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

Objectives: To assess the effect of a multicomponent theory-based intervention, incorporating patient information guides, an evidence summary, audit and feedback processes and a provider directory, on provision/receipt of preoperative pelvic floor muscle training (PFMT) among patients having radical prostatectomy.

Methods: Provision/receipt of preoperative PFMT was assessed over an 18-month period (9 months pre-intervention, 9 months post-intervention) through: (i) questionnaire 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 – Urinary Incontinence Form (ICIQ-UI Short Form) at 3 months after radical prostatectomy.

Results: There was a significant increase in the proportion of survey respondents receiving preoperative PFMT post-intervention (post-intervention: 30/43 respondents, 70% vs pre-intervention: 37/81 respondents, 46%, p=0.01). There was a corresponding significant increase in provision of preoperative PFMT by private sector providers (post-intervention: 16.7±3.7 patients per month versus pre-intervention: 12.1±3.6 patients per month, p=0.02), but not by public sector providers (p>0.05). Respondents receiving preoperative PFMT had significantly better self-report urinary incontinence (ICIQ-UI Short Form sum-score) at 3 months after radical prostatectomy (5.8±5.1 vs 9.4±5.8, p<0.001).

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