# How arts, heritage and culture can support health and wellbeing through social prescribing

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## Introduction

Engaging in art, nature, exercise, music, creative, expressive, social or philosophical activities can elicit stimulatory benefits such as heightened emotional, cognitive and sensory processing, increased social interaction, adoption of healthy behaviours, promotion of physical movement and activity, and decreased stress hormone responses [1-4]. Alongside this, arts, culture and heritage interventions can also lead to improvements in other areas such as employment and skills, economic development, civic pride and social cohesion [1]. In turn, engagement in arts, culture and heritage can play a public health role in the prevention and treatment of long-term conditions that currently pressurise the healthcare system[1]. This paper outlines the state of the literature on arts, heritage, culture and health and wellbeing. Set out below is an overview of the Rapid Evidence Review methodology used for this paper, followed by a thematic overview of the results. This is followed by a summary of the reliability of this data alongside future recommendations for social prescribing referrals and pathways.

## Method

- Scoping is defined in this piece of work as exploring a range of evidence sources to populate an understanding of the concepts, boundaries, outcomes, and critical ingredients to achieve defined and emergent outcomes. Our method was guided by our aim to explore information available on websites about real-world projects or services as well as published literature. Therefore, please note that this review is a rapid scoping review, rather than a systematic review.
- A Rapid Evidence Review approach was used to provide this evidence synthesis. Rapid Evidence Reviews streamline the steps of systematic reviews under an accelerated time frame to produce evidence in a shortened time frame. We searched the Cochrane Library, MEDLINE, PubMed, Google Scholar, and sources of grey literature including google, greylit.org and opengrey.eu.
- The following terms were used to identify relevant social prescribing literature: (1) social prescri* OR community refer* OR on prescription. Search terms were established using the PICO (population, intervention, control, outcome) method. Only adult populations were included within this review. Search terms for the Interventions include: art, heritage, culture, music, social infrastructure, museums, public libraries, creative, craft, knitting, writing, poetry, sewing, pottery, painting, drawing, singing, archaeology, heritage, landscapes, historic buildings, architecture,

literature, theatre, dance, festivals, film, galleries, celebration, cultural activity. Outcomes included wellbeing, health, mental health, maternal health, cardiovascular disease, Type 2 diabetes, obesity, chronic respiratory disease, cancer and hypertension. To keep the review manageable, the searches were limited to the last 5 years only, when the majority of social prescribing publications have been produced.

- For searching on Google Scholar, 'social prescribing' OR 'community referral' or 'on prescription' were combined to get an initial series of hits. Further search terms on arts, heritage and culture as listed above were individually applied to these hits. Where multiple pages were found, up to the first 10 pages were searched.

- Studies included reviews (including scoping reviews, Cochrane reviews, meta-analyses and narrative reviews), cohort studies, longitudinal analyses, analyses of secondary data and grey literature. Studies were included if they were in English, they explicitly assessed the relationship between the specified interventions alongside one of the identified outcomes, if they pertained to adult populations, and were written in English. All other literature was excluded.

- The first broad search and screening of abstracts was conducted by RM to make a preliminary selection of studies for consideration. Rayyan.ai software was used to organise all sources of information, for screening and for independent review of each paper. Final selections for inclusion were then made by both authors (RM, AS) when reading the studies in full. Results of the review process between RM and AS were compared, and any discrepancies discussed and resolved.

## Results of the search strategy

- A total of 233 studies were identified. Forty-six met inclusion criteria [7-52].

- Population: Most studies (n=20) did not focus on a particular population, rather looked at items of wellbeing, mental health or service delivery for the wider population [13,22,24,25,28,29-31,36,38,44-46,48-52]. Thirteen studies assessed populations of individuals with mental health difficulties or diagnoses, including depression, anxiety, general poor mental health or issues relating to neurodevelopmental conditions such as autism, or those currently accessing mental health services [7,12,14-16,18-21,34,39,42,47]. Eight articles focussed on older populations including those experiencing loneliness and isolation, dementias and general cognitive loss [8,10,17,33,37,40,41,43]. Two articles assessed socioeconomic status in relation to social prescribing interventions [35,39].

