WHAT IS THE PREVALENCE OF URINARY INCONTINENCE AMONG BRAZILIAN COMPETITIVE FEMALE ATHLETES?

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Hypothesis / aims of study

The principal risk factors investigation of for urinary incontinence (UI) is related to **reproductive outcomes.**

Other different situations in which **intra-abdominal pressure increases** are also an important risk factor, but its relation is not linear.

It is important to consider that although physical activity increases intra-abdominal pressure, it has a **positive effect** on preserving UI.

There is a need to comprehend the effect of physical performance at different levels on continence status.

Very little is known about the status of continence in competitive athletes who are exposed to frequent and intense increases in intra-abdominal pressure.

Among the **sporting modalities**, some have been listed regarding the **risk factor** for UI with:

- **Low-risk**: swimming and cycling
- **Moderate-risk**: running and tennis
- **High-risk**: running and tennis as moderate-risk, and basketball, volleyball, judo, gymnastics, and athletics

Women, despite experiencing negative consequences with UI, feel **embarrassed** to discuss this issue with healthcare professionals, which implies that this matter is still **underdiagnosed and undertreated** in athletes.

Similarly, **prevention** is not included in their routine.

So, we aimed to **evaluate the prevalence, type and occasion of UI in competitive athletes.**

Study design, materials and methods

It was a cross-sectional study approved by the Institutional Ethics Committee (number: 0749/2013).

Eligible female athletes of any age, who had participated in sports competitions for more than two years in any sport category, were considered.

All athletes completed a questionnaire regarding demographic characteristics, UI subtypes, and occasion of leakage

Results and interpretation

Results

80 competitive female athletes (18,8+5,5 years old and 22,1+3,2 kg/m2) were included.

- **60 (75%) reported UI,**
- the most prevalent UI type was **Mixed-UI** (50%)
- followed by **Stress-UI** (13,75%)
- and **Urgency-UI** (11,25%).

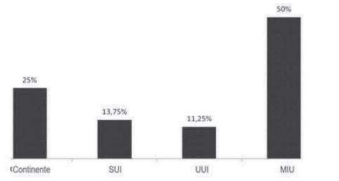

Figure 1. Characterization of the sample (n=80) according to the type of incontinence. SUI = stress urinary incontinence; UUI = urge urinary incontinence; MUI = mixed urinary incontinence.

Regarding the leakage occasion, among athletes who was considered incontinent (n=60) 77% reported UI during **daily-life activities**, 42,5% during **training,** 29% during the **competition.**

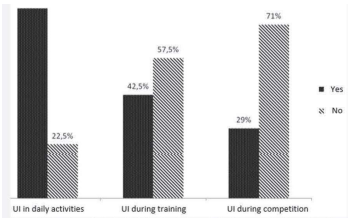

Figure 2. Percentage of athletes (n=80) with urine loss during daily activities (general loss), during sports training and during competition.

Interpretation of results

Urinary incontinence is commonly associated with pregnant or aging, however, evidence indicates that **young and physically active women can also experience it**, even in the absence of known risk factors.

Regarding the representativeness of the sample in this research, it was primarily composed of athletes from regional and state tournaments, which may not reflect the population of high-performance athletes.

Further research is needed to better understand this issue, especially because it affects many active women at a young age, and with the increasing popularity of sports among women, it is crucial to better understand the **impact of sports on the female body to ensure healthy development throughout their careers.**

Conclusions

These preliminary results showed that

- UI is very **prevalent among female athletes**,
- The most **frequent UI subtype Mixed-UI** and
- Surprisingly the most **prevalent leakage occasion is not linked to the length of sports practice**

References

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