

Dance intervention for quality of life and cognitive and physical impairment of patients with cancer. A Systematic Review.

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Review methods were amended after registration. Please see the revision notes and previous versions for detail.

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REVIEW TITLE AND BASIC DETAILS

Review title

Dance intervention for quality of life and cognitive and physical impairment of patients with cancer. A Systematic Review.

Original language title

Dance intervention for quality of life, and cognitive and physical impairment of patients with cancer. A Systematic Review.

Review objectives

What are the effects and the measured outcomes of dance interventions in cognition impairment, quality of life and physical well-being of cancer patients?

We will include studies that report cognitive impairment in cancer patients submitted to dance interventions using PICO.

Population: patients since they are diagnosed with cancer

Intervention: Dance therapy or movement with music

Comparison: No intervention, or interventions without music nor movement

Outcome: QoL, cognitive or physical well-being.

Keywords

cancer, cognition, dance, integrative medicine, movement, oncology, physiotherapy, rehabilitation, therapy

SEARCHING AND SCREENING

Searches

A preliminary search with the keywords Danc* AND Cancer AND “cognitive impairment” was undertaken in PubMed/MEDLINE to identify a set of relevant articles on the topic.

The text words of these articles were then applied to a full search strategy on the following databases: PubMed/MEDLINE, MEDLINE Complete EBSCO, Psychology & Behavioral Sciences Collection EBSCO, SPORTDiscuss with Full Text EBSCO, Scopus, PEDRo, Cochrane Library, CINAHL Complete EBSCO and APA PsycArticles EBSCO. Specific index terms of each database were combined with the previously identified text words through the Boolean operators AND/OR.

No date restrictions were applied to these searches, but only articles in English, Portuguese and Spanish will be reviewed.

Study design

We will include randomized controlled trials, experimental studies without randomization, cohort and case-control studies, observational studies, cross-sectional studies and case series.

Studies in Portuguese, English, French and Spanish.

ELIGIBILITY CRITERIA

Condition or domain being studied

Cancer. Dance intervention in cancer.

Population

Inclusion Criteria:

Patients with cancer

Cancer survivors

Exclusion criteria:

Patients with cancer under 18 years old

Intervention(s) or exposure(s)

Inclusion criteria:

Music and dance

Music and movement

Exclusion criteria:

Studies that only include video games

Comparator(s) or control(s)

Studies with or without comparison groups will be included. Comparison groups may consist of other forms of treatment to cognitive impairment.

Context

Any context (research, clinical). Studies of patients with cancer including any disease stage, recent diagnoses, during treatments or cancer survivors.

OUTCOMES TO BE ANALYSED

Main outcomes

Changes in quality of life, from the first assessment to after the dance intervention, measured using valid scales.

Measures of effect

Changes in pre/pos- intervention or other effect reported.

Additional outcomes

Measures of cognition, measures of physical well-being

Measures of effect

Comparison of results from the control and experimental groups to other possible dimensions of reported effects.

DATA COLLECTION PROCESS

Data extraction (selection and coding)

Study selection: Three reviewers will apply eligibility criteria and select studies for inclusion in the systematic review. Two reviewers will independently screen records for inclusion and the other one will screen and check a sample for decisions made. Researchers will be blinded to each other's decisions.

Disagreements between individual judgments will be resolved by reading the full paper and finally by the third reviewer. We will use Rayyan software to record decisions.

Data extraction:

Data will be extracted from study documents, including information about the study design and methodology, participant demographics and baseline characteristics, and numbers of events or measures of effect. It will be recorded in an EXCEL table.

Three reviewers will extract data. Two people will independently extract data, and the other one will screen

and check a sample for decisions made. Researchers will be blinded to each other's' decisions.

Disagreements between individual judgements will be resolved by the third reviewer.

Missing data will be handled by contacting study investigators for unreported data or additional details.

Risk of bias (quality) assessment

Two reviewers independently assess the study quality according to the Cochrane Handbook for Systematic Reviews of Interventions (Higgins et al., 2011). Each study will be evaluated and their results will be compared to a final consensus on the risk of bias.

PLANNED DATA SYNTHESIS

Strategy for data synthesis

A Qualitative Synthesis of all included studies is planned. The results will be presented in tables and discussed in a narrative form in parallel, in order to provide a logical and descriptive summary of the results that align with the purpose of this review. For the analysis of the studies, a first table of evidence will be created to record study information such as the authors, year of the publication, design of the study, study location, publication journal and study population. A second table will be created with a synthesis of the studies included in the review according to its sample, objectives, dance interventions characterization, and cognitive status, quality of life and physical status measures and main results. Finally, conclusions will be drawn, and an attempt will be made to answer the original question of this systematic review.

Analysis of subgroups or subsets

As far as possible, the analysis of subgroups will be made to answer the original questions factors:

- different interventions in dance;
- different phases of illness;
- different types of cancer;
- different measures of results.

REVIEW AFFILIATION, FUNDING AND PEER REVIEW

Review team members

- Dr Paula Pinto Nogueira, Universidade Católica Portuguesa, Instituto de Ciências da Saúde de Lisboa. Centro Hospitalar de Lisboa Central.
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Review affiliation

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Funding source

None

Named contact

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TIMELINE OF THE REVIEW

Review timeline

Start date: 17 June 2023. End date: 17 June 2024

Date of first submission to PROSPERO

30 June 2023

Date of registration in PROSPERO

11 July 2023

CURRENT REVIEW STAGE

Publication of review results

The intention is to publish the review once completed. The review will be published in English

Stage of the review at this submission ^{1 change}

Review stage	Started	Completed
Pilot work		
Formal searching/study identification	✓	✓
Screening search results against inclusion criteria		
Data extraction or receipt of IP		
Risk of bias/quality assessment		
Data synthesis		

Review status

The review is currently planned or ongoing.

ADDITIONAL INFORMATION

Additional information

This review is being undertaken as part of the planning for a randomised trial that aims to study types of dance intervention used as a complementary therapy for oncological patients.

Collaborators

- **Biblioteca**, Universidade Católica Portuguesa

PROSPERO version history

- Version 1.3 published on 03 Nov 2023
- Version 1.2 published on 02 Nov 2023
- Version 1.1 published on 11 Jul 2023
- Version 1.0 published on 11 Jul 2023

Review conflict of interest

None known

Country

Portugal

Other registration details

None

Medical Subject Headings

Cognition; Cognitive Dysfunction; Dance Therapy; Humans; Music; Neoplasms; Quality of Life

Revision note 1 change

The start date has passed, and we had not indicated that the review has progressed. Updated field #5 to reflect the current status of the review.

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