- Interventions: One article assessed the merits of bibliotherapy for individuals with poor mental health, including associating with characters in a story, self-help, history or escapist fantasy [20]. One study assessed the mental health benefits of knitting including the impact of mindful knitting

and needlework on feelings of relaxation and stress reduction [42]. Four articles focussed on the evaluation of services, including service delivery, service impact and service design [28-30, 36,39]. Five articles assessed the impact of singing, music, collaborative compositions and dance on physical and health outcomes [12,17,22,23,31]. Five articles assessed the benefits of museum-based activities, including horticulture, artmaking, interacting with collections and museum object holding [16,33,34,37,40]. Five articles heritage assessed the health and wellbeing benefits of heritage, including national heritage sites [48-52]. Six articles assessed the impact of culture and art, including group and in community social activities [46], community activities [7,24,41,43], and culture and country specific activities [45]: for example, one study by Noguchi et al. [45] noted the significant decrease in depressive symptoms of a sample of 37,627 older adults, after taking part in traditional Japanese cultural activities including musical performances, singing, dancing, handicrafts, painting, photography, poetry composition, calligraphy, and traditional tea ceremonies. Eight articles assessed the impact of social prescribing in general [9,10,26,27,32,35,44,47]. Ten articles assessed the benefits of arts on prescription [8,11,13-15,18,19,21,25,38], including initiatives such as ‘culture vitamins’ (short interactive ‘bursts’ of culture for individuals with mild to moderate depression, stress or anxiety) [14] and ‘arts for the blues’ (visual art workshops for individuals with depression) [18].

- Outcome: the literature focussed mostly on psychological wellbeing as an outcome of arts, culture and heritage intervention, although the subsequent physiological (e.g. singing for lung health) or socioeconomic (e.g. help with housing or benefits) outcomes were also sporadically discussed. Eleven articles assessed arts interventions and mental health and cognitive outcomes: including stress levels, mild to moderate depression, cognitive decline in the elderly and behavioural and psychological aspects of dementia [41,42,43,45,46-52]. One study assessed both physiological and mental health outcomes including cardiovascular and brain health in the elderly [10]. Twenty-five studies assessed the relationship between arts interventions and subjective hedonic and eudemonic wellbeing, using a range of validated questionnaires such as the Warwick- Edinburgh Mental Wellbeing Scale, the PERMA Model, or novel or ad hoc measurements of wellbeing [7-9,11-14-19,21,22,25-27,31-34,38-40,44]. One study outlined a series of medical trials exploring increased brain arousal (particularly in language processing regions) measured through MRI data as an outcome of bibliotherapy [20]. Two others assessed the biopsychosocial aspects of arts on prescription, including skill gain and occupational health [23,37]. The remaining six studies assessed outcomes such as service delivery and service impact of social prescribing and referral pathways, rather than individual health outcomes [24,28-30,35,36].

- Included literature comprised of pre/post studies (n=16) [8,12,15,17,20-22,31,33,34,36-39,41,42]; literature/ narrative reviews (n=9) [7,10,23,24,35,40,48,49]; systematic reviews (n=6) [9,19,28,29,32,44]; grey literature (n=3) [50-52]; longitudinal data (n=3) [26,43,45] case studies (n=2) [14,18]; cohort data (n=2) [25,26]; practitioner perspectives (n=2)

interview (n=2) [27,46]; [11,13]; realist review (n=1) [47]; theoretical modelling (n=1) [30]; intervention (n=1) [16].

- Longitudinal analyses from the English Longitudinal Study of Aging assessed long term cognitive decline in older adults [43] and community engagement and dementia [26]. The Japan Gerontological Evaluation Study assessed the impact of cultural engagement on depressive symptoms [45]. Grey literature reports were included from the What Works Centre for Wellbeing [50], the Baring Foundation [51] and Historic England [52]. Between systematic and literature reviews an additional total of 176 studies were included within included reviews.

## The impact of arts, heritage and culture on health and wellbeing

There is now a large body of literature that evidences the positive association between better health and wellbeing and time spent engaging in art, nature, exercise, music, creative, expressive, social or philosophical activities [1,3]. Such evidence also points towards social prescriptions being positive facilitators for good health and wellbeing for those with long term physiological or psychological conditions [9,10,26,27,32,35,44,47]. Overwhelmingly, our search found positive associations between health and wellbeing and arts, heritage and culture engagement. However, the validity, reliability and quality of evidence is inconsistent, often relying on anecdotal or non-validated pre/post intervention data.

