

Culture-based prescribing to improve mental health: a scoping review protocol

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ABSTRACT

Objective: The objective of this review is to investigate what is known about culture-based prescribing to improve mental health and well-being.

Introduction: Culture-based prescribing, where a person is referred by a clinical professional to an arts or cultural activity aimed at improving mental health and well-being, is increasingly used as a community-based source of support. Although culture-based prescribing seems promising, the field is heterogeneous with respect to definition, underlying hypotheses, and cultural activity. This hampers its further development and implementation.

Inclusion criteria: We will consider publications that report on or explore culture-based prescribing to improve mental health and well-being for adults with symptoms related to mental health conditions who are seeking care from any clinical professional.

Methods: We will search 8 electronic literature databases for published or unpublished reports on culture-based prescribing, without date limits. We will also search for gray literature and screen reference lists of relevant reviews. No language restrictions will be applied during the screening process, but for data extraction, we will only extract studies in languages our team has proficiency in. The screening and data extraction will be performed by 2 reviewers, independently. Data analysis will be descriptive, with results tabulated separately for each subquestion. The results will be complemented with a narrative summary.

Review registration: Open Science Framework <https://osf.io/ndbqj>

Keywords: art on referral; culture-based prescribing; mental health; mental well-being; scoping review

JBI Evid Synth 2023; 21(8):1679–1686.

Introduction

Mental health disorders have an important impact on the health of people worldwide.¹ Mental health is at the core of quality of life, well-being, and productivity for individuals, and in a broader context relates to the strength and resilience of societies.² The World Health Organization developed a comprehensive and coordinated mental

health action plan for its member states, with clear actions to promote mental health and well-being for all to prevent mental health conditions for those at risk.³ One of these actions is to integrate care models for mental health in community-based settings.³

Increasingly, the limitations of traditional medical management for mental health problems are being acknowledged. Firstly, an exclusively medical-oriented treatment may not meet all of the needs of clients, especially social needs.⁴ Secondly, non-compliance with pharmacological interventions for mental disorders is high, for example, due to side effects⁵ or social and self-stigma related to the use of antipsychotics.⁶

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The authors declare no conflict of interest.

DOI: 10.11124/JBIES-22-00211

Thirdly, the prevalence of mental disorders in primary care is high,⁷ putting an additional workload on health care professionals.

Financial constraints in health organizations have facilitated the development of alternative, more socially oriented prescribing practices.⁸ These alternative social or community-based sources of support are increasingly used to prevent and address health problems, and the process of referral to such sources is called “social prescribing.”⁹ The referral may be mediated by a “link worker,” who engages with the person and finds the community-based activity that best fits the patient’s needs.¹⁰ Social prescribing may be effective in improving health and well-being, as well as reducing workloads for health care professionals and demand for secondary care services, although evidence gaps exist in this field.^{11–14} Social prescribing is inherently social rather than individually focused and functions as an adjunct to complement primary care services and therapies.¹⁵

Community-based sources of support attempt to reduce isolation and link people or communities. Programs may focus on one or more elements (see Figure 1), most notably nature (nature-based prescribing), exercise (exercise-based prescribing), or culture (culture-based prescribing). Nature-based prescribing covers referral to activities that support contact with nature, such as gardening, walking in parks, or developing green spaces.¹⁶ Exercise-based prescribing covers referral to supported exercise programs, for example, cycling, dance, swimming, or Nordic walking.¹⁷

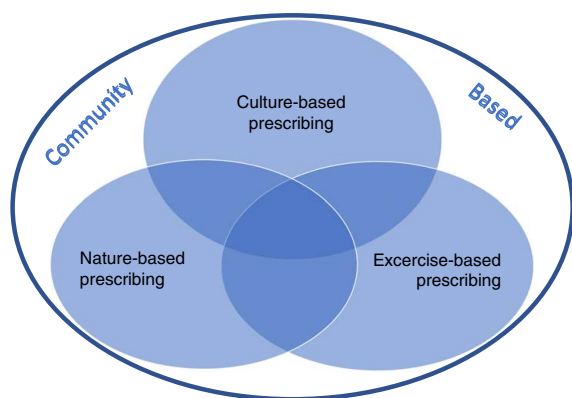


Figure 1: Illustration of the potential overlap between existing social prescribing programs

