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THE USE OF TRADITIONAL MEDICINE IN REHABILITATION POST-COVID-19: A SCOPING REVIEW OF PUBMED

Resume: *People who have had COVID 19 have residual symptoms and need rehabilitation. Traditional medicine has shown its effectiveness in the treatment of the acute period of COVID 19. Therefore, it is advisable to study the use of traditional medicine in the rehabilitation of COVID 19. It is important to understand what methods of traditional medicine are used in the rehabilitation of covid-19 victims and how effective they are. This will have an impact on the widespread use of traditional medicine in rehabilitation.*
Methods: *Scoping review. We searched PubMed from January 1, 2022 to July 1, 2022. The dates of publication, language of publication, methodological characteristics and the key findings were analyzed separately. The data are presented as bar graphs, structured tables and figures.*
Results: *In this scoping review, 4 research articles were included: 3 case study, 1 multicenter prospective self-controlled study. The included studies reported that acupuncture, traditional Chinese exercises and traditional Chinese medicine decoction could alleviate the symptoms of long COVID-19 patients, and is effective for the elderly.*
Conclusion: *Traditional Medicine methods are an attractive potential method of rehabilitation, given its holistic approach and the fact that it can be added to a multidisciplinary, consistent with the recommendations of the regime. Further studies are needed to demonstrate the effectiveness of TM in LCS.*
Keywords: *COVID-19, SARS-CoV-2, rehabilitation, post-acute COVID-19 syndrome, Chinese Traditional Medicine.*

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ПРИМЕНЕНИЕ ТРАДИЦИОННОЙ МЕДИЦИНЫ В РЕАБИЛИТАЦИИ ПОСТ- COVID-19: ОЦЕНОЧНЫЙ ОБЗОР В PUBMED

Резюме. Люди, перенесшие COVID-19, имеют остаточные симптомы и нуждаются в реабилитации. Традиционная медицина показала свою эффективность при лечении острого периода COVID-19. Поэтому целесообразно изучить применение традиционной медицины в реабилитации после COVID-19. Важно понимать, какие методы народной медицины используются при реабилитации пост- COVID -19 и насколько они эффективны. Это окажет влияние на широкое использование традиционной медицины в реабилитации.

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COVID-19-ДАН КЕЙІНГІ ОҢАЛТУДА ДӘСТҮРЛІ МЕДИЦИНАНЫҢ ҚОЛДАНЫЛУЫ: PUBMED-ТЕ БАҒАЛАУ ШОЛУЫ

Түйін. COVID-19-бен ауырған науқастарда қалдық белгілер қалады және олар оңалтуды қажет етеді. Дәстүрлі медицина COVID-19 жедел сатысында өзінің маңызын көрсеткен. Сондықтан дәстүрлі медицинаның COVID-19 кейінгі оңалтуда қолданылуын зерттеу керек. Дәстүрлі медицинаның қандай әдісі және ол қаншалықты тиімді екенін ескеру керек. Бұл шолу оңалту шараларында дәстүрлі медицинаның кең ауқымды қолданылуына себеп болады.
Әдістер. Бағалау шолуы. Біз PubMed іздеу жүйесінде 1 қаңтар 2022 жыл мен 1 шілде 2022 жыл аралығында сәйкес болатын мақалалар іздедік. Баспаға шығу күні, тілі, метадологиялық ерек-

Методы. Оценочный обзор. Мы провели обзор в поисковой системе PubMed с 1 января 2022 года по 1 июля 2022 года. Даты публикации, язык публикации, методологические характеристики и ключевые выводы были проанализированы отдельно. Данные представлены в виде гистограмм, структурированных таблиц и рисунков.
Результаты. В этот обзорный обзор были включены 4 исследовательские статьи: 3 случай исследования, 1 многоцентровое проспективное самоконтролируемое исследование. Включенные исследования показали, что иглоукалывание, традиционные китайские упражнения и отвар трав могут облегчить симптомы пациентов с пост -COVID-19 и эффективны для пожилых людей.
Вывод. Методы традиционной медицины являются привлекательным потенциальным методом реабилитации, учитывая его целостный подход и тот факт, что он может быть добавлен к рекомендациям. Необходимы дальнейшие исследования, чтобы продемонстрировать эффективность Традиционной Медицины в реабилитации пост- COVID-19.
Ключевые слова: COVID-19, SARS-CoV-2, реабилитация, пост-COVID-19, китайская традиционная медицина.

