Assessing Trial Characteristics Associated with Osteopathic Manipulative Treatment

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Introduction

A retrospective analysis of 276 clinical trials from ClinicalTrials.gov was conducted to identify factors associated with the completion, posted results, and publication of Osteopathic Manipulative Treatment (OMT) research.

Background

Osteopathic Manipulative Treatment encompasses various techniques used to diagnose and treat structural and functional illness, with the goal of restoring functionality and promoting self-healing.

Despite the growing numbers of Doctors of Osteopathic Medicine, clinical trials evaluating OMT efficacy remain limited, with variable outcomes, and many trials being withdrawn or prematurely terminated.

Understanding the factors that affect these trial outcomes is essential to guide future research efforts and determine the efficacy of OMT.

Objective

To identify factors associated with the completion, posted study results, and manuscript publication of OMT clinical trials through a comparative analysis of study characteristics.

Methods

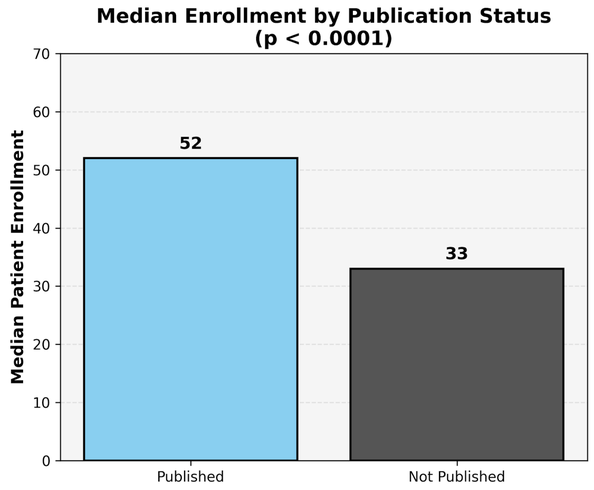
Data Collection: A retrospective cohort of OMT-related trials was identified from ClinicalTrials.gov using specific search items (e.g., "Osteopathic Manipulative Treatment", "OMM").

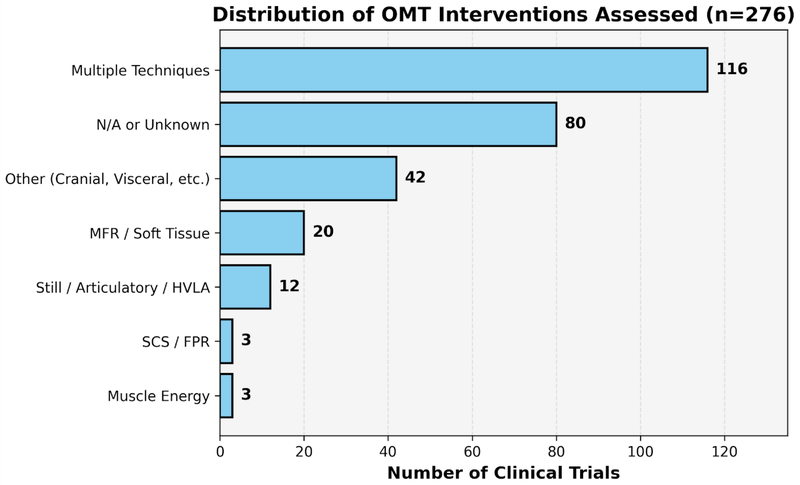
Refinement: The initial search yielded 419 studies, which were manually sifted to exclude non-OMT trials (such as those using OMT for "Optimal Medical Therapy"), resulting in a final cohort of 276 trials.

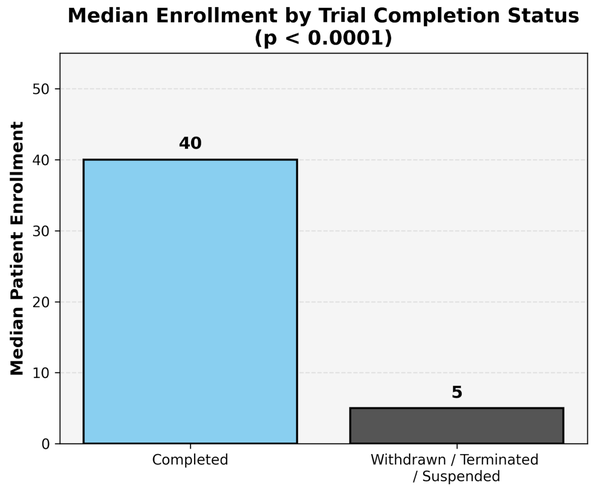
Variables Analyzed: Trials were assessed based on study type, interventions, phases, funding, allocation, intervention model, reason for discontinuation, enrollment, and published results.

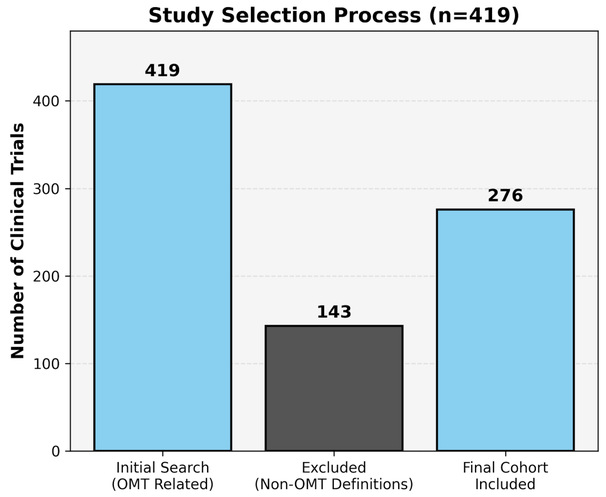
Statistical Analysis: Data were extracted using a structured tool and analyzed with the Python SciPy stats module. Categorical variables were evaluated using the chi-square test of contingency and adjusted standardized residuals, while continuous variables were assessed with the Mann-Whitney U test.

Results









Discussion & Conclusion

Enrollment is Critical: Trials that were withdrawn, terminated, suspended, or completed without resulting publications consistently demonstrated low patient enrollment numbers.

Reporting Gaps: Progressing to later clinical trial phases does not guarantee that study results will be posted, highlighting ongoing inconsistencies in OMT research reporting.

Future Directions: These findings emphasize an urgent need to enhance patient recruitment, improve trial design, and standardize reporting practices to strengthen OMT research and better establish its clinical efficacy.

Works Cited

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