

Motivational Interviewing in Chiropractic: a Scoping Review Protocol

INPLASY202410048

doi: 10.37766/inplasy2024.1.0048

Received: 11 January 2024

Published: 11 January 2024

Brogan Hartlieb, K¹; Stuber, K²; Malaya, C³; Ferguson, A⁴.**Corresponding author:**

Kathryn Brogan Hartlieb

kathrynhartlieb@parker.edu

Author Affiliation:

Parker University.

ADMINISTRATIVE INFORMATION**Support** - None.**Review Stage at time of this submission** - The review has not yet started.**Conflicts of interest** - None declared.**INPLASY registration number:** INPLASY202410048**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 11 January 2024 and was last updated on 11 January 2024.**INTRODUCTION**

Review question / Objective What is known from the existing literature about the teaching, use and effectiveness of motivational interviewing in the chiropractic profession? This scoping review will utilize Preferred Reporting Items Systematic Reviews and Meta-Analyses for Scoping Reviews (PRISMA-SCR) guidelines. This review will also be registered through the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY – <http://www.inplasy.com>).

Background Motivational Interviewing (MI) is an evidence-based communication method for promoting behavior change and growth with more than 2,000 clinical trials involving a wide range of professional fields, health conditions, and nations (1). MI blends relational and technical components into teachable language skills to guide conversations when patients are ambivalent about change (2). It is broadly used in medical settings to

optimize medical interventions (e.g., body weight reduction, sedentary behavior) and promote treatment adherence (3). These health behaviors are frequently targeted in chiropractic care, lending great potential for the applicability of MI in the profession.

Rationale The degree to which the chiropractic profession has engaged in MI conversations to support behavior change is unknown, nor is the manner in which they train in MI. Additionally, to our knowledge, the application of MI to the specific health behaviors frequently targeted during chiropractic care has not been adequately studied or summarized in the literature.

METHODS

Strategy of data synthesis This review will follow the methods described by Levac et al. (4) and Arksey and O'Malley (5). The scoping review will follow a six-stage process (6).

- Stage 1: Research question identification
- Stage 2: Relevant study identification
- Stage 3: Study selection
- Stage 4: Data charting
- Stage 5: Collating, summarizing, and reporting
- Stage 6: Consultation

The following electronic databases will be searched from inception until January 2024:

1. MEDLINE (OVID)
2. Index to Chiropractic Literature
3. CINAHL (EBSCO)
4. Psychology Database (ProQuest)

This is a sample strategy for Ovid/MEDLINE®:

1. motivational interviewing/
 2. Self-Management/
 3. Back Pain/px [Psychology]
 4. Low Back Pain/px [Psychology]
 5. Neck Pain/px [Psychology]
 6. (action* adj3 plan*).ab,kf,kw,ti.
 7. (goal* adj3 set*).ab,kf,kw,ti.
 8. (motivat* adj3 interview*).ab,kf,kw,ti.
 9. (self-management or "self management").ab,kf,kw,ti.
 10. Models, Biopsychosocial/
 11. biopsychosocial.ab,kf,kw,ti.
 12. or/1-11
 13. Manipulation, Chiropractic/ or Chiropractic/
 14. Manipulation, Spinal/
 15. chiropract*.ab,kf,kw,ti.
 16. (spin* adj3 manipul*).ab,kf,kw,ti.
 17. (cervical adj3 manipul*).ab,kf,kw,ti.
 18. (thoracic adj3 manipul*).ab,kf,kw,ti.
 19. (lumbar adj3 manipul*).ab,kf,kw,ti.
 20. or/13-19
 21. 12 and 20
- Reference checking will be performed.

Eligibility criteria Eligible studies will report on the teaching, use, or effectiveness of motivational interviewing in the chiropractic profession. Studies will be included in the analysis if they satisfy the following criteria:

- 1) Studies reporting on the teaching, use, or effectiveness of motivational interviewing in the chiropractic profession;
- 2) Experimental and observational studies (including but not limited to qualitative studies, case reports and series), educational research studies, or review articles;
- 3) Articles published in a peer-reviewed journal in the English language.

Studies will be excluded based on the following criteria:

- 1) Not a full-text, original article (i.e., editorials, letters to the editor, and/or sole abstracts);
- 2) Full text is not available in the English language;

- 3) Article not published in a peer reviewed journal
- 4) Article content is unrelated to the teaching, use, or effectiveness of motivational interviewing in the chiropractic profession.

Source of evidence screening and selection

Following the literature search, citations will be checked for duplicate entries, and a complete list of unique citations will be exported to Covidence. A calibration exercise consisting of review of five randomly selected titles/abstracts will be conducted among the review team to determine which meet the inclusion criteria. Selection criteria will be deemed successful if they meet an 80% agreement threshold, with further refinement of criteria using an additional five titles/abstracts if necessary.

Following successful calibration of the selection criteria, two reviewers (K.H. & C.M.) will independently review the selected titles and abstracts to determine eligibility. Any disagreements will be resolved through a weekly discussion and consensus meeting, with K.S. serving as referee if necessary. The full-text of selected articles will be obtained and evaluated using the selection criteria. Those articles included after full-text review will constitute the final group of articles used for data extraction into a data extraction spreadsheet and subsequent analysis.

Data management Data will be extracted from selected, original articles and compiled into a password-protected spreadsheet (Microsoft Excel® 2023). Data will be organized by variables pertinent to the objectives of this investigation. Information collected will include:

- 1) Author(s) name(s) & year of publication
- 2) Title of article
- 3) Aim(s) & objective(s)
- 4) Country/countries of origin
- 5) Population
- 6) Methodology
- 7) Intervention(s) & comparator(s)
- 8) Outcome measure(s)
- 9) Pertinent results
- 10) Conclusions
- 11) Limitations.

Reporting results / Analysis of the evidence

Relevant findings will be categorized and compiled. Pertinent themes will also be identified from the included studies.

Presentation of the results The authors will present numerical and thematic analyses of the selected articles, with additional relevant information, as appropriate. Summary charts of included articles will also be presented.

Country(ies) involved This scoping review originated in the United States of America and Canada.

Other relevant information The review team combines expertise from two chiropractic research and three education programs, including Parker University, Florida International University College of Medicine, and the Canadian Memorial Chiropractic College with literature search expertise from the United States.

Keywords chiropractic, motivational interviewing, behavioral change, chronic pain.

Dissemination plans Finding from this scoping review will be presented at a scientific conference. A manuscript will be prepared and submitted for publication in a peer-reviewed chiropractic journal. Social media posts and press releases will be used to increase awareness of the publication.

Contributions of each author

Author 1 - Kathryn Brogan Hartlieb - Study conception. Article reviewer. Data extraction and analysis. Manuscript preparation. Corresponding author.

Email: kathrynhartlieb@parker.edu

Author 2 - Kent Stuber - Study conception. Article review referee. Data analysis. Manuscript preparation.

Email: kentstuber@parker.edu

Author 3 - Chris Malaya - Article reviewer. Data extraction and analysis. Manuscript preparation.

Email: cmalaya@parker.edu

Author 4 - Amy Ferguson - Research librarian and scoping review strategist. Manuscript preparation (search methodology).

Email: amyferguson@parker.edu