шеліктері мен кілтті сөздер жеке дара сарапталынды. Нәтижелері гистограмма, жүйелі таблица түрінде көрсетілген.
Нәтижелер. Бұл шолуға 4 зерттеу мақалалары кірді: 3 жағдай сипаттау мақалалары және 1 көпорталықты проспективті өз-өзін бақылайтын зерттеу. Сарапталған зерттеулер нәтижесінде, инетерапия, дәстүрлі жаттығулар және шөптер қайнатпасы COVID -19-дан кейіңгі қалдық симптомдарды емдеуі және қарт адамдарда да қолданылғаны анықталды.
Қорытынды. Дәстүрлі медицина әдістерін оңалтуда қолдануға болады. Бірақ, COVID-19-дан кейіңгі оңалтудағы Дәстүрлі медицинаның тиімділігін нақты анықтау үшін қосымша үлкен ауқымды зерттеулер керек.
Түйінді сөздер: COVID-19, SARS-CoV-2, оңалту, пост-COVID-19, дәстүрлі медицина.

Abstract. The COVID-19 outbreak is developing rapidly, the total number of confirmed cases in the world has reached 592 million and more than 6 million deaths as of August 1, 2022. And many patients have experienced complications and residual effects of the coronavirus. The task of doctors is timely and effective rehabilitation of patients who have undergone COVID-19. After almost 2 years of fighting against SARS-CoV-2 pandemic, the number of patients enduring persistent symptoms long after acute infection is a matter of concern. This set of symptoms was referred to as "long COVID", and it was defined more recently as "Post COVID-19 condition" by the World health Organization (WHO). Long-COVID is a multisystem disease that develops regardless of the initial disease severity. Its clinical spectrum comprises a wide range of symptoms [5]. The most-common PCS symptom is fatigue, affecting 58% of patients,6 followed by headache, attention disorder, hair loss, and dyspnea, and others, with life-threatening conditions being rare (e.g., stroke, myocarditis) [6].
Traditional medicine is currently the best additional choices for the treatment and prevention of COVID-19, and it is expected that it will be promoted by countries around the world. Current evidence shows that traditional medicine, as an adjunct treatment with standard care, helps to improve treatment and rehabilitation outcomes in COVID-19 cases. And many patients have experienced complications and residual effects of the coronavirus. The task of doctors is timely and effective rehabilitation of patients who have undergone COVID-19 [1].
Ethics and dissemination The studied evidence is in the public domain, therefore, no specific ethics approval is required. Evidence dissemination will be via peer-reviewed publications, conference presentations and reports to the policy makers.

Abbreviations

COVID-19- Coronavirus Disease 2019
LCS- long covid syndrom
PCS-post covid syndrome
TCM – traditional Chinese medicine

Educational Aims: Find materials and research on the use of Traditional Medicine methods in post COVID19. Make a systematic analysis of articles for further research of rehabilitation of post COVID19.

Introduction. Although the COVID19 pandemic is over, there are still consequences. Long COVID likely results from long-term organ damage due to acute-phase infection, specific mechanisms following the initial illness could contribute to the later symptoms possibly affecting many organs. As such, autonomic nervous system damage could account for many symptoms without clear evidence of organ damage. Immune dysregulation, auto-immunity, endothelial dysfunction, occult viral persistence, as well as coagulation activation are the main underlying pathophysiological mechanisms so far [6].
Frequently listed persistent symptoms of long COVID were: respiratory/ pulmonary sequelae (i.e. dyspnoea, pulmonary fibrosis and cough), fatigue, decreased exercise tolerance, cognitive impairment, headache, anxiety, depression, insomnia and myalgias or arthralgias [5].
This all affects the physical activity and quality of life of pa-

tients. Traditional medicine has proven itself well as an additional treatment for acute coronavirus infection [1, 8-16]. Relying on these results, it will be interesting to know the effectiveness and impact of traditional medicine in the rehabilitation of Post-COVID19.

Previously, reviews were conducted on the mechanisms of influence of acupuncture in long COVID19 [17], rehabilitation of COVID19 with physiotherapy [18] and the use of traditional medicine in post-viral olfactory dysfunction [19]. We found 6 unfinished studies on the use of traditional medicine methods for the rehabilitation post COVID19 [20-25]. We conducted this evaluation review in order to identify clinical examples of the use of traditional medicine for the rehabilitation of Post-COVID19. Only 4 suitable articles were found. This suggests that this topic has been little studied. There is a lack of evidence. It is necessary to conduct original research on this topic.

Materials and Methods. This pilot scoping review aims to identify, systematize and synthesise the available knowledge on the use of Traditional medicine in rehabilitation Post-COVID-19.

This pilot scoping review will follow the essential stages of the methodological framework for scoping reviews, based on the previously published guidelines, including the Preferred Reporting Items for Systematic Reviews and Meta-Analyses recommendation for Scoping Reviews. In particular, this scoping review corresponds to the type 3 (summary and dissemination of research findings) and type 4 (identification of knowledge gaps) of the scoping review.

Study design. A scoping review was conducted following the methodological framework suggested by Arksey and O'Malley. The following five steps were used to conduct this scoping review: a) identifying a clear research objective and search strategies, b) identifying relevant research articles, c) selection of the research articles, d) extraction and charting of the data, and e) summarizing, discussing, analyzing, and reporting the results. The central scoping review question was "What is the current state and main result of clinical research about Traditional medicine for the rehabilitation of Post-COVID-19". Figure 1.

