

INPLASY

Effect of stretching, aerobic, and resistance exercise on pain, sleep, depression and quality of life in fibromyalgia patient A narrative review

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ADMINISTRATIVE INFORMATION

Support - Did not receive any support or specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Review Stage at time of this submission - Piloting of the study selection process.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY2024120095

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 23 December 2024 and was last updated on 23 December 2024.

INTRODUCTION

Review question / Objective The objective of this study is to determine the effects of stretching, aerobic, and resistance exercise on pain, sleep, depression & quality of life in fibromyalgia patients.

Rationale To learn about the most recent proof of the different types of exercises and their effects on pain, depression, and quality of life in fibromyalgia patient.

Condition being studied Fibromyalgia.

METHODS

Search strategy An electronic search on different database [?] Google scholar, Scientific Electronic Library Online (SciELO), Medical Literature Analysis and Retrieval System Online (MEDLINE), Scopus,

Web of Knowledge ISI, Physiotherapy Evidence Database (PEDro), Cumulative Index to Nursing and Allied Health Literature (CINAHL), will be conducted for research published during time period (2018-2023) using Medical Subject Headings (MeSH) for 'pain' AND 'exercises' AND 'Sleep' AND 'Quality of life'. The 'OR' search terms used for (MeSH) keywords and were combined with 'AND' and searched in 'All Fields'.

Participant or population Fibromyalgia Patients.

Intervention Stretching, Aerobic, and Resistance exercises.

Comparator Control group and conventional treatment.

Study designs to be included Narrative Review Study.

Eligibility criteria Inclusion Criteria:

Published in English.

Randomized Control trial (RCT) and Non-randomized control trial (NON-RCT) evaluating pain, quality of life, sleep and depression for fibromyalgia are considered.

Types of Intervention – interventions based on the following types of exercise: aerobic (AE), resistance (RE), or stretching (ST) performed. Interventions that included more than one exercise typology were included.

Full-text articles will be included.

Exclusion Criteria:

Articles published in 2018 or before were excluded.

Research on therapies for rheumatoid arthritis, alternative and integrative medicine, and personalized health education were excluded.

Pilot studies are excluded.

Information sources Research-Gate, Web of Knowledge, Google Scholar, Scopus, SciELO, PEDro, MEDLINE, CINAL.

Main outcome(s) Pain, sleep, depression and quality of life.

Additional outcome(s) None.

Data management Articles post screening and selection; the selected articles important information will be extracted by the second author. The information about the type of the study, study participant population, the kind and length of the intervention, the outcomes will be assessed. The accuracy and consistency of the data will be examined.

Quality assessment / Risk of bias analysis

PedRo scoring will be done for included articles after identification, screening, and fulfillment of eligibility criteria.

Strategy of data synthesis Reviewers will screen the titles and abstract records. Full-text articles will be obtained for potentially eligible records.

Subgroup analysis It will be done by group analysis to explore heterogeneity.

Sensitivity analysis It will be done to assess the stability of the results and not by chance.

Language restriction English.

Country(ies) involved India.

Other relevant information Not Applicable.

Keywords Stretching, aerobic, resistance, exercise, pain, sleep, depression, quality of life, fibromyalgia.

Dissemination plans The findings of this narrative review will be disseminated through multiple channels to reach a broad audience of researchers, clinicians, and policymakers. The review will be submitted for publication in a peer-reviewed journal focused on rehabilitation or physiotherapy. Additionally, results will be presented at relevant national and international conferences to engage with the professional community. To enhance accessibility, summaries, and key findings will be shared through institutional platforms, social media, and open-access repositories, ensuring wide reach and impact across healthcare and academic sectors.

Contributions of each author

Author 1 - PRANJAL BARANWAL - Conception, Methodology, Data extraction and writing initial draft.

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Author 2 - Sachin Gupta - Supervision, Development of the selection criteria, Revision of the draft, and Approval of the final manuscript.

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