INPLASY PROTOCOL

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

Conflicts of interest: None declared.

A scoping review of the scientific literature on publicly available databases for Complementary and Integrative Medicine (CIM) studies

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Review question / Objective: Review Questions: 1. What are the publicly available databases that can identified in Complementary and Integrative Medicine (CIM) studies? 2. What are the main characteristics of these studies? 3. Which of the CIM studies identified are associated with rehabilitation? Objectives 1. To create a tool for future research approaches based on lessons from the studies identified - hence promoting robust scientific protocols in its pursuit – for better acceptance by scientists, practitioners, and end-users. 2. To map and review open access databases that include CIM related data as defined by the National Institute of Health in 2012. 3. To highlight a subset of CIM studies that are associated with rehabilitation; to be identified as CIRM and promote it as an inclusive rehabilitative modality. 4. To guide future research on Complementary and Integrative Medicine. 5. To stimulate future research in Complementary and Integrative Medicine. 6. To promote evidence-based practice in Complementary and Integrative Medicine.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 09 September 2022 and was last updated on 09 September 2022 (registration number INPLASY202290043).

INTRODUCTION

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Background: CIM had evolved from Traditional Medicine and Traditional and Complementary Medicine over thousands of years. However, it remains under-represented in the state-of-the-art research and publication wonders of the world. The term CIM replaced TCM in 1992. The attempt by some to integrate it into modern-day clinical practice has attracted a wide range of proponents. Amongst others, it has resulted in the emergence of market forces unique to the ever-increasing number to the list of at least 18, as surveyed by the National Institute of Health (NIH) in 2012. However, robust research on CIM is still lacking though the importance of evidence-based medicine has been alluded to for a long time. The generation of ideas for future research in CIM is muted by the difficulty in accessing previous works due to an absence of a systematic database.

Rationale: 1. There is evidence of an increase in the use of Complementary Integrative Medicine. Robust scientific research methods can provide evidence for gold standard medical and rehabilitation practice. Identification of CIM studies and its database sources can serve as a useful tool for future research endeavors. To the best of our knowledge, no scoping review of CIM has been done before. 2. As expressed by Decaria et al 2012, by examining the broader area through a scoping review, we can identify gaps in the knowledge base and report on the types of evidence that address and inform CIM practice.

METHODS

Search strategy: The data will be compiled using Covidence software for data extraction, validation, coding, and analyses. Descriptive statistics will be calculated to summarize the data. Percentile values will be rounded to the nearest integer.
Data extraction include
i. Author(s)
ii. Year of publication
iii. Origin/country of origin (where the source was published or conducted)
iv. Aims/purpose
v. Population and sample size within the source of evidence (if applicable)
vi. Methodology / methods
vii. Intervention type, comparator, and details of these (e.g., duration of the intervention) (if applicable). Duration of the intervention (if applicable)
viii. Outcomes and details
ix. Key findings that relate to the scoping review question/s.
Subgroup analyses will be performed on CIM studies that are related to Rehabilitation, e.g.,
x. Type of rehabilitation service, i.e., Rehabilitation Medicine, Physiotherapy, Occupational Therapy, Speech Therapy, Clinical Psychology, etc.
xi. Outcome measures used
xii. Funding sources
xiii. Diagnostic category
ix. Age category: Paediatric, adolescent、adult、older population.

Eligibility criteria: i. CIM studies done from 1992 to-date ii. Studies reported at least one of the following or a related intervention term. These interventions were derived from the 2012 National Health Interview Survey (NHIS) conducted by the National Center for Complementary and Integrative Health (NCCIH) using 18 non-conventional complementary and integrative health care practices by adults and children. 1. Acupuncture 2. Ayurveda 3. Biofeedback 4. Chelation therapy 5.

Chiropractic or osteopathic manipulation 6. Craniosacral therapy 7. Energy healing therapy 8. Hypnosis 9. Massage 10. Naturopathy 11. Traditional healers 12. Movement therapies (Pilates/Trager psychophysical integration/ Feldenkrais), 13. Herbal and non-vitamin supplements 14. Vitamins and minerals 15. Homeopathy 16. Special diets 17. Yoga/tai and chi/qi gong 18. Relaxation techniques are defined as meditation, guided imagery, and progressive relaxation). iii. Publicly accessible data on studies: iv. Any study with a quantitative or qualitative design that investigated any aspect of CIM listed above v. Any study setting, e.g., location, environment vi. Any study context, e.g., experimental, etc. vii. Any age group viii. Any study design other than reviews. Exclusion criteria:
i. Studies in languages other than English
ii. Review studies (Systematic, narrative, scoping, etc.)
iii. Non-human subjects