Ethics

Ethics approval was not required for this scoping review.

Types of studies

The focus of this scoping review was to provide an overview of currently published papers on clinical research about Traditional Medicine in rehabilitation of Post-COVID-19 patients.

Inclusion criteria

(1) Full-text articles in English.
(2) Studies with available full text.
(3) Participants: Patients after COVID-19.
(4) Interventions: Studies evaluating the use of Traditional Medicine for the rehabilitation of patients with COVID-19 were included. In this scoping review we included any type of Traditional Medicine – acupuncture, electroacupuncture, acupressure, phytotherapy, Chinese Herbal, moxibustion, cupping therapy, massage, exercise therapy, auriculotherapy.
(5) Outcomes: Rehabilitation, rehabilitation outcome, recovery of function, clinical effect, treatment effect, ineffect, recommendation and influence, quality of Life, return to work, physical therapy.

Exclusion criteria

Studies were excluded if one of the following criteria was met.
(1) Duplicated publication.
(2) Essential data or full-text of the study that could not be obtained after contacting the original author.
(3) Foreign language
(4) reviews of all kinds, meta-analyses, conference abstracts, retractions, commentaries or Editorials (these were grouped together as "unsuitable publication type")
(5) no, title or abstract describe a population / intervention / outcome

Database and search. The literature for this review was identified by searching the following online PubMed databases. We searched scientific publications from January 1, 2022 to June 31, 2022. Details of the search strategy are presented in Table 2.

Literature Identification. Two reviewers conducted the study screening independently. They reviewed the abstracts and full texts and extracted the relevant information from the included studies. Disagreements on the inclusion or exclusion of literature were resolved through discussion or, if necessary, by including a third researcher to make the final decision. Eventually, 4 unique academic publications were included in this analysis. Figure1.

Data extraction. The extracted data were date of publication, title of article, name of journal, study design, targets of study, sample size, study setting, data collection instrument and key findings.

Results. Characteristics of the included studies. Among the 4 research articles included in the analysis. 3 case study, 1 multicenter prospective self-controlled study. Table 1.

Pilot PUBMED searches. One of the case study a 50-year-old woman with long-term treatment from COVID received 7 sessions of acupuncture of the scalp, auricle and body. She had 8 months of fatigue, anosmia, chest pressure, palpitations and other symptoms following a mild form of COVID-19, confirmed by analysis. Previous / simultaneous medical examination revealed a multisystem inflammatory lesion (pericardial effusion, thyroid dysfunction and elevated levels of d-dimers). Cardiology/Pulmonology cleared the patient was allowed to exercise until tolerance, given that there was no serious pathology. The acupuncturist's Traditional Chinese Medicine impression was of Qi Deficiency of the Heart, Lung, Spleen, and Kidney. 1-week post-acupuncture course, including 6 30-minute exercises with heart rate control and rest as needed. Chest pressure and palpitations in the patient disappeared after 1 acupuncture procedure. With 6 additional treatments, spanning 9 weeks, overlapping with PT-led SPTA, she recovered completely and resumed her normal exercise [2].

The second case study is about a 46-year-old male with LCS was conducted to preliminarily define the range of symp-

toms, a Traditional Chinese Medicine diagnostic structure, and evaluate the potential utility of prescribed acupuncture for Long Covid Syndrome. This case suggests potential benefit of acupuncture for Long Covid Syndrome. Patient reported improvement after six sessions was maintained or improved with maintenance treatment. His tongue changes showed clearing of heat and improvement in the severity of Yin Deficiency. The pulse demonstrated resolution of Blood Stagnation and some improvement in dampness [2].
The third article is a multicenter prospective self-controlled study to explore the effects of Liuzijue in discharged COVID-19 patients. This study was designed to investigate the effects of Liuzijue exercise on the rehabilitation of COVID-19 patients. Thirty three eligible patients with COVID-19 were enrolled in the study after discharge. All the participants practiced Liuzijue exercise once per day for 20 minutes over 4 weeks. Data were collected at baseline and the end of the intervention. Primary outcomes involved functional capacity and secondary outcomes involved quality of life. The maximal inspiratory pressure, peak inspiratory flow, and diaphragm movement in deep breathing of patients increased significantly after 4 weeks of intervention. The dyspnea was also alleviated and exercise capacity was significantly improved. In terms of quality of life, physical functioning and role-physical scores were significantly increased. Moreover, Liuzijue could significantly alleviate the depression and anxiety status of the patients [7].
The fourth article is a case study. A 61-year-old woman who was diagnosed with COVID-19. The patient had difficulty falling asleep and poor appetite, accompanied by hunger and thirst without the desire to eat or drink, intermittent dry and loose stools, dark red tongue with a yellowish thick and greasy coating in the middle and back, but smooth and uncovered on both sides and at the tip of the tongue; her pulse was weak and astringent. Computer tomography of the patient's chest performed showed inflammatory exudate and fibrous lesions in both lungs, accompanied by a small amount of pleural effusion on the right side. To promote the absorption of pulmonary exudate, reduce the level of pulmonary fibrosis and prevent relapse or exacerbation COVID-19, a consensus was reached, taking into account the patient's age, damage to the spleen and stomach, initial recovery from illness andweakness, the mild nature of Chinese medicine, imperceptible irritation of the gastrointestinal tract. After seven days of treatment with the first TCM decoction, the re-examined chest CTs of this patient showed that the bilateral lung exudate and fibrosis were partially absorbed compared to baseline, and the right pleural effusion was completely absorbed [4].

