INPLASY

The effects of ACSM-based exercise on breast cancer-related fatigue: a systematic review and meta-analysis

Corresponding author:
Haifang Liu

626242348@qq.com

Author Affiliation:
The Six Medical Center of PLA General Hospital.

Liu, HF.

ADMINISTRATIVE INFORMATION

Support - The effects of ACSM-based exercise on breast cancer-related fatigue: a systematic review and meta-analysis.

Review Stage at time of this submission - The review has not yet started.

Conflicts of interest - None declared.

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Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 5 February 2025 and was last updated on 5 February 2025.

INTRODUCTION

*R*eview question / Objective The aim of this study was to evaluate which of these previous people's exercises were ACSM-compliant and which were less ACSM-compliant, and whether the effects of their interventions differ from one another.

Condition being studied We set out to do a meta-analysis to evaluate which of these previous people's exercises were ACSM-compliant and which were less ACSM-compliant, and whether the effects of their interventions differ from one another.

METHODS

Participant or population Breast cancer survivors.

Intervention Exercise.

Comparator Routine care.

Study designs to be included Inclusion criteria(1)study subjects were breast cancer survivors(2) published randomized controlled trials (RCTs)(3) intervention could be any land-based exercise program, including resistance training, aerobic exercise, flexibility exercise, etc.(4) Cancer-related fatigue was reported in the study results.

Eligibility criteria Exclusion criteria (1)studies with incomplete or unreported data (2) quasi-randomized controlled trials, animal studies, protocols, case reports, conference proceedings, reviews, etc. were not considered.

Information sources Pubmed, EMBASE, Cochrane Central Register of Controlled Trials, Web of Science.

Main outcome(s) Fatigue.

Quality assessment / Risk of bias analysis This study was assessed according to the ROB (Risk of Bias) quality assessment tool.

Strategy of data synthesis Using Review Manager 5.4, we performed a meta-analysis to calculate SMD, grouping studies according to their level of compliance with ACSM recommendations. Funnel plots were also generated to assess the possibility of publication bias.

Subgroup analysis Each exercise indicator was assigned a score from 0 to 2, with 2 indicating compliance, 1 indicating uncertainty or lack of reporting, and 0 indicating non-compliance. When two authors had different opinions, a third author was consulted for further evaluation and discussion to reach a final consensus. Using this scoring system, we determined the proportion of adherence to the recommended exercise dose of ACSM in each study. Studies with a compliance ratio of ≥75% were classified as having high adherence to ACSM recommendations, while those with a <75% ratio were classified as showing low adherence.

Sensitivity analysis Exclude a class of documents.

Country(ies) involved China.

Keywords fatigue, exercise, breast cancer.

Contributions of each author
Author 1 - Haifang Liu.
Email: 626242348@qq.com