

Prevalence of Urinary Incontinence in High School and Middle School-Aged Female Athletes

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Purpose: The purpose of this study is to determine the prevalence of urinary incontinence (UI) in middle school and high school-aged female athletes in order to implement preventative education in the future, as well as to determine the association between prevalence and quality of life. This study also investigates whether or not the young athletes that do experience UI have ever received formal training in pelvic floor exercises that have been previously proven as effective in the treatment of UI.

Methods: The study includes 49 middle school and high school aged female athletes. Permission was granted from the parent/guardian(s) through consent forms as well as from the subjects themselves through assent forms. Once consent and assent were granted, a second meeting with the team was scheduled to administer the survey, which consisted of the ICIQ-FLUTS questionnaire as well as one created by the investigators titled “Female Urinary Incontinence Survey.” Furthermore, prevalence of urinary incontinence and the effect it has on quality of life was investigated.

Results: Among the 49 participants, 27 young women (55.1%) reported urinary leakage. The mean age was 15.6 (\pm 1.3) years of the total participants and 15.6 (\pm 1.1) years for those that reported leakage. Of the 49 participants, 26 played volleyball with 16 out of 26 (61.5%) reporting leakage; 25 played basketball with 14 out of 25 (53.8%) reporting leakage; 12 played softball with 5 out of 12 (19.2%) reporting leakage; 7 played track field events with 5 out of 7 (19.2%) reporting leakage; 4 running track with 2 out of 4 (7.7%) reporting leakage; and 9 participate in other sports including swimming, rodeo, cheer, and soccer with 4 out of 9 (15.4%) reporting leakage. Out of those reporting leakage (27), 17 (63.0 %) reported feeling embarrassed, 4 (14.8%) reported feeling afraid, and 5 (18.5%) reported feeling bad about themselves. Among the young athletes that reported UI, 55.6% reported no previous education on the performance of pelvic floor exercises (Kegels) in order to prevent the occurrence of UI.

Conclusions: The study found that there is a prevalence of urinary incontinence in middle school and high school aged female athletes. This in turn has a negative effect on the quality of life of these young female athletes causing them to feel embarrassed, afraid, and bad about themselves. Because the study showed that urinary incontinence is occurring at such a young age and that many of these young athletes have never been educated in Kegels, a preventative education program is now being developed in order to enhance the quality of life of these young female athletes.