Search strategy and knowledge databases. The search strategy aims for high coverage and sensitivity (recall). The search strategy followed PIO (Population, Intervention, Outcomes) criterion, “population” - COVID-19. In particular, we consider the publications of the patients who had previously COVID-19. The “intervention” was Traditional Medicine. The "outcomes" was rehabilitation of Post-COVID-19.
The search strategy was developed mainly using PubMed terms (medical topic headings and additional concepts) supplemented with custom keywords. Custom keywords were derived from titles, annotations, or keywords tagged by the authors of publications identified during the pilot launch of the testing strategy. These keywords were compiled manually, as well as using text mining algorithms. Adding custom keywords for a search strategy aimed at increasing the sensitivity of the latter.
We searched PubMed from January 1, 2022 to July 1, 2022. The dates of publication, language of publication, methodological characteristics and the key findings were analyzed separately. The data are presented as bar graphs, structured tables and figures.
Original publications on the use of Traditional Medicine in patients with diseases unrelated to COVID-19 excluded from screening. Abstracts and conference materials will also be excluded, as well as editorials, comments, letters to the editor, essays, book chapters, books and the contents of Internet sites.
Before screening for inclusion in the final reference sample, the references will first undergo deduplication. To this end, the references identified through all searches subjected to comprehensive manual deduplication as per published optimised protocol.

Screening for suitable publications. Following deduplication, the publications will undergo manual screening. The latter will be conducted as follows. First, the titles and abstracts will be screened by the reviewers’ team comprising the lead author and two other reviewers. Following the previous screening step, full-text publications will be procured using publications’ digital object identifiers (doi’s) or manually.

Charting the data. The full-text screening was done by the lead author, supported by other members of the reviewers’ team and will yield a final reference sample for descriptive synthetic analysis. If needed, consultations helded with other coauthors.
The information from the final reference sample compileded in the data extraction table, which was developed and tested during the pilot searches. The table 1 includes the publication ID (authors, title, journal and doi), country of study’s origin, research question/hypothesis/objectives of the study, type of the study (RCT, nonrandomised or non-controlled trial, observational study, case series or case report), study design (cross-sectional or longitudinal), population (patients’ age, race and ethnicity, sex and gender, comorbidities, duration of the Long COVID-19, method of TM. Publications’ outcomes and conclusions were documented.

Discussion. Most patients who have had COVID-19 experience residual symptoms and complications.Considering this fact, various solutions have been proposed for the rehabilitation of patients who have undergone COVID-19.
The use of TM can be useful for the rehabilitation after acute COVID-19 (also known as "long-term COVID-19" or "chronic COVID-19").
Acupuncture appeared to facilitate PCS recovery. However, the independent effects of acupuncture are less clear, given the concurrent STPA/exercise therapy, and should be

explored using large study designs. Acupuncture is an attractive potential PCS therapy, considering its holistic approach and that it may be added to a multidisciplinary, guideline-concordant regimen. Acupuncture may be part of a multidisciplinary approach for PCS treatment pending appropriate clinical trials. In this case report, it appears that the patient benefited from the acupuncture but can not be extrapolated to other cases dealing with PCS until further statistical data is obtained from future studies [2]. A preliminary TCM diagnostic structure for LCS was defined. Acupuncture appears to have been helpful for a patient with LCS. Further research is needed to demonstrate the efficacy of acupuncture and/or other TCM modalities for LCS. Acupuncture may be useful for treating the broad symptoms and pathophysiology of the LCS. More research is needed to better understand the syndrome, develop useful interventions, and investigate the mechanism(s) of action of LCS and interventions [3].

Targeted oral treatment with TCM decoction was able to effectively promote the absorption of pulmonary inflammatory exudate and to reduce pulmonary fibrosis experienced by a convalescing COVID-19 patient. This treatment plays a key role in improving the quality of life of patients and the prognosis of the disease. Compared with clinically recommended anti-pulmonary fibrosis drugs, such as pirfenidone and nidanib, which have more adverse reactions, oral administration of TCM decoction can be used as a reference drug for convalescent patients with novel coronavirus pneumonia, but the insights provided in this case report need further exploration and verification [4].

