

**Interventions (or Assessment of Risk Factors)** Demographics including age, gender, medical history, medication and smoking.

**Results** The average age of respondents was 40.9y (range 18–83y) and 54.1% were male. 42.3% of respondents had never completed a marathon event before. 1995 (16.9%) of all respondents had a LTMC. Most (95.7%) were aware of their condition prior to entering but only 47.0% had seen a doctor about their health with respect to the event. Respiratory conditions such as asthma were the most common LTMC (36.2%). 363 (18.2%) of LTMCs were related to a cardiovascular cause (hypertension, hypercholesterolaemia, previous myocardial infarction or angina, previous stroke/TIA or Type 2 diabetes mellitus). 35.1% were current or ex-smokers. 72.0% of those with aLTMC were taking prescribed medication (compared to 11.2% of those without a LTMC).

**Conclusions** In this study on runners in mass-participation community-based marathon events, approximately 1 in 6 respondents had a long-term medical condition. Further study will improve our ability to counsel individuals who wish to participate in endurance running events and help event organisers and medical teams to plan for reasonably anticipated medical conditions.

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#### RECREATIONAL RUNNERS' ATTITUDES TOWARDS RUNNING-RELATED INJURY PREVENTION, SELF-MANAGEMENT AND THE USE OF DIGITAL TECHNOLOGY TO PREVENT AND SELF-MANAGE INJURY

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**Background** Recreational runners have a high prevalence of running-related injury (RRI). Injury prevention and self-management of RRIs using digital technologies may be a way to enable continued participation and maintain positive health benefits.

**Objective** To explore attitudes of recreational runners towards prevention and self-management of RRI, including barriers and facilitators to digital methods supporting RRI prevention and self-management.

**Design** A qualitative design was conducted and data saturation achieved through five online focus groups conducted via Zoom.

**Setting** Recreational running community in Wales.

**Patients (or Participants)** 20 recreational runners aged 18+, distributed across 5 focus groups. All participants were selected from a subset of 233 runners who had participated in a survey mapping training and injury patterns in this population.

**Assessment of Risk Factors** All participants advised regarding protection of anonymity and confidentiality of information shared during focus groups. Transcripts were given to selected participants to ensure trustworthiness

**Main Outcome Measurements** Data were coded, organized into sub-themes and thematically analysed.

**Results** Recreational runners reported to prevent and self-manage injury using a range of means (e.g. stretches, massage, strength training and cross training). Runners sourced information from the internet, physiotherapists, running peers and

coaches. Participants found online information overwhelming, expressing distrust in the information. Facilitators for use of digital platforms were the information evidence base, its trustworthiness and the ability to personalise the programme according to characteristics such as age, gender and injury history. Other factors potentially enhancing its uptake were simplicity, ease of use, accessibility and content (e.g. information on warm-ups, specific RRIs and examples of exercises for prevention and management).

**Conclusions** Recreational runners find online information about RRI prevention and self-management to be overwhelming, confusing and unreliable. Any future digital RRI prevention and self-management programmes should be simple to use while also providing evidence-based, reliable information and advice.

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#### THE BALANCE ERROR SCORING SYSTEM: FAILURE TO DETECT PREVIOUS ANKLE INJURY OR INSTABILITY IN YOUTH ATHLETES

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**Background** Prevalence of lateral ankle sprains (LAS) is high among adolescent athletes resulting in time loss from sport and, often, long term functional ankle instability (FAI): a major risk factor for re-injury.

**Objective** This study aimed to assess the sensitivity of the Balance Error Scoring System (BESS) to detect FAI in adolescent athletes.

**Design** Case control study.

**Setting** Youth sport in an UK independent school

**Participants** Twenty-seven athletes who had sustained a past ankle injury took part. Selection criteria included participant involvement in the school athletic development programme.

**Assessment of Risk Factors** A modified BESS protocol was used. Participants balanced on one leg for 20 seconds on a stable surface (the ground) followed by an unstable surface (Airex balance pad), keeping their eyes closed and hands on hips. Both ankles were tested across each surface.

**Main Outcome Measurements** Participants received an error score for each condition (capped at 10 errors). Errors included: opening eyes, moving hands off hips, lifting toes or heel up, abduction or flexion at the hip  $>30^\circ$  and stepping, stumbling, or falling.

**Results** There was no significant difference in error score between the ankle that had previously been injured and that which had not on a stable ( $p=1.0$ ) and unstable ( $p=0.46$ ) surface. On the unstable surface, the error score (mean  $\pm$  standard deviation) was  $7.5 \pm 1.8$  for athletes with a previous ankle injury and  $7.8 \pm 1.4$  for athletes without a previous ankle injury. On the stable surface, the error score (mean  $\pm$  standard deviation) was  $3.2 \pm 2.3$  for athletes with a previous ankle injury and  $3.2 \pm 2.3$  for athletes without a previous ankle injury.

**Conclusions** The BESS was not able to detect previous ankle injury or FAI in adolescent athletes. Using the BESS in conjunction with other assessment tools may allow practitioners to screen for more ankle injury risk factors.