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Dumoulin C<sup>1</sup>, Korner-Bitensky N<sup>2</sup>, Tannenbaum C<sup>1</sup> 1. University of Montreal, 2. McGill University

# DO REHABILITATION PROFESSIONALS IDENTIFY AND TREAT URINARY INCONTINENCE POST STROKE?

#### Hypothesis / aims of study

Given the complexity of post-stroke urinary incontinence (UI), an interdisciplinary approach to UI management is warranted. While traditionally UI management has fallen primarily on the nursing and medical professions, emerging scientific evidence suggests that physical therapists' (PT) and occupational therapists' (OT) interventions such as pelvic floor muscle rehabilitation and functionally oriented rehabilitation approach are effective in the management of post-stroke UI [1, 2]. What is currently unknown is whether the actual interventions of PT and OT related to UI management post-stroke reflect best practice knowledge. The objective of this study is to identify 1) the extent to which rehabilitation professionals identify post-stroke UI as a problem in those affected, 2) the prevalence of use of best practice interventions to manage post-stroke UI, and 3) the association between clinician, client and environmental variables and best practices related to UI management.

#### Study design, materials and methods

In 2004/2005, a cross-sectional Canada-wide survey was undertaken to investigate the practice patterns of rehabilitation specialists working with individuals affected by stroke. Within each discipline, potential participants were stratified by province, setting (urban or rural) and treatment environment (acute-care in-patient, rehabilitation in-patient, community out-patient). Clinicians were eligible if they were registered in a professional Order, had worked in stroke rehabilitation a minimum of three months during the year of the study, had treated a minimum of two adult clients per month, and spoke either English or French.

Clinicians were interviewed about their treatment practices by means of a telephone-administered validated questionnaire used to elicit information on rehabilitation practices for a case depicting a typical client with stroke. Previous work has used case studies to elicit information on clinicians' typical practice patterns as a valid form of treatment ascertainment [3]. Three different vignettes indicating three different clients at various stages post-stroke (acute, rehabilitation in-patient and community out-patient) addressed three different UI-types according to their signs and symptoms, namely stress urinary incontinence (SUI), urge urinary incontinence (UUI) and urinary incontinence secondary to functional limitation (FUI).

Descriptive statistics were used to indicate the prevalence of problem identification and intervention use for UI by discipline and UI-type. In addition, univariate analyses were used to examine the association between the potential explanatory variables and identification of UI as a problem according to discipline. Given the multiple correlations included in the analysis, the p-value was set at 0.01 using a Bonferroni correction.

#### Results

In all, 656 PT, age 40.5  $\pm$  9.75 yr and 663 OT, age 36.8  $\pm$  9.0 yr, were interviewed. The findings indicate that 271 (41.3%) PT and 272 (41.0%) OT identified post-stroke UI as a problem in those affected. Type-specific UI identification was uncommon but when present was more prevalent when FUI was described in the vignette as compared to when stress and urge incontinence were described. Rehabilitation interventions were rarely proposed. Eleven PT (4.1%) and 25 (9.2%) OT who identified UI as a problem made use of best-practice interventions. Pelvic floor muscle exercises and bladder retraining with urge suppression techniques were interventions identified by PT for SUI and UUI, whereas toilet aids, toilet transfers and toileting were indicated by OT for FUI. Neither age of the PT and OT nor their sex, their province, their clinical experience with stroke or the number of stroke clients seen in a typical day predicted whether they identified or treated UI in stroke patient.

#### Interpretation of results

Canadian rehabilitation professionals did not routinely identify UI as a problem in stroke patients: the type-specific UI problems depicted in the three vignettes were rarely identified. Furthermore, use of best-practice interventions was seldom identified.

#### Concluding message

Given the serious negative consequences of UI on functional recovery, discharge destination and resumption of social participation, knowledge translation strategies are warranted to close the gap between best and actual rehabilitation practices for the treatment of post-stroke UI.

#### **References**

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