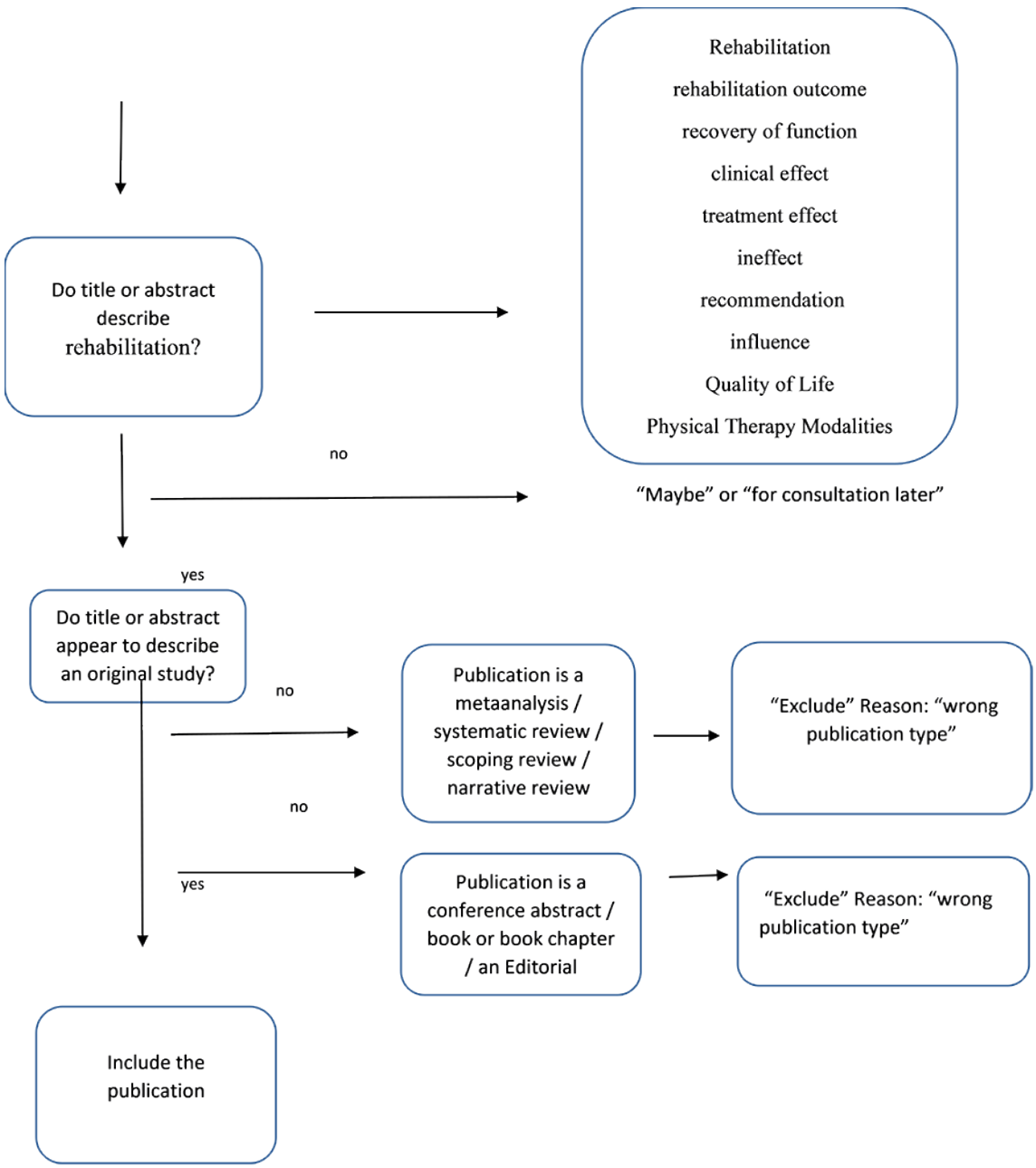

Figure 1 - Prisma flow chart

These results indicated that Liuzijue may be a promising exercise option for the rehabilitation of patients who have had COVID-19. The present study demonstrated that Liuzijue exercises improved the respiratory function and exercise capacity of patients previously infected with the SARSCoV-2 coronavirus at 4-weeks follow-up. In addition, the results in this study also showed Liuzijue exercises may improve the patients' quality of life and mental states. These results indicate that rehabilitation training is crucial for COVID-19 patients. However, there are several limitations in this study. First, this is a multicenter, prospective, self-controlled study. Future well designed randomized controlled trial studies will enhance the understanding of the effects of Liuzijue. Second, the sample size of this study was limited, which is explained by the control of the COVID-19 epidemic in the short period in Jiangxi province. We were unable to get larger samples. Our results show that Liuzijue exercise can be an alternative home exercise program that produces better functional capacity and quality of life in discharged COVID-19 patients. These findings also showed the necessity of rehabilitation for discharged COVID-19 patients [7]. We conducted this evaluation review in order to identify

