Abstract

Title:

Strength exercises for the prevention of knee injuries in drop landing: a sysmatic review.

Objectives:

This study aims to create an incidence overview of strength exercises for the prevention of knee injuries during drop landing using a systematic search of scientific databases.

Methods:

For an elaboration of this thesis was used the systematic review method based on recommendations of PRISMA (Page et al., 2021). At the beginning of the thesis, a research question was defined to identify the most common strength exercises in intervention programs to prevent drop landing injuries. Next, a script was created using defined keywords and Boolean operators such as AND, OR and NOT. The script was used to retrieve studies from internet databases (Web of Science, SportDiscus, Scopus, PubMed). Duplicates were subsequently excluded from the retrieved studies, and the number of studies was further reduced by expert review according to predefined criteria.

Results:

According to the results of this bachelor thesis, lunges are the most common exercise used in intervention programs to prevent knee injuries during drop landing. They were used in 13 out of 24 intervention programs. In addition to strength exercises, plyometric exercises are widely used in intervention programs.

Keywords:

Strength training, kinematics, dynamics, drop landing