Compliance with at-home injury-prevention program for high school girls lacking

**Description:** This pilot project developed a DVD-based strength training, flexibility, balance and agility program to determine the feasibility of athletes’ use at home to help prevent lower-extremity injuries among female high school basketball players in rural Wisconsin.

**Relevance:** Sports-related knee and ankle injuries are common and more severe in adolescent females than in males. Among directly comparable high school sports (soccer, basketball and baseball/softball), girls sustain more injuries than boys.

Ankle injuries are the most common sports-related injury and result in time lost from sports participation, lead to long term disability and have a major impact on health care costs. Females also are up to eight times more likely than males to sustain an anterior cruciate ligament (ACL) tear of the knee, which often requires surgery and lengthy rehabilitation and result in an increased risk of degenerative arthritis.

Injuries acquired in high school can result in long-term chronic pain, decreased function and poor quality of life; a subsequent decrease in lifetime physical activity increases the risk of developing chronic medical conditions such as diabetes and cardiovascular disease.

**Results:** Sixty-nine female basketball players from nine rural high schools completed several pre-tests and received instruction for using the video and equipment provided. Less than half of the participants completed both pre- and post-testing of balance and jumping activities, and nine of those did the exercises on the DVD more than 50 percent of the time during an eight-week period.

With players sharing various reasons for non-compliance, project partners determined that it was not feasible to expect female high school basketball players to independently perform 15 minutes of exercises three times per week. This was not the answer hoped for; however, the pilot materials can be used under director supervision with little, if any, instruction. Coaches can supervise athletes performing it as part of practice.


