to seek medical attention, there are clear long term health consequences to the initial injury. Knowledge of the prevalence of these injuries is important to inform key stakeholders and prevention and rehabilitation strategies and resources prioritisation.

Despite research identifying the prevalence of CAI across various sports and populations, the sample sizes have been low for population-based studies, and there is a lack of research in female specific sport outside of Asia, including netball, soccer, basketball, and volleyball. Therefore, this study aims to identify the prevalence of CAI and impact on ankle function and quality of life in a large-scale international study (UK, USA, Australia, and New Zealand). Given that lateral ankle sprains are most common in the female population, and that lateral ankle sprains are one of the highest occurring injuries across netball, football, volleyball, and basketball, we will focus on these four sports.

Do you have to take part?

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No. It is your decision to take part in this investigation and you can exit the study survey at any point which will remove yourself from the investigation. All data collected is anonymised, so once you have submitted your survey, we will not be able to delete your submission. Not taking part in this study or withdrawal will not affect your standing or your relationship with any of the collaborating Universities in any way.

What will you do in the project?

You will be asked to complete an online survey which will be live for you to complete at any time from 9th March 2024 until 22nd April 2024 (6 weeks).

The survey includes questions about your sporting history, occupation, weight, height, age, country you reside in, as well as your general health and ankle function.

We expect the survey to take 20-25 minutes to complete.

Once submitted, the end of survey message will appear, and you may exit.

The experiment offers neither incentives nor reimbursement.

Why have you been invited to take part?

The chosen participants will be over 18 years of age and self-report to meeting the following criteria:

Inclusion criteria:

Potential volunteers will be asked to self-report that they:

- Currently participate in a female netball, soccer, basketball, or volleyball team (professional, sub-elite, recreational, social)
- Have participated in netball, soccer, basketball, or volleyball for >12 months.
- Female
- Have access to a device which enables online survey completion

Exclusion criteria:

Potential participants with the following criteria will be excluded from the investigation if they self-report:

- Do not play for a female netball, soccer, basketball, or volleyball team
- Have been playing netball, soccer, basketball, or volleyball for < 12 months.
- Male
- Under 18

What are the potential risks to you in taking part?

As the investigation requires online participation only, there are no risks associated.

What information is being collected in the project?

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All survey data will be handled on Qualtrics software licensed to the University of Strathclyde. The surveys will be anonymous. Once completed, the end of the survey message will appear, and you may exit. Data will be anonymous and will therefore be stored indefinitely.

The survey includes questions about your sporting history, occupation, age, country you reside in, as well as your general health and ankle function.

Who will have access to the information?

All experimental data will be stored on OneDrive with secure access only by the named University of Strathclyde researchers. The data will also be uploaded to a Teams site for the all the named researchers to access.

Where will the information be stored and how long will it be kept for?

Data will be securely stored, and its access will be in accordance with the University of Strathclyde Data Protection Policy.

All anonymised data will be kept indefinitely. Anonymised data will be made publicly available for further study. All the information will be saved as a backup on password protected University of Strathclyde computers and on a password protected folder on external hard drives.

All personal data will be processed in accordance with data protection legislation. Please read our [Privacy Notice for Research Participants](#) for more information about your rights under the legislation.

What happens next?

Thank you for your attention and time in reading the Participant Information. If you would like to continue to the survey please click the next button to complete the consent form prior to completing the survey.

In the case that you do not wish to be involved in the project, then the investigators of this study would like to take the opportunity to thank you for taking interest in this study.

If you would like to receive feedback about the progress of the study post-analysis you can contact Lauren Forsyth on the contact details given below.

Researcher contact details:

Researcher: Dr Lauren Forsyth
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This investigation was granted ethical approval by the Department Ethics Committee. If you have any further questions/concerns, during or after the investigation, or wish to contact an independent person to whom any questions may be directed or further information may be sought from, please contact:

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