Our review focuses on culture-based prescribing, where a person is referred to arts or cultural activities.¹⁸ Cultural activities, such as festivals, fairs, art and craft workshops, cultural heritage explorations, or museum visits, create social solidarity and cohesion, reduce social isolation, and create opportunities to restore and enhance people’s sense of place.^{19,20} These activities “embody or convey cultural expressions, irrespective of the commercial value they may have. Cultural activities may be an end in themselves or they may contribute to the production of cultural goods and services.”²¹(para.1) In our review, we will cover cultural activities either as an end in themselves or as a contributor to the production of goods and services. Engagement in cultural activities is usually multisensory and includes both perception and creation, making culture-based prescribing a broad but distinct category within social prescribing. The 2 more dominant streams of evidence linked to culture-based prescription are the cultural heritage and the arts sector.

There is strong evidence that engagement in arts supports well-being.²² Creative activities may relate to the development of self-expression and self-esteem, and also have been shown to improve mental health and quality of life.²³ Consequently, the UK, Finland, and Australia have started to support specific art on prescription programs at a national level.¹² Several studies have been performed, both quantitative and qualitative, suggesting that referral to arts-based activities improves psychological well-being.^{18,24–27} A recent rapid review suggests that the creative process helps people to feel proud of their achievements, which also makes them feel calmer and more relaxed.¹⁸

A second stream of evidence targets the value and benefits of people’s exposure to cultural heritage, both in terms of the tangible and the intangible aspects of culture. Examples of exposure to tangible aspects of culture include museum visits, which have been prescribed for their positive effects on mood and anxiety.²⁶ According to Labadi, “intangible heritage practices such as yoga, buen vivir and other culturally inspired health care practices can help to promote alternative, holistic paths to health and well-being that are more respectful of the connections between nature and culture and look for the harmonious connections between body and mind.”¹⁹(p.34)

Culture-based prescribing is a heterogeneous field in terms of how it is defined, its underlying hypotheses, the different types of activities, and how they potentially cross-compare within the field of culture-based prescribing. This hampers the development and implementation of culture-based prescribing. Therefore, it is timely to map the available evidence to serve as a source of inspiration for primary health care practitioners interested in culture-based prescribing, and as a basis for practice and policy on how to best implement this in practice to achieve the most meaningful and suitable outcome for clients.

A preliminary search of PROSPERO, MEDLINE, the Cochrane Database of Systematic Reviews, and *JBI Evidence Synthesis* was conducted on September 8, 2022, and no current or in-progress scoping reviews or systematic reviews on the topic were identified. However, a rapid review on culture on referral was identified, which included 13 primary research papers published between 2010 and 2020.¹⁸ This rapid review included peer-reviewed papers in English, focusing on specific questions on the impact of these programs and how they have been evaluated, the strengths and limitations of the research, and current gaps. We aim to clarify the concept of culture-based prescribing and to identify its key characteristics. Therefore, we have a different aim and will take a broader perspective to the rapid review, including non-English literature and both arts activities as well as tangible and intangible cultural heritage activities. The objective of this review is to investigate what is known about culture-based prescribing as a means to improve mental health.

Review questions

What is known about culture-based prescribing in a health care and mental well-being context? Specifically:

- i) What populations are targeted with culture-based prescribing?
- ii) How is culture-based prescribing defined in the literature?
- iii) What theories and frameworks are used to underpin studies on culture-based prescribing?
- iv) What are the characteristics (where, when, why, how, and by whom they are led) of the cultural activities, and under which specific conditions are they conducted?
- v) Which assessments (process and outcomes) are used to evaluate culture-based prescribing?

- vi) Which caregivers participate in culture-based prescribing, and are link workers involved?