Source of evidence screening and selection: Information sources are the Allied & Complementary Medicine Database (AMED), Cumulative to Nursing and Allied Health Literature (CINAHL), EMBASE, Scopus, PubMed, and Web of Science. Level 1 screening of titles and abstracts will be done on all studies found in the above sources using keywords search strategy e.g.,r from Pubmed ((Dataset* [tiab] OR "data set" [tiab] OR "data sets" [tiab] OR "data repository" [tiab] OR "data repositories" OR "Dataset" [Publication Type] OR "Datasets as Topic"[Mesh]) AND ("Acupuncture"[Mesh] OR "Complementary Therapies"[Mesh] OR ((integrative[ti] OR complementary[ti] OR alternative [ti] OR African [ti] OR Arabic [ti] OR "East Asian" [ti] OR Ayurvedic [ti] OR traditional [ti] OR Persian [ti] OR cupping [ti] OR Bioresonance [ti] OR Bio-resonance [ti] OR bio-physical [ti] OR mora [ti] OR Horticultural [ti] OR gardening [ti] OR mind-body [ti] OR aroma [ti] OR Directed-Reverie [ti] OR laugh* [ti] OR natur* [ti] OR mental [ti] OR drama [ti] OR art [ti] OR color [ti] OR dance [ti] OR music [ti] OR play [ti] OR manual [ti] OR indigenous [ti] OR soft-tissue [ti] OR Proliferation [ti] OR reflex [ti] OR spiritual [ti] OR faith [ti] OR prayer [ti] OR energy [ti]) AND (therap* [ti] OR medicine* [ti] OR healing [ti] OR healer [ti])) OR ((False [ti] OR bogus [ti]) AND Physiological [ti] AND Feedback* [ti]) OR ((Acoustic [ti] OR auditory [ti]) AND Stimulation [ti]) OR Anthroposophy [ti] OR Auriculotherap* [ti] OR "Diffuse Noxious Inhibitory Control" [ti] OR Dry-Needling [ti] OR Integrative-Oncolog* [ti] OR Mesotherap* [ti] OR Aromatherap* [ti] OR Myofeedback* [ti] OR Respiratory-Muscle-Training* [ti] OR Hypnotism [ti] OR Hypnoanalysis [ti] OR Hypnotherap* [ti] OR Mesmerism [ti] OR Hypnosis [ti] OR Reiki [ti] OR Laying-on-of-Hands [ti] OR Therapeutic-Touch [ti] OR Organotherap* [ti] OR Prolotherap* [ti] OR Reflexotherapy [ti] OR Speleotherap* [ti] OR Magic [ti] OR Radiesthesia [ti] OR Witchcraft [ti] OR Sorcer* [ti] OR Exorcism [ti] OR Applied-Kinesiology [ti] OR Reflexolog* [ti] OR Bodywork [ti] OR Rolfing [ti] OR sandplay* [ti] OR Chromatotherap* [ti] OR Chromotherap* [ti] OR dramatherapy [ti] OR psychodrama [ti] OR ecotherap* [ti] OR holistic[ti] OR homeopath*[ti] OR osteopath*[ti] OR Acupunctur*[ti] OR Pharmacopuncture* [ti] OR Acupotom* [ti] OR Ching-Lo [ti] OR Jing-Luo [ti] OR Jingluo [ti] OR Meridian* [ti] OR Moxabustion [ti] OR acupressur*[ti] OR Yoga[ti] OR tai-chi[ti] OR tai-ji[ti] OR qi-gong[ti] OR qigong[ti] OR biofeed*[ti] OR neurofeed*[ti] OR Mindful*[ti] OR meditat*[ti] OR MBSR[ti] OR Self-care[ti] OR selfcare*[ti] OR Self-management[ti] OR massag*[ti] OR manipulat*[ti] OR relaxation[ti] OR body-based[ti] OR Imagery[ti] OR breathing-exercise* [ti] OR Chiropract*[ti] OR movement-therap* [ti] OR pilates[ti] OR trager[ti] OR Feldenkrais[ti] OR Naturopath*[ti] OR chelat*[ti] OR massage*[ti] OR body-mind[ti] OR phytotherap*[ti] OR shaman*[ti] OR curandero[ti] OR machi[ti] OR parchero[ti] OR yerbero[ti] OR hierbista[ti] OR sobador[ti] OR huesero[ti] OR non-pharmacological[ti] OR whole-health[ti] OR empower*[ti] OR imgv[ti] OR centering[ti] OR cam[ti] OR alexander-technique[ti] OR "mind and body"[ti] OR ki-energy[ti] OR chi-energy[ti] OR life-energy[ti] OR elixir-

field[ti] OR biofield*[ti] OR pranic[ti] OR healing-presence[ti] OR psychosomatic*[ti]) AND ("1992/01/01"[Date - Publication] : "3000"[Date - Publication])) NOT (systematic-review [ti] OR meta-analysis [ti] OR scoping-review [ti] OR "Review" [Publication Type] OR "Systematic Review".