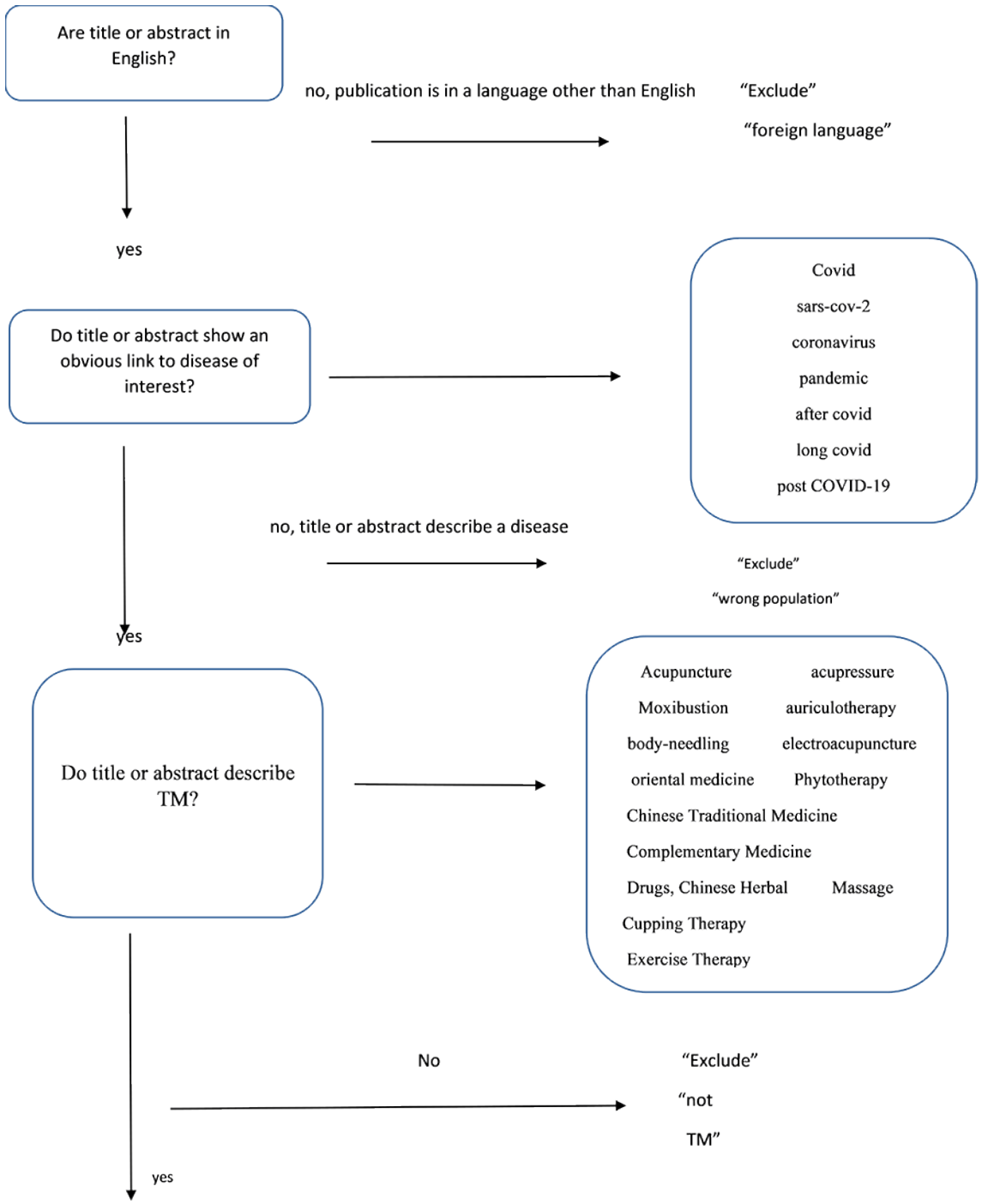

Figure 2 - The number of articles found using various methods of Traditional Medicine in post COVID-19: the use of acupuncture -2 articles, Chinese exercises - 1 article, herbal decoctions - 1 article.

clinical examples of the use of TM for the rehabilitation of Post-COVID19. Only 4 suitable articles were found. This suggests that this topic has been little studied. There is a lack of evidence. It is necessary to conduct original research on this topic.

Ethics and dissemination. For proper dissemination of the evidence synthesis, we plan to publish this scoping review in a peer-reviewed journal, as well as share the findings at medical conferences. As mentioned previously, this scoping review may inform the authors' team about the feasibility of a systematic review in this area.

Prisma flow chart. The PubMed database was searched based on "Population Intervention" concept. The identified publications were deduplicated and subjected to primary (title + abstract) and secondary (full-text) screening. This was followed by full text perusing and review, and descriptive semi structured, and structured evidence synthesis. Each of these steps was associated with exclusion of publications based on the reasons presented in this chart. Respective numbers of identified, deduplicated, and excluded publications are shown in parentheses in respective boxes.