- Theoretical mechanisms (how this relationship works,) are still up for debate. Participation in community activities involves aesthetic engagement, evocation of the imagination and emotion, cognitive stimulation, sensory stimulation, social interaction and physical activity – which in turn endorse positive psychological (e.g. coping and emotional strategies), physiological (e.g. lower stress hormone response), social (e.g. reduced loneliness and isolation) and behavioural outcomes (e.g. adoption of healthier behaviours and skills development) [1]. Evidence suggests that such salutogenic approaches (i.e. approaches that focus on health and wellbeing,) are useful in the treatment and prevention of long-term conditions, can take pressure off of socialised healthcare systems, and can be effective in increasing resilience and wellbeing in individuals and communities [1].

- Despite evidence of the positive impact of arts, heritage and cultural engagement on the population in general, more research is needed on social prescribing referral pathways as reducers of health inequity in disadvantaged or marginalised communities [39,44,47].

## Social prescribing and arts, heritage and culture

- **Social prescribing** is intended as a non-clinical bridge between primary care and the community, the aim being to use long term salutogenic approaches to improve health behaviours and aid in the management of long-term conditions. It often sits alongside existing treatments to support health and

wellbeing through in-community activities such as arts on prescription, cultural trips, museum-based learning, local befriending services, or in certain instances help with housing, benefits or work-related concerns [27,32,35,44].

- **Arts on prescription** models rely on wider community infrastructure such as arts and heritage buildings and local charities to be effectively utilised and partnered with. 'Social infrastructure' such as cafes, libraries, museums, community organisations and public institutions are therefore crucial to the efficacy of social prescribing [9]. Individuals living in areas that are rich in 'social infrastructure' experience lower rates of mental ill-health, such as anxiety and depression, and lower rates of physical ill-health, such as obesity, chronic pain, and diabetes [3]. Negative health outcomes are closely related to asset-deprivation in towns [3].

- As a result of the COVID-19 pandemic there has been a large increase in the general appetite for home and community based, arts and culture related activity [32].

- In a study conducted by Fancourt et al. [26], community cultural engagement (eg, visiting museums, galleries, the theatre) was found to be associated with a lower risk of developing dementia in older age independent of demographic, health-related and a broad range of social factors. Such findings are of relevance when considering the role of social prescribing to support healthy ageing.

- The literature overwhelmingly reports that heritage and culture on prescription is beneficial for patient physical and psychological health [8,11,13-15,18,19,21,25,38]. This was also dependent on service implementation and design [8,16]. One study by Jensen et al. reported that cultural institutions are generally positive with regards to interdisciplinary collaboration which enables smooth running of social prescription services [13].

- The UK is considered to be a leader in social prescribing. One narrative review conducted by Jensen et al [24] outlines the state of social prescribing within Europe: of the Scandinavian countries, Sweden appears to be ahead in arts on prescription services having implemented social prescribing services into local infrastructure, however it is widely considered that the UK is able to provide more longer term and in depth analysis of the service implications of social prescribing having been implementing community referrals since the mid-1990s [1-3, 24].

## Arts, heritage and culture and populations at greatest risk of experiencing health inequalities

Several articles assessed the impact of arts, heritage, and culture on populations at greatest risk of experiencing health inequalities:

- Mental health service users: alongside talking therapy and a range of holistic interventions, arts can help individuals with mental ill-health connect, be active, notice and be mindful [16,39,34]. In one study conducted by Thomson et al. [34], 46 mental health service users participated in a museums on prescriptions scheme which included horticulture, art making and interaction with museum collections. After a 10-week programme, participants reported improved self-esteem, decreased social isolation alongside the formation of communities of practice. Another study by Liou et al [16] reported reduced psychological stressors and therapeutic qualities of museums on prescription.

- Migrants: literature is scarce assessing key components of NHS strategy on migrant (including refugee, asylum seeker and economic migrant) populations. A systematic review by Zhang et al. [32] reported that the overall literature on this topic was of low quality but where efficacy was recorded, social prescribing improved self-esteem, confidence, empowerment and social connectivity.

- Underserved populations: those who live in deprived areas with less access to community resources, from low socioeconomic backgrounds experience health inequity, including access to social prescribing services [11,35]. Gaps in service provision are around: barriers to participation – such as lack of public transport links or childcare; ineffective 'buy in' into arts on prescription activities; financial and legal aspects of social prescribing (e.g., help with housing, benefits and legal or other welfare issues) [9,10,26,27,32,35,44,47].

