



Epidemiology of combined urinary and fecal incontinence

Epidemiologia das incontinências urinária e anal combinadas

Epidemiología de las incontinencias urinaria y fecal combinadas

Claudia Regina de Souza Santos¹, Vera Lúcia Conceição de Gouveia Santos²

ABSTRACT

The shortage of studies on urinary and fecal incontinence makes difficult the implementation of preventive and therapeutic interventions to address the physical, psychological, and economic problems among patients with these conditions. The lack of national publications and paucity of international literature on the epidemiology of combined urinary and fecal incontinence led to the performance of this literature review.

Keywords: Urinary incontinence/epidemiology; Fecal incontinence/epidemiology

RESUMO

A baixa investigação pelos profissionais de saúde quanto às perdas urinárias e anais, combinadas ou não, dificultam as ações voltadas para sua prevenção e originam problemas com repercussões física, psicológica e econômica. A escassez de publicações nacionais e a reduzida literatura internacional sobre a epidemiologia dessas incontinências combinadas, motivou a realização deste artigo de atualização.

Descritores: Incontinência urinária/epidemiologia; Incontinência fecal/epidemiologia

RESUMEN

Las pocas investigaciones realizadas por los profesionales de la salud en cuanto a las pérdidas urinarias y fecal, combinadas o no, dificultan las acciones volcadas a su prevención y originan problemas con repercusiones física, psicológica y económica. La escasez de publicaciones nacionales y la reducida literatura internacional sobre la epidemiología de esas incontinencias combinadas, motivó la realización de este artículo de actualización.

Descriptores: Incontinencia urinaria/epidemiologia; Incontinencia fecal/epidemiologia

¹ Nursing Master by the Nursing Program in Adult Health at the Escola de Enfermagem da USP; PGET pela UNITAU; Pouso Alegre City Healthy Secretary, WOCN at Outpatient Center, Pouso Alegre, Brazil.

² Lecturer, Full professor, Associate Professor of the Medical-Surgical Nursing Department of the Escola de Enfermagem da Universidade de São Paulo - USP - São Paulo (SP), Brazil.

INTRODUCTION

The presence of urinary incontinence (UI) and/or fecal incontinence (FI) are a public health problem. Currently, the small number of investigations by health professionals, and the limited amount of complaints by individuals make it difficult for geared action towards prevention to be taken. Studies show 4% to 35% prevalence for UI⁽¹⁻²⁾ and 2% to 33% for FI⁽³⁻⁴⁾.

Both incontinences lead to family and friends isolation and to admission of elderly people into nursing homes⁽⁵⁾. Additionally, there are several studies confirming the impact of incontinences on quality of life leading to physical, psychological and social problems^(4, 6, 7).

The lack of national publications on urinary and fecal incontinence encouraged us to write this article with the objective of presenting the epidemiologic aspects of both incontinences when they are combined.

EPIDEMIOLOGY OF COMBINED URINARY AND FECAL INCONTINENCES

The pelvic floor is a structure similar to a net or trampoline and it is weakened by lateral opening from urethra, vagina and anus. Because of age, urogynecologic and rectal surgeries and sphincter lesions, these structures may present dysfunctions over time and the association of urinary and fecal incontinences is not uncommon⁽⁸⁾.

UI is defined as "any kind of unintentional loss of urine" and it is classified into stress incontinence, urge incontinence, mixed incontinence, total urinary incontinence, nocturnal enuresis, overflow incontinence and extra-urethral⁽⁹⁾.

FI is the "unexpected leak of feces and/or gases"⁽⁹⁾. Although there are several different classifications, in Brazil, we use that proposed by Jorge and Wexner⁽¹⁰⁾, according to which FI can be mild, moderate and severe. The Fecal Incontinence Index, as it is known, is a scale including characteristics and frequency of loses, the use of protectors and the impact in quality of life, with scores ranging from zero (perfect continence) to twenty (total incontinence). Thus, the three types mentioned correspond from 0 to 7, 8 to 13 and 14 to 20, respectively.

A study on the relationship between anal sphincter

lesions and the onset of fecal and urinary incontinence studied 124 postpartum primiparous women who delivered by Cesarean section, 22.9% of them evolved to urinary loses and 7.6% to loses of feces six months after delivery⁽¹¹⁾.

In another study on socio-demographic characteristics, elimination habits, and lifestyle, 2,492 questionnaires of primiparous women were assessed six months after delivery and prevalence found was 20.6%, 29.6% and 10.4%, respectively for FI, UI and both combined⁽¹²⁾.

In the city of Newport, United Kingdom, the association of both incontinences was present in 8.4% of women undergoing treatment in a gynecology clinic. Additionally, this prevalence increased with women's age⁽¹³⁾.

In elderly patients over 60 years old, the rates found were 10.9% for FI, 30.1% for UI and 6.2% for the association of both⁽¹⁴⁾.