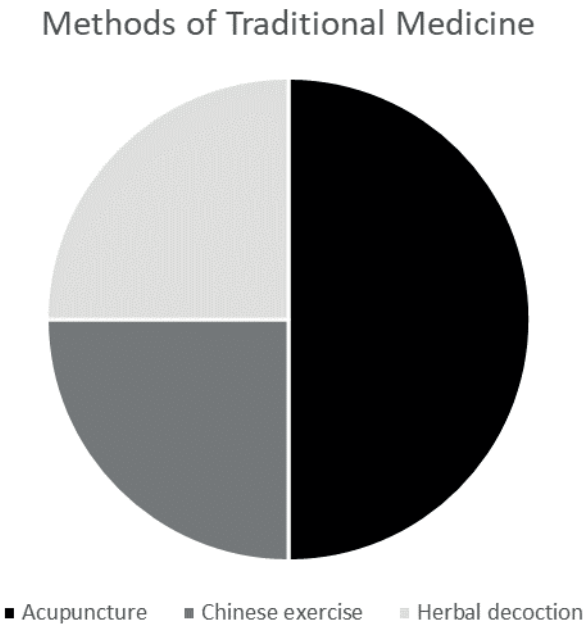

Table 1 - Descriptive synthesis of included 4 publications

First author	Publication year	journal and doi	country of study's origin	type of the study	population	Symptoms	duration of the Long COVID-19	method of TM	Main results
Robert J. Trager	2022	MEDICAL ACUPUNCTURE DOI: 10.1089/acu.2021.0086	USA	Case report	50-year-old woman	fatigue, anosmia, ageusia, anxiety, dyspnea on exertion, chest pressure, dry cough, brain fog, and palpitations	35 weeks post-SARS-CoV-2	Acupuncture and SPTA exercise program	The patient's chest pressure and palpitations resolved after 1 acupuncture treatment. With 6 additional treatments, spanning 9 weeks, overlapping with PT-led SPTA, she recovered completely and resumed her normal exercise
Michael Hollifield	2022	MEDICAL ACUPUNCTURE DOI: 10.1089/acu.2021.0088	USA	observational case study	46-year-old male	Chest pain Shortness of breath Eye dryness Brain fog/memory loss Headaches Knee pain Finger pain Fatigue	7 months after COVID-19	Acupuncture	The primary TCM diagnostic patterns from this patient's LCS presentation included Lung Qi and Yin Deficiency, Qi and Blood Stagnation, and Spleen Qi Deficiency with dampness. Acupuncture for this patient was associated with reduced symptoms and signs of LCS
Na Zhi	2021	Journal of Integrative Medicine doi.org/10.1016/j.joim.2020.11.005	China	Case report	61-year-old female	pulmonary fibrosis, difficulty in falling asleep and poor appetite, accompanied by hunger and thirst without desire to eat or drink, intermittent dry and loose stools	with COVID-19	oral traditional Chinese medicine decoction	After seven days of treatment with the first TCM decoction, the re-examined chest CTs of this patient showed that the bilateral lung exudate and fibrosis were partially absorbed compared to baseline, and the right pleural effusion was completely absorbed. The patient reported that the symptoms of difficulty in falling asleep, poor appetite and thirst were relieved, and that her stool was better formed.
Yunliang Tang	2021	Medicine doi.org/10.1097/MD.0000000000024564	China	multicenter prospective self-controlled study	33 eligible patients diagnosed with COVID-19, and meets the discharge criterion	Respiratory function The Short Form Health Survey HAMD and HAMA Scales	patients who have had COVID-19	Liuzijue exercise	Liuzijue may not result in the improvement of all aspects of quality life, but there has some benefit in the recovery of physical functions and role-physical. As for the impact of Liuzijue on mental status, the HAMA and HAMD scores significantly decreased; Liuzijue could alleviate the symptoms of depression and anxiety in patients.

