

URINARY INCONTINENCE IN A SUBSET OF YOUNG HEALTHY INDIAN POPULATION

Hypothesis / aims of study

Management of urinary Incontinence [1] and most of our health strategies are based on available Western data [2]. This study seeks to evaluate the prevalence of urinary incontinence (UI) in a subset of young healthy Indian population.

Study design, materials and methods

After getting prior permission from Institutional Review Board, data was analysed from an anonymous validated questionnaire distributed among the hospital staff in month of august, 2010. There were no inclusion or exclusion criteria. Total of 796 consenting staff members (384 men, 412 women) participated in this study. 73.16 % of men and 73.05 % of women were between 21 to 30 years of age (Table 1).

Results

Overall prevalence of UI was 20.6%- 164/796 (men16.4%- 63/384, women 24.52%- 101/412). The prevalence rate in women of stress urinary incontinence (SUI) was 14.32% (59/412), urge urinary incontinence (UUI) 5.82% (24/412) and mixed urinary incontinence (MUI) 4.36% (18/412), while in men it was 4.68% (18/384) for SUI, 8.85% (34/384) for UUI and 2.86% (11/384) for MUI. Proportionate prevalence of SUI was significantly higher (Z value 8.4) among women (58.41%) as compared to men (28.57%) with similar difference in UUI (women 53.96%, men 23.76% with Z value 8.9) (Table 2). Also 50% of women (206/412) and 36.71% of men (141/384) reported problem of sleep interruption due to their night visits to toilets and opted for an interference score of more than 5, when questioned about quality of life(QoL).

Interpretation of results

A relatively higher prevalence of overall urinary incontinence as well as SUI and UUI was noticed among women, while mixed incontinence was equally prevalent in both sexes. The estimated prevalence rates are quite significant for this age group of population, though the results may not be generalisable to other more urban populations with different socioeconomic circumstances.

Concluding message

Despite this high prevalence and significant impact on QoL, attitude towards reaching health facilities is minimal. The burden of this hidden epidemic reflects the need of preventive strategies, awareness and timely intervention.

Table 1: Age Distribution by Gender

| Age Distribution | Male | Male % | Female | Female % | Z value | P value |
|------------------|------|--------|--------|----------|---------|---------|
| <20 | 20 | 5.20 | 30 | 7.28 | 1.16 | 0.246 |
| 21-30 | 281 | 73.16 | 301 | 73.05 | 0.038 | 0.9680 |
| 31-40 | 62 | 16.14 | 61 | 14.80 | 0.77 | 0.441 |
| 41 & above | 21 | 5.46 | 20 | 4.85 | 0.35 | 0.726 |
| Total | 384 | 100 | 412 | 100 | | |

Table 2 : Proportionate Prevalence of various types of incontinence

| Type Of Incontinence | Women Prevalence Rate | % | Men Prevalence Rate | % | Z value | P value |
|----------------------|-----------------------|-------|---------------------|-------|---------|-----------------|
| SUI | 59 | 58.41 | 18 | 28.57 | 8.4 | Significant |
| UUI | 24 | 23.76 | 34 | 53.96 | 8.9 | Significant |
| Mixed | 18 | 17.82 | 11 | 17.46 | 0.13 | Not Significant |
| Total | 101 | | 63 | | | |

References

1. Abrams P, Andersson K.E, Birder L, Brubaker L, Cardozo L, Chapple C et al. Review Article, Fourth International Consultation on Incontinence, Recommendations of the International Scientific Committee: Evaluation and Treatment of Urinary Incontinence, Pelvic Organ Prolapse, and Fecal Incontinence, *Neurourology and Urodynamics* 29:213–240 (2010).
2. 15. Markland AD, Richter HE, Fwu CW, Eggers P, Kusek JW. Prevalence and trends of urinary incontinence in adults in the United States, 2001 to 2008. *J Urol.* 2011 Aug;186(2):589-93.

Disclosures

Funding: NONE **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Institutional Review Board, Medanta - The Medicity. **Helsinki not Req'd:** It was based on an anonymous questionnaire, filled by participants voluntarily. **Informed Consent:** No