Inclusion criteria

Participants

This review will consider studies that include adults experiencing symptoms related to mental health, who are seeking care (for themselves or for relatives/friends whom they may be concerned about) from any health or social care professional. Any mental health symptom (with or without psychiatric diagnosis, or self-perceived) will be eligible. Studies on children and adolescents (under 18 years) and on populations with cognitive problems, such as dementia, that require a specific approach during the cultural activities will be excluded. Persons with psychiatric problems will be included, provided that they are able to function independently in a non-clinical environment.

Concept

This review will consider studies that explore the concept of culture-based prescribing or referral. This consists of a referral to artistic, craft-related, or cultural activities. The referral may or may not be mediated by a link worker who engages with the person and finds the community-based activity that best fits the patient's needs.¹⁰ The cultural activities may include, but are not limited to, the multisensory engagement of people with visual art, photography, dance, drama, singing or music; sculpture or wood carving; interactive museum and cultural heritage visits; or spiritual or other activities within the broad field of intangible cultural heritage activities. We will also consider activities delivered online or digitally. The concept should fulfill 2 criteria in order to be eligible: first, a referral process by a health or social care professional, and second, the cultural activities should take place in a community-based setting.

Studies that explore the prescription of nature-based or exercise-based activities or studies assessing referral to other social activities without a cultural component will not be considered for inclusion. We will exclude studies examining cultural activities used as therapy; for example, mindfulness.

Context

This review will consider publications that consider culture-based prescription in health or social care or any other context worldwide; however, activities

need to be community-based. Community may refer to a geographical area or neighborhood where the activity takes place, but may also refer to groups of people sharing a particular identity, cultural heritage, language, belief, shared fate, or interest.²⁸

Types of sources

This scoping review will consider any source of information for inclusion, provided that it reports on a culture-based prescribing program, including experimental and observational study designs, qualitative studies, and systematic or scoping reviews. In addition, text and opinion papers will be considered for inclusion in the proposed scoping review.

Methods

The proposed scoping review will be conducted in accordance with the JBI methodology for scoping reviews²⁹ and reported in line with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR).³⁰

Search strategy

The search strategy will aim to locate both published and unpublished primary studies, reviews, and text and opinion papers. An initial limited search of MEDLINE (PubMed) and Web of Science was undertaken to identify articles on the topic. The text words contained in the titles and abstracts of relevant articles, and the index terms used to describe the articles were used to develop a full search strategy for MEDLINE via PubMed (see Appendix I). The search strategy, including all identified keywords and index terms, will be adapted for each included information source. The following electronic databases will be searched from inception: MEDLINE (PubMed), CINAHL (EBSCOhost), Web of Science, PsycARTICLES (ProQuest), Scopus, Cochrane CENTRAL, Cochrane Database of Systematic Reviews, and ProQuest Central (ProQuest). The following sources for unpublished studies and gray literature will be searched: Google/Google Scholar, GreyNet, and Scopus. The databank ScienceDirect will additionally be searched without date limit. The reference lists of articles included in the review will be screened for additional papers.

No language restrictions will be made at title and abstract screening. At full text, articles published in

English, Dutch, Spanish, French, Thai, or Italian will be included, as these languages are spoken by our review team.

Study selection

Following the search, all identified records will be collated and uploaded into EndNote v.X9.1 (Clarivate Analytics, PA, USA) and duplicates removed. Following a pilot test, titles and abstracts will be screened in Rayyan (Qatar Computing Research Institute, Doha, Qatar) by 2 independent reviewers for assessment against the inclusion criteria for the review. Potentially relevant papers will be retrieved in full and their citation details imported into the JBI System for the Unified Management, Assessment and Review of Information (JBI SUMARI; JBI, Adelaide, Australia).³¹ The full text of selected citations will be assessed in detail against the inclusion criteria by 2 independent reviewers. Reasons for exclusion of full-text papers that do not meet the inclusion criteria will be recorded and reported in the scoping review. Any disagreements that arise between the reviewers at each stage of the selection process will be resolved through discussion or with a third reviewer. The results of the search will be reported in full in the final scoping review and presented in a PRISMA flow diagram.³²