Table 2 – Pilot PUBMED search based on the Population-Intervention criteria

Step	Seach term 1	logycal operator, if any	Seach term 2	Number of hits	Category
1	(“COVID-19*”[MeSH Terms])	OR	(“covid*”[Title/Abstract] OR “coronavirus*”[Title/Abstract] OR “coronavirus covid-19”[Title/Abstract] OR “coronavirus infection*”[Title/Abstract] OR “coronavirus disease*”[Title/Abstract] OR “COVID19”[Title/Abstract] OR “COVID-19” [Title/Abstract])	284,768	Population
2	(“SARS-CoV-2”[MeSH Terms])	OR	(“sars-cov*”[Title/Abstract] OR “sars-cov-2”[Title/Abstract] OR “2019-nCoV”[Title/Abstract] OR “nCoV”[Title/Abstract])	174,322	
3	(“Pandemics”[MeSH Terms])	OR	(“pandemic*”[Title/Abstract] OR “new coronavirus pneumon*”[Title/Abstract] OR “novel coronavirus*”[Title/Abstract])	191,917	
4	(“long covid*”[Title/Abstract])	OR	(“after covid*”[Title/Abstract] OR “long-covid*”[Title/Abstract] OR “Long-COVID-19 syndrom*”[Title/Abstract] OR “symptom*”[Title/Abstract])	1,333,425	
5	(“post COVID-19”[Title/Abstract])	OR	(“postcovid*”[Title/Abstract] OR “post-COVID-19 condition*”[Title/Abstract] OR “post-COVID-19 syndrom*”[Title/Abstract] OR “Post-COVID syndrom*”[Title/Abstract])	4,157	
6	#1 OR #2 OR #3 OR #4 OR #5			1,615,082	
7	(“Acupuncture Therapy*”[MeSH Terms])	OR	(“acupunc*”[Title/Abstract] OR “pharmacoacupunc*”[Title/Abstract])	35,023	Intervention
8	(“Acupuncture Points”[MeSH Terms])	OR	(“body needl*”[Title/Abstract] OR “body-needling”[Title/Abstract])	7,663	
9	(“acupressure”[MeSH Terms])	OR	(“acupres*”[Title/Abstract])	1,635	
10	(“Phytotherapy”[MeSH Terms])		(“natural product*”[Title/Abstract] OR “decoction*”[Title/Abstract])	2,022	
11	(“Drugs, Chinese Herbal”[MeSH Terms])		(“Chinese Herbal Med*”[Title/Abstract] OR “CHM”[Title/Abstract] OR “Chinese traditional herb*”[Title/Abstract])	3,384	
12	(“Moxibustion*”[MeSH Terms])	OR	(“moxibust*”[Title/Abstract])	3,545	
13	(“Cupping Therapy*”[MeSH Terms])	OR	(“cupping*”[Title/Abstract])	2,202	
14	(“Massage”[MeSH Terms])	OR	(“manual therap*”[Title/Abstract])	9,827	
15	(“Exercise Therapy*”[MeSH Terms] OR “Exercise*”[MeSH Terms])	OR	(“physical therap*”[Title/Abstract])	355,211	
16	(“auriculotherapy”[MeSH Terms])	OR	(“auriculotherap*”[Title/Abstract] OR “auricular acupunc*”[Title/Abstract])	904	
17	(“Medicine, Chinese Traditional”[MeSH Terms])	OR	(“chinese med*”[Title/Abstract] OR “traditional med*”[Title/Abstract] OR “oriental medicine”[Title/Abstract] OR “TCM”[Title/Abstract] OR “traditional chinese med*”[Title/Abstract])	77,234	
18	(“Complementary Med*”[Title/Abstract])	OR	(“alternative med*”[Title/Abstract] OR “integrative med*”[Title/Abstract])	19,464	
19	(“electroacupuncture”[MeSH Terms])	OR	(“electroacupunc*”[Title/Abstract] OR “electropunc*”[Title/Abstract] OR “electro-acupunc*”[Title/Abstract])	6,886	
20	#7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19			488,18	

21	(“rehabilitation”[MeSH Terms] OR “rehabilit*”[Title/Abstract] OR “rehabilitation outcome”[Title/Abstract])	OR	(“clinical effect*”[Title/Abstract] OR “treatment effect*”[Title/Abstract] OR “ineffect*”[Title/Abstract])	641,733	Outcome
22	(“recovery of function”[MeSH Terms])	OR	(“recommendat*”[Title/Abstract] OR “us*”[Title/Abstract] OR “influenc*”[Title/Abstract])	2,486,633	
23	(“Treatment Outcome”[MeSH Terms] OR “Outcome*”[MeSH Terms])	OR	(“treatment”[Title/Abstract])	5,630,082	
24	(“Quality of Life”[MeSH Terms] OR “return to work”[MeSH Terms])		(“efficacy”[Title/Abstract] OR “safety”[Title/Abstract])	28,078	
25	(“Physical Therapy Modalities”[MeSH Terms] OR “physic* med*”[Title/Abstract])			172,237	
26	#21 OR #22 OR #23 OR #24 OR #25			7,941,237	
27	#6 AND #20 AND #26			30,003	
28	(“2020/01/01”[Date - Publication] : “2022/07/01”[Date - Publication])			3,960,071	
29	#27 AND #28			7,675	
30	(“Systematic review”[Publication Type] OR “review”[-Publication Type] OR “meta-analysis”[Publication Type] OR “scoping review”[Title/Abstract])			3,161,728	
31	#29 NOT #30			5,858	
32	English[Language]			29,595,484	
33	#31 AND #32			5,462	

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Мүдделер қақтығысы – мәлімделген жоқ.
Бұл материал басқа басылымдарда жариялау үшін бұрын мәлімделмеген және басқа басылымдардың қарауына ұсынылмаған. Осы жұмысты жүргізу кезінде сыртқы ұйымдар мен медициналық өкілдіктердің қаржыландыруы жасалған жоқ. Қаржыландыру жүргізілмеді.

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