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## Barriers and facilitators towards exercise in patients undergoing chemotherapy: a systematic review

**Background and objective:** With rising cancer incidence, also the number of patients receiving chemotherapy and experiencing treatment-related side effects is increasing. While robust evidence shows that exercise during treatment yields beneficial effects in the attenuation of these side effects, exercise participation and adherence during chemotherapy remain critically low. Therefore, the objective of this review is to summarize existing evidence on barriers and facilitators towards exercise in patients undergoing chemotherapy while participating in a supervised exercise program.

**Methods:** A systematic review was conducted up to 24th of March 2026 following the PRISMA 2020 guidelines, searching PubMed, Embase, and Web of Science. Included studies were required to identify barriers or facilitators influencing participation in exercise therapy, with participants actively undergoing chemotherapy during the study period. Articles were screened double-blinded. Risk of bias was assessed independently and blinded by two reviewers using the Mixed Methods Appraisal Tool (MMAT). The overall certainty of the evidence was evaluated using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach for quantitative evidence and the GRADE-Confidence in the Evidence from Reviews of Qualitative Research (GRADE-CERQual) approach for qualitative evidence. Data extraction will include study and population characteristics, adherence, barriers and facilitators, and the methodologies used to assess these factors.

**Results:** The search yielded 1,352 studies. After duplicate removal and title, abstract and full-text screening, 16 studies were included.

Currently, all relevant data is being systematically extracted and assessed for methodological quality. Final results will be available in July 2026.

**Conclusion:** The results of this systematic literature study may inform future exercise programs and support the integration of exercise into supportive cancer care during active chemotherapy.

### Keywords

exercise, barriers, facilitators, chemotherapy

### Conflict of Interest & Ethical Approval

yes

### Abstract submitters declaration

yes

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