Data extraction

Data will be extracted from studies included in the scoping review by 2 independent reviewers using a data extraction tool developed by the reviewers in JBI SUMARI. We will extract the definition or description of culture-based prescribing, together with any reported underlying theories or frameworks. With respect to characteristics of the prescriber, where reported, we will extract age, gender, profession, and describe their practice (setting, number of coworkers, and discipline). We will extract the same details about the link worker, if involved. The data extracted about culture-based prescribing will include type of activity, frequency and duration, location, and details on the person who leads the activity (profession and training). We will extract age, gender, diagnosis or complaint, date of onset or duration, and use of medication for mental health for the care receiver. A draft data extraction tool is provided (see Appendix II) and will be modified and revised as necessary during the process of extracting data from

each included paper. Modifications will be detailed in the full scoping review. Any disagreements between the reviewers will be resolved through discussion or with a third reviewer. Authors of papers will be contacted to request missing or additional data, where required.

Data analysis and presentation

The extracted data will be presented in tabular format. First, we will describe the number of studies and the study designs included in the review, the date of publication, and geographic location of the author teams. We will then produce 5 tables: the first will list how culture-based prescribing has been defined in the literature and underpinning theories and frameworks, using publications as a unit. Data will be sorted descriptively into overall categories and the frequency of characteristics will be reported.

A second table will display characteristics of the cultural-based activity (ie, the person performing this activity or specific conditions for that activity) for each empirical study. Data from papers reporting on the same study will be merged. A third table will present a list of the populations that were referred to cultural-based activities. Data about the characteristics of the prescriber will be summarized in a fourth table. Finally, a fifth table will present assessments used to evaluate culture-based prescribing. Where possible, these data also will be presented in a graphical manner.

A narrative summary will describe the results for each research question. Specifically, we will narratively describe the differences and similarities between the populations and, if reported, the reasons for referring these populations to particular types of activities.

Acknowledgments

Krizia Tuand, a biomedical reference librarian of the KU Leuven Libraries—2Bergen—Learning Centre Désiré Collen (Leuven, Belgium), for her advice in developing the systematic literature search strategy.

Author contributions

Conception: GEB, KH. Performing the search: GEB. Performing the analysis: GEB, KH, MC.

All authors contributed to collecting data and writing the protocol (including designing the analysis).

References

1. GBD 2019 Mental Disorders Collaborators. Global, regional, and national burden of 12 mental disorders in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet Psychiatr* 2022;9(2):137–50.
2. Friedl L. Mental health, resilience and inequalities [internet]. Denmark: WHO Regional office for Europe; 2009 [cited 2022 May 14]. Available from: <https://apps.who.int/iris/bitstream/handle/10665/107925/E92227.pdf>.
3. World Health Organization. Comprehensive mental health action plan 2013–2030 [internet]. WHO; 2021 [cited 2022 Apr 6]. Available from: <https://apps.who.int/iris/handle/10665/345301>.
4. Cruwys T, Wakefield JRH, Sani F, Dingle GA, Jetten J. Social isolation predicts frequent attendance in primary care. *Ann Behav Med* 2018;52(10):817–29.
5. Doane MJ, Sajatovic M, Weiden PJ, O'Sullivan AK, Maher S, Bjorner JB, et al. Antipsychotic treatment experiences of people with schizophrenia: patient perspectives from an online survey. *Patient Prefer Adherence* 2020;14:2043–54.
6. Townsend Pareja K, Buchanan-Hughes A, Worthington E, Pritchett D, Brubaker M, et al. Antipsychotic-related stigma and the impact on treatment choices: a systematic review and framework synthesis. *Patient Prefer Adherence* 2022;16:373–401.
7. Serrano-Blanco A, Palao DJ, Luciano JV, Pinto-Meza A, Luján L, Fernández A, et al. Prevalence of mental disorders in primary care: results from the diagnosis and treatment of mental disorders in primary care study (DASMAP). *Soc Psychiatry Psychiatr Epidemiol* 2010;45(2):201–10.
8. Coid DR, Williams B, Crombie IK. Partnerships with health and private voluntary sector organizations: what are the issues for health authorities and boards? *Public Health* 2003;117(5):317–22.
9. Thomson LJ, Camic PM, Chatterjee HJ. Social prescribing: a review of community referral schemes [internet]. University College London; 2015 [cited 2022 Nov 12]. Available from: <https://repository.canterbury.ac.uk/item/881q4/social-prescribing-a-review-of-community-referral-schemes>.
10. Fixsen A, Seers H, Polley M, Robins J. Applying critical systems thinking to social prescribing: a relational model of stakeholder “buy-in”. *BMC Health Serv Res* 2020;20(1):580.
11. Bickerdike L, Booth A, Wilson PM, Farley K, Wright K. Social prescribing: less rhetoric and more reality. A systematic review of the evidence. *BMJ Open* 2017;7(4):e013384.
12. Chatterjee HJ, Camic PM, Lockyer B, Thomson LJM. Non-clinical community interventions: a systematised review of social prescribing schemes. *Arts Health* 2018;10(2):97–123.
13. Reinhardt GY, Vidovic D, Hammerton C. Understanding loneliness: a systematic review of the impact of social

