Introduction

Fatigue is a common adverse effect suffered by prostate cancer patients receiving androgen deprivation therapy (ADT). A growing body of evidence has proposed exercise as a treatment to relieve and prevent the adverse effects of ADT. Recently, high-quality randomized controlled trials (RCTs) of supervised exercise have been conducted to get more assessment. However, the pooled estimate for the effect of supervised exercise on fatigue has not been established yet.

Methods

A literature search was conducted from PubMed, Clinicaltrial, and Cochrane Library, published up to January 2020 following the PRISMA guideline. We screened RCTs with our inclusion criteria and assessed the quality using the tools provided by Cochrane. The primary outcome analyzed in this study was fatigue measured as Standardized Mean Difference (SMD) with 95% confidence intervals (CIs). Subgroup analysis was conducted to determine the difference in exercise duration, modality, and the onset of ADT. The analysis was performed using STATA 16.

Results

A total of 7 RCTs comprising 455 patients reported the fatigue using the FACIT-Fatigue, EORTC QLQ-C30, and Schwartz Cancer Fatigue Scale. The included studies presented a low risk of bias. Supervised exercise showed an overall reduction on fatigue (SMD = 0.25, 95%CI 0.07-0.44, p = 0.01, 12 = 0%). The subgroup test results showed no significant difference between exercise duration (p = 0.4), modality (p = 0.67) and onset of ADT (p = 0.57). The Egger’s test results showed no indication of publication bias (p = 0.64).

References


Acknowledges

We would like to show our gratitude to the HM for sharing their pearls of wisdom with us during the course of this research.

Funding and disclosures

The authors received no specific funding for this work and the authors declare that they have no conflict of interest.

Correspondence

Email: niwandayogiswara@gmail.com
Phone: +6282228731040

Figure 2. Funnel plot of the included studies