

## Effects of supervised exercise and self-managed psychosexual therapy on sexual health in men with prostate cancer: A randomized clinical trial.

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**Background:** Sexual dysfunction is a common, distressing, and persistent adverse effect of prostate cancer treatment and current management strategies do not adequately address physical and psychological effects. Exercise is emerging as potential therapy in the management of sexual health. The purpose of this study was to investigate the effects of supervised, clinic-based, resistance and aerobic exercise with and without psychosexual therapy self-management on sexual health in men with prostate cancer. **Methods:** A 3-arm, parallel group, multi-center randomized clinical trial was undertaken between 2014 and 2018. The study was conducted at university-affiliated exercise clinics. Eligible participants were men with prostate cancer who had previously or were currently undergoing treatment and concerned about sexual dysfunction. One-hundred and twelve participants were randomized to: 1) 6 months of supervised, group-based resistance and aerobic exercise (n=39), 2) the same exercise program plus psychosexual therapy (n=36), or 3) usual care (n=37). Exercise was undertaken 3 days per week at university-affiliated exercise clinics. Psychosexual therapy consisted of a brief self-management intervention that addressed psychological and sexual wellbeing. The primary outcome was sexual health assessed with the International Index of Erectile Function. Secondary outcomes included body composition, physical function, and muscle strength. Analyses were undertaken using an intention-to-treat approach. **Results:** Erectile function increased by 5.1 points (exceeds MICD) with exercise and 1.0 point with usual care (P interaction=.010) while intercourse satisfaction increased by 2.2 points with exercise and 0.2 points with usual care (P interaction=.026). Self-managed psychosexual therapy did not result in additional improvements. Compared with usual care, exercise prevented an increase in fat mass (P interaction=.028) and improved physical function outcomes, as well as upper and lower body muscle strength. **Conclusions:** Supervised resistance and aerobic exercise improved erectile function and intercourse satisfaction in men with prostate cancer; however, self-managed psychosexual therapy resulted in no additional improvements. Men with prostate cancer concerned about sexual dysfunction should be encouraged to undertake exercise as a potential countermeasure. Clinical trial information: ACTRN12613001179729. Research Sponsor: National Health and Medical Research Council.