- prescribing initiatives on loneliness. *Perspect Public Health* 2021;141(4):204–13.
14. Drinkwater C, Wildman J, Moffatt S. Social prescribing. *BMJ* 2019;364:l1285.
 15. Polley MJ, Herbert N, Bertotti M, Frostick C. Report of the annual Social Prescribing Network Conference [internet]. London; January 20, 2016 [cited 2022 Sep 14]. Available from: <https://www.scie.org.uk/prevention/research-practice/getdetailedresultbyid?id=a110f00000NeJ0UAAV>.
 16. Leavell MA, Leiferman JA, Gascon M, Braddick F, Gonzalez JC, Litt JS. Nature-based social prescribing in urban settings to improve social connectedness and mental well-being: a review. *Curr Environ Health Rep* 2019;6(4): 297–308.
 17. Pavvey TG, Taylor AH, Fox KR, Hillsdon M, Anokye N, Campbell JL, *et al.* Effect of exercise referral schemes in primary care on physical activity and improving health outcomes: systematic review and meta-analysis. *BMJ* 2011;343:d6462.
 18. Dowlen R. Culture on referral: research digest [internet]. 2020 [cited 2022 Apr 6]. Available from: <https://www.culturalvalue.org.uk/resources/culture-on-referral-research-digest/>.
 19. Labadi S, Giliberto F, Rosetti I, Shetabi L, Yildirim E. Heritage and the sustainable development goals: policy guidance for heritage and development actors [internet]. 2021 [cited 2022 Nov 9]. ICOMOS (International Council on Monuments and Sites) Open Archive. Available from: <https://openarchhive.icomos.org/id/eprint/2453/>.
 20. Segers R, Hannes K, Heylighen A, Van den Broeck P. Exploring embodied place attachment through co-creative art trajectories: the case of Mount Murals. *Soc Incl* 2021;9: 116–29.
 21. UNESCO Institute for Statistics. Glossary [internet]. n.d. [cited 2022 Apr 27]. Available from: <http://uis.unesco.org/en/glossary-term/cultural-activities>.
 22. Fancourt D, Warran K, Aughterson H. Evidence summary for policy: the role of arts in improving health and wellbeing [internet]. Department for Digital, Culture and Media and Sport; 2020 [cited 2022 Sep 14]. Available from: <https://www.gov.uk/government/publications/evidence-summary-for-policy-the-role-of-arts-in-improving-health-and-wellbeing>.
 23. Callard F, Friedli L. Imagine East Greenwich: a qualitative evaluation. *J Public. Ment Health* 2005;4:29–41.
 24. Potter S. Arts on prescription 2010–2012 Research report [internet]. Arts and Mind; 2013. [cited 2022 Sep 14]. Available from: https://kar.kent.ac.uk/65624/1/arts-on-prescription-2010_12_research-report_susan-potter.pdf.
 25. Crone DM, O'Connell EE, Tyson PJ, Clark-Stone F, Opher S, James DV. 'Art Lift' intervention to improve mental well-being: an observational study from U.K. general practice. *Int J Ment Health Nurs* 2013;22(3):279–86.
 26. Thomson LJ, Lockyer B, Camic PM, Chatterjee HJ. Effects of a museum-based social prescription intervention on quantitative measures of psychological wellbeing in older adults. *Perspect Public Health* 2018;138(1):28–38.
 27. Hacking S, Secker J, Spandler H, Kent L, Shenton J. Evaluating the impact of participatory art projects for people with mental health needs. *Health Soc Care Community* 2008;16(6):638–48.
 28. Coemans S, Hannes K. Researchers under the spell of the arts: two decades of using arts-based methods in community-based inquiry with vulnerable populations. *Educ Res Rev* 2017;22:34–49.
 29. Peters MDJ, Godfrey C, McInerney P, Munn Z, Tricco AC, Khalil H. Chapter 11: Scoping reviews. In: Aromataris E, Munn Z, editors. *JBIManual for Evidence Synthesis* [internet]. JBI; 2020 [cited 2022 May 20]. Available from: <https://synthesismanual.jbi.global>.
 30. Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, *et al.* PRISMA extension for scoping reviews (PRISMA-ScR): checklist and explanation. *The PRISMA-ScR Statement. Ann Intern Med* 2018;169(7):467–73.
 31. Munn Z, Aromataris E, Tufanaru C, Stern C, Porritt K, Farrow J. The development of software to support multiple systematic review types: the Joanna Briggs Institute System for the Unified Management, Assessment and Review of Information (JBI SUMARI). *Int J Evid Based Healthc* 2019;17(1):36–43.
 32. Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Goffmann TC, Mulrow CD, *et al.* The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ* 2021;372: n71.

