A multicomponent theory-based intervention improves uptake of pelvic floor muscle training before radical prostatectomy: a before and after cohort study

Background: Preoperative pelvic floor muscle training (pre-PFMT) reduces the severity and duration of urinary incontinence after radical prostatectomy. A majority of men having radical prostatectomy in Western Sydney, however, do not receive pre-PFMT.

Objective: To assess the effect of a multicomponent theory-based intervention, incorporating patient information guides, an evidence summary, audit and feedback and a provider directory, on provision/receipt of pre-PFMT.

Methods: Provision/receipt of pre-PFMT was assessed over an 18-month period (9 months pre-intervention, 9 months post-intervention) through: (i) surveys of patients having radical prostatectomy at 1 public hospital (n=30) and 2 private hospitals (n=94) in Western Sydney, Australia; and (ii) practice audits of associated public sector (n=4) and private sector (n=2) providers of PFMT. Self-report urinary incontinence was assessed using the International Consultation on Incontinence Questionnaire (ICIQ-UI Short Form) at 3 months after radical prostatectomy.

Results: There was a significant increase in the proportion of survey respondents receiving pre-PFMT post-intervention (42/58 respondents, 72% vs pre-intervention: 37/81 respondents, 46%, p=0.002). There was a corresponding significant increase in provision of pre-PFMT by private sector providers (post-intervention: 16.7±3.7 patients per months versus pre-intervention: 12.1±3.6 patients per month, p=0.02), but not by public sector providers (p>0.05). Respondents receiving pre-PFMT had significantly better ICIQ-UI Short Form sum-score (6.2±5.0 vs 9.2±5.8, p<0.001).

Conclusions: The intervention increased provision/receipt of pre-PFMT. Additional component strategies aimed at increasing utilisation of public sector providers may be necessary to further improve pre-PFMT receipt amongst men having radical prostatectomy in the public hospital system.