The few available studies on the combination of both urinary and fecal incontinences show advanced age, obesity, menopause and pelvic surgery⁽⁸⁾; hormonal status, delivery, previous surgery, muscle deficiency, physical damages and medication⁽¹⁵⁾, and the use of forceps during delivery⁽¹²⁾ as some of the most important factors related with the development of incontinence.

FINAL CONSIDERATIONS

The literature presents an increased number of publications on the prevalence of UI compared to FI, alone. Many of the factors associated with the genesis of these incontinences are common to both and we have chosen to perform this bibliographic update of the epidemiology of both forms when they are combined. Although, only a few studies were found, combined incontinences are not restricted to people in old age. Some studies have demonstrated statistically significant association between obstetric and surgical factors as previously described.

We hope that the information mentioned in the present study can contribute for further studies of the now better known urinary loses in our environment, in both conditions, in the daily clinical practice and in the university, so that important knowledge can be gained for its prevention and treatment.

REFERENCES

1. Beutel ME, Hessel A, Schwarz R, Brähler E. Prevalence of urinary incontinence in the German population. *Urologe A*. 2005; 44(3):232-8.
2. Meneses MAJ, Hashimoto SY, Santos VLGC, Martins AAR, Gonzaga Jr JL, Lombardi RS, Silva MA, Nunes DAB, Oliveira JZ. Prevalence of urinary incontinence in a sample population in the city of São Paulo. *J Wound Ostomy Continence Nurs*. In press 2009.
3. Macmillan AK, Merrie AE, Marshall RJ, Parry BR. The prevalence of fecal incontinence in community-dwelling adults: a systematic review of the literature. *Dis Colon Rectum*. 2006; 47(8):1341-9.
4. Damon H, Guye O, Seigneurin A, Long F, Sonko A, Faucheron JL, et al. Prevalence of anal incontinence in adults and impact on quality-of-life. *Gastroentérologie Clinique et Biologique*. 2006; 30(1): 37-43.
5. Miner PB Jr. Economic and personal impact of fecal and urinary incontinence. *Gastroenterology*. 2004; 126(1

- Suppl):S8-13.
6. Coyne KS, Zhou Z, Thompson C, Versi E. The impact on health-related quality of life of stress, urge and mixed urinary incontinence. *BJU Int.* 2003;92(7):731-5.
 7. Santos VLCC, Silva AM. Qualidade de vida de pessoas com incontinência anal. *Rev Bras Colo-Proctol.* 2002;22(2):98-108.
 8. Smith DB. Female pelvic floor health: a developmental review. *J Wound Ostomy Continence Nurs.* 2004;31(3):130-7.
 9. Abrams P, Andersson KE, Brubaker L, Cardozo L, Cottenden A, Denis L, Donovan J, Fonda D, Fry C, Griffiths D, Hanno P, Herschorn S, Homma Y, Hu T, Hunskaar S, van Kerrebroeck P, Khoury S, Madoff R, Morrison J, Mostwin J, Newman D, Nijman R, Norton C, Payne C, Richard F, Smith A, Staskin D, Thuroff J, Tubaro A, Vodusek DB, Wall L, Wein A, Wilson D, Wyndaele JJ and Members of the Committees. 2005 ICI Book. 3rd International Consultation on Incontinence – recommendations Committee: Evaluation and Treatment of Urinary Incontinence, Pelvic Organ Prolapse and Faecal Incontinence. 2005; 26-29.
 10. Jorge JM, Wexner SD. Etiology and management of fecal incontinence. *Dis Colon Rectum.* 1993;36(1):77-97.
 11. Borello-France D, Burgio KL, Richter HE, Zyczynski H, FitzGerald MP, Whitehead W, Fine P, Nygaard I, Handa VL, Visco AG, Weber AM, Brown MB; Pelvic Floor Disorders Network. Fecal and urinary incontinence in primiparous women. *Obstet Gynecol.* 2006;108(4):863-72.
 12. Hatem M, Pasquier JC, Fraser W, Lepire E. Factors associated with postpartum urinary/anal incontinence in primiparous women in Quebec. *J Obstet Gynaecol Can.* 2007;29(3):232-9.
 13. Griffiths AN, Makam A, Edwards GJ. Should we actively screen for urinary and anal incontinence in the general gynaecology outpatients setting? A prospective observational study. *J Obstet Gynaecol.* 2006; 26(5):442-4.
 14. Lopes MC, Teixeira MG, Jacob Filho W, Carvalho Filho ET, Habr-Gama A, Pinotti HW. Prevalência da incontinência anal no idoso: estudo epidemiológico com base na população atendida no Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo, em regime ambulatorial. *Rev Hosp Clin Fac Med Univ São Paulo.* 1997;52(1):1-12.
 15. Corcos J, Davis SMB, Drew S, West L. Incontinencia fecal y urinaria. El uso de la biorretroalimentación electromiográfica en el entrenamiento de la musculatura de la base pelviana [Internet]. sd. [cited 2007 Nov 1]. Available from: <http://www.bfe.org/protocol/pro04spa.htm>