Appendix I: Search strategy

MEDLINE (PubMed)

Search conducted: May 25, 2022

Search	Query	Records retrieved
#1	"social prescri*[Title/Abstract] OR "cultural prescri*[Title/Abstract] OR ("culture on"[Title/Abstract] AND "referral"[Title/Abstract]) OR ("culture on"[Title/Abstract] AND "prescription*[Title/Abstract]) OR "arts on prescription*[Title/Abstract] OR "arts on referral"[Title/Abstract]	358
#2	"prescriptions"[MeSH Terms:noexp] OR "referral and consultation"[MeSH Terms:noexp] OR "prescri*[Title/Abstract] OR "referr*[Title/Abstract]	643,706
#3	"art"[MeSH Terms] OR "religion"[MeSH Terms] OR "culture"[MeSH Terms:noexp] OR ("art"[Title/Abstract] NOT ("antiretroviral"[Title/Abstract] OR "state-of-the-art"[Title/Abstract])) OR "arts"[Title/Abstract] OR "artistic"[Title/Abstract] OR "creativ*[Title/Abstract]	193,152
#4	(("religio*[Title/Abstract] OR "spiritua*[Title/Abstract] OR "cultural"[Title/Abstract]) AND ("activit*[Title/Abstract] OR "engag*[Title/Abstract]))	23,644
#5	(#3 OR #4) AND #2	4957
#6	#1 OR #5	5260

Appendix II: Draft data extraction instrument

Scoping review details	
Scoping review title:	
Review objective/s:	
Review question/s:	
Inclusion/exclusion criteria	
Population	
Concept	
Context	
Types of evidence source	
Evidence source details and characteristics	
Citation details (eg, author/s, date, title, journal, volume, issue, pages)	
Study design	
Country	
Context (where is the study performed)	
Definition of culture-based prescribing	
Underlying theories/frameworks	
Outcomes (quantitative and qualitative) evaluated + assessment tools/instruments (frequency/times)	
Prescriber (details: age, gender, profession, practice [setting, number of coworkers and disciplines], details link worker)	
Culture-based activity (details: type of activity, frequency and duration, location, and details on the person who leads the activity [profession and training])	
Patient/client (details: age, gender, diagnosis or complaint, date of onset or duration, and use of medication for mental health)	