Data management: A web based software platform, Covidence will be used to manage screening and data extraction of all eligible materials. 10 reviewers will independently screen all titles, abstracts and full-text studies for inclusion. Covidence will highlight conflicts in risk of bias, screening and extraction to be resolved by reviewers.

Reporting results / Analysis of the evidence: We will report 1. sources of publicly accessible data on CIM studies that have been published since 1992, 2. the geographical areas they have been done, 3. the context it has been collected, 4. Describe the concepts and characteristics, 5. The CIM modality that is being used, 6. the size of the database, 7. The gaps in the knowledge base on CIM studies to date, 8. The proportion of studies that are related to rehabilitation at the time of the study,

Presentation of the results: The data will be compiled using Covidence software for data extraction, validation, coding, and analyses. Descriptive statistics will be calculated to summarize the data. Percentile values will be rounded to the nearest integer. The results will first be presented in a draft chart and table forms.

Language restriction: Only studies done in the English language will be reviewed.

Country(ies) involved: Australia, Canada, India, Malaysia, Singapore and USA.

Other relevant information: AnexampleofSearch strategy: PubMed ((Dataset* [tiab] OR "data set" [tiab] OR "data sets" [tiab] OR "data repository" [tiab] OR "data repositories" OR "Dataset" [Publication Type] OR "Datasets as Topic"[Mesh]) AND ("Acupuncture"[Mesh] OR "Complementary Therapies"[Mesh] OR ((integrative[ti] OR complementary[ti] OR alternative [ti] OR African [ti] OR Arabic [ti] OR "East Asian" [ti] OR Ayurvedic [ti] OR traditional [ti] OR Persian [ti] OR cupping [ti] OR Bioresonance [ti] OR Bio-resonance [ti] OR bio-physical [ti] OR mora [ti] OR Horticultural [ti] OR gardening [ti] OR mind-body [ti] OR aroma [ti] OR Directed-Reverie [ti] OR laugh* [ti] OR natur* [ti] OR mental [ti] OR drama [ti] OR art [ti] OR color [ti] OR dance [ti] OR music [ti] OR play [ti] OR manual [ti] OR indigenous [ti] OR soft-tissue [ti] OR Proliferation [ti] OR reflex [ti] OR spiritual [ti] OR faith [ti] OR prayer [ti] OR energy [ti]) AND (therap* [ti] OR medicine* [ti] OR healing [ti] OR healer [ti])) OR ((False [ti] OR bogus [ti]) AND Physiological [ti] AND Feedback* [ti]) OR ((Acoustic [ti] OR auditory [ti]) AND Stimulation [ti]) OR Anthroposophy [ti] OR Auriculotherap* [ti] OR "Diffuse Noxious Inhibitory Control" [ti] OR Dry-Needling [ti] OR Integrative-Oncolog* [ti] OR Mesotherap* [ti] OR Aromatherap* [ti] OR Myofeedback* [ti] OR Respiratory-Muscle-Training* [ti] OR Hypnotism [ti] OR Hypnoanalysis [ti] OR Hypnotherap* [ti] OR Mesmerism [ti] OR Hypnosis [ti] OR Reiki [ti] OR Laying-on-of-Hands [ti] OR Therapeutic-Touch [ti] OR Organotherap* [ti] OR Prolotherap* [ti] OR Reflexotherapy [ti] OR Speleotherap* [ti] OR Magic [ti] OR Radiesthesia [ti] OR Witchcraft [ti] OR Sorcer* [ti] OR Exorcism [ti] OR Applied-Kinesiology [ti] OR Reflexolog* [ti] OR Bodywork [ti] OR Rolfing [ti] OR sandplay* [ti] OR Chromatotherap* [ti] OR Chromotherap* [ti] OR dramatherapy [ti] OR psychodrama [ti] OR ecotherap* [ti] OR holistic[ti] OR homeopath*[ti] OR osteopath*[ti] OR Acupunctur*[ti] OR Pharmacopuncture* [ti] OR Acupotom*

Keywords: Complementary integrative health practice, data set.

Dissemination plans: The results of the scoping review and its progress will be presented at the 99th American Congress of Rehabilitation Medicine Conference,

2022. Upon completion, it will be published in a peer-reviewed journal.

Contributions of each author:

Author 1 - Zaliha Binti OMAR - Author 1 conceptualized, manage study, register protocol, screen levels 1 and 2, extract and collect data, create database, analyse data, write manuscript, present symposium at ACRM Conference 2022, submit manuscript, rewrite post review and resubmit manuscript.
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