

PROSPERO International prospective register of systematic reviews

Frequency of injuries and risk factors for injuries in strength sports: a systematic review

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Citation

Lars Berglund, Ivar Svartholm, Fredrik Andersson, Ulrika Aasa. Frequency of injuries and risk factors for injuries in strength sports: a systematic review. PROSPERO 2015:CRD42015014805 Available from http://www.crd.york.ac.uk/PROSPERO_REBRANDING/display_record.asp?ID=CRD42015014805

Review question(s)

To review the literature of prevalence and risk of injuries in powerlifting and weightlifting

To review the literature regarding risk factors of injuries in powerlifting and weightlifting

To review the literature regarding which body regions are most frequently injured

Searches

We will search the following electronic bibliographic databases: MEDLINE, SPORTDiscus, PubMed, Scopus and Web of Science. The search strategy will include only terms relating to or describing the review questions. The search strategy includes terms for describing the individual sports (i.e. weightlifting and powerlifting) and the events of the sports. Further, search terms describing occurrence and risk are included, as well as terms describing risk factors for injury and specific terms for injuries. Only articles in English will be included in the review. There will be no restrictions in publication dates in the search. The searches will be re-run just before the final analyses and possible new studies will be included.

Types of study to be included

Inclusion: observational studies

Exclusion: narrative literature reviews, systematic reviews, controlled trials, case studies

Condition or domain being studied

Musculoskeletal health and pain among weightlifters and powerlifters

Participants/ population

Inclusion: participants defined as weightlifters or powerlifters.

Exclusion: participants defined as recreational lifters, studies including participants with a history of using anabolic-androgenic steroids

Intervention(s), exposure(s)

Inclusion: studies including competitive training of powerlifting and weightlifting

Exclusion: studies including recreational resistance training with either event included in powerlifting or weightlifting

Comparator(s)/ control

Not available.

Outcome(s)

Primary outcomes

Prevalence and risk of injuries, defined as absences from training or competition.

Secondary outcomes

Risk factors for injuries and localisation of injuries (body region).

Data extraction, (selection and coding)

Titles and/or abstracts of studies retrieved using the search strategy and those from additional sources will be screened independently by two review authors to identify studies that potentially meet the inclusion criteria outlined above. The full text of these potentially eligible studies will be retrieved and independently assessed for eligibility by two review team members. Any disagreement between them over the eligibility of particular studies will be resolved through discussion with a third reviewer.

A standardised, pre-piloted form will be used to extract data from the included studies for assessment of study quality. Extracted information will include: study setting; study population and participant demographics and baseline characteristics; study methodology; recruitment and study completion rates; outcomes and times of measurement; information for assessment of the risk of bias. Two review authors will extract data independently, discrepancies will be identified and resolved through discussion (with a third author where necessary). Missing data will be requested from study authors.

Risk of bias (quality) assessment

Included studies will be assessed for selection bias, performance bias, detection bias, response bias, report bias and conflicts of interest according to GRADE.

Strategy for data synthesis

We will provide a narrative synthesis of the findings from the included studies, structured around the type of sport, risk factors and type of injury and/or body region. We will provide summaries of each outcome for each sport in relation to the methodological quality of the included studies.

Analysis of subgroups or subsets

If the necessary data are available, subgroup analyses will be done with separation by sex or level of skill (i.e. participants competing at either regional, national or international level).

Dissemination plans

A paper will be submitted to a leading journal in this field.

Contact details for further information

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Anticipated or actual start date

09 March 2015

Anticipated completion date

12 June 2015

Funding sources/sponsors

The work with this review has not received any external funding.

Conflicts of interest

None known

Other registration details

PROSPERO

Language

English

Country

Sweden

Subject index terms status

Subject indexing assigned by CRD

Subject index terms

Athletic Injuries; Humans; Physical Therapists; Risk Factors; Sports

Stage of review

Ongoing

Date of registration in PROSPERO

06 March 2015

Date of publication of this revision

06 March 2015

DOI

10.15124/CRD42015014805

Stage of review at time of this submission

	Started	Completed
Preliminary searches	No	Yes
Piloting of the study selection process	No	Yes
Formal screening of search results against eligibility criteria	No	No
Data extraction	No	No
Risk of bias (quality) assessment	No	No
Data analysis	No	No

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