- Lonely, socially isolated individuals: Loneliness and social isolation can compromise physical and psychological health. Social prescription activities based in arts, heritage and culture can improve community connectedness and belonging, particularly when social prescriptions work alongside community organisations such as local museums, cafes, libraries, community charities, befriending services and heritage sites. Such activities can reduce social isolation, as well as lead to improvements in health-related behaviours [34,39,40,48-52].

- Older adults with cognitive decline: arts on prescription, culture and art projects, museums on prescription and social prescribing were reported to have a positive impact on subjective wellbeing in older adults [8,10,43]. Two longitudinal studies conducted by Fancourt et al. [26] and Arab et al. [43] both analysing data from the English Longitudinal Study of Ageing reported that arts on prescription and social prescribing had the potential to slow down cognitive decline.

## Social prescribing pathways: barriers and enablers

- In recent years there has been an increase in social prescriptions through a number of referral pathways including general practice. One study conducted by Whitelaw et al. [41] outlined concerns over a lack of evidence and formalised insights into how social prescribing may be optimally

integrated into the community, due to issues around culture, behaviour, and organisational change.

- The evidence suggests that better co-design and co-production in social prescribing is needed for link workers and community services to reach underserved populations. This includes the involvement of stakeholders, community organisations as well as service users in the co-production of social prescribing services [35,36].

- In a systematic review conducted by Pescheny et al. [28], several systemic barriers and enablers were identified in evaluating social prescribing service delivery. These ranged from issues around service implementation (e.g. logistics and staffing), legal agreements, leadership, management and organisation, staff retention and engagement, relationships and communication between partners and stakeholders, characteristics of general practices, and the local infrastructure. Another systematic review conducted by Pescheny et al. [29] assessed service impact, finding that where improvements were found in health and wellbeing, health-related behaviours, self-concepts, feelings, social contacts and day-to-day functioning post-social prescribing, methodologies that were utilised by social prescribing organisations were of variable quality.

- One study by Fixsen et al. [30] outlined a theoretical model of arts on prescription using Critical Systems Thinking, a model that takes into account systemic barriers and enablers that are often encountered by stakeholders where diverse interests, unequal power and multidisciplinary methodologies may clash. This study found that effective implementation of social prescribing into existing bureaucratic systems required 'holistic' behaviour change strategies alongside 'buy in' measures for staff and those working on the ground.

## How reliable is this data?

- A sampling technique was used to assess the reliability of the data contained within this review. Grey literature was sampled and assessed using the Accuracy, Authority, Coverage, Objectivity, Date and Significance (AACODS) Checklist [69]. Pre/post studies using interventions were randomly sampled and assessed using the Cochrane grading system of Platinum, Gold, Silver, Bronze [70]. All three items of grey literature included within this search met quality thresholds for AACODS (i.e. scored above 22). Eighty percent of sampled pre/post intervention studies (12 out of 15) scored the lowest level of 'Cochrane Bronze' whilst one scored 'Silver'. This was due mainly to the absence of control groups within the sampled studies.

- Between the systematic reviews, scoping reviews, narrative reviews and meta-analyses included within this paper, 222 studies were examined. The overwhelming majority of these studies were pre/post studies describing a positive association between arts, heritage or culture and health and wellbeing. Many used subjective wellbeing measures, meaning data may not always translate to the general population. Such positive associations can

only reliably be ascribed to intervention or RCT data – which there is currently a scarcity of.

## Recommendations

- There is an abundance of data reporting the positive health and wellbeing impact of arts, culture and heritage however there is still a lack of reliable data from community organisations. The development of better evaluation tools would enable third sector organisations to calculate and understand the impact of initiatives more accurately.

- Co-design and co-production consistently appear within the literature as effective ways of implementing arts, heritage and culture programmes within primary care and social prescribing. Effective partnerships with stakeholders and community organisations alongside 'buy in' by frontline workers may enable organisational behaviour change. This should sit alongside partnerships with community assets such as museums, cafes, libraries, galleries, theatres etc.

- Patients tend to value arts, culture and heritage and are knowledgeable of their benefits [35]. But since there is still a lack of representation from audiences at greatest risk of health inequalities, due to access restrictions and other barriers, service 'nudges' and greater reach out initiatives would benefit wider audiences.

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