Art on prescription: Practice and evidence

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Synonyms: Art on referral, social prescribing, community art, psychosocial intervention.

Definition: Art on prescription involves the referral of people to a programme of art workshops (visual arts), typically by health care professionals, with the aim of improving psychosocial health and wellbeing.

Main Text

Art on prescription is one pathway in social prescribing schemes that typically involves referrals to visual arts programmes (rather than to activities such as dance, music or creative writing) (Crone et al., 2018; van der Venter & Buller, 2015). Social prescribing is normally offered to individuals with low to moderate mental health problems in primary health care situations (Keenaghan et al., 2012). Drawing on a biopsychosocial model, it recognizes the social cultural determinants of health, for instance, the role of social isolation in stress, anxiety and depression (Fixsen & Polley, 2020; World Health Organisation [WHO], 1946). Consequently, referrals are made to interventions that aim to improve psychosocial wellbeing, rather than solely focusing on biological treatments (and talking therapies), providing an additional resource (Bungay & Clift, 2010). Typically, a primary care health-care professional (e.g. a general practitioner [GP] or practice nurse), public health or social work care worker refers a patient to a social prescribing link worker, who discusses local community groups and interventions that might meet their interests and wellbeing needs, leading to a personalized 'social prescription' (Fixsen & Polley, 2020). This could consist of numerous activities that might benefit the person, with the hope of improving their wellbeing, health and/or health-related behaviours, such as taking part in cookery classes, sport, gardening groups, nature walks, joining choirs or attending museums (Chatterjee et al., 2018).

NHS England aim to extend the provision of social prescribing in their Long-Term Plan (NHS England, 2019), not only to improve patient wellbeing but also to reduce the burden on primary care. It has been estimated that one fifth of visits to GPs are due to social rather than medical reasons (Caper & Plunkett, 2015; Fixsen & Polley, 2020). Consequently, it is hoped that social prescribing will reduce visits to GP surgeries and even need for medication (Drinkwater et al., 2019). Further, social prescribing has the potential to alleviate *future* burden on the NHS, especially pressing since it is predicted that health care costs associated with stress, anxiety and depression will rise exponentially by 2026 (Fleischer & Grehan, 2016) and that depression will be the largest 'global health burden' by 2030 (Mathers & Loncar, 2006). Despite the anticipated economic benefits of social prescribing, it has been argued that the primary driver for its use should be patient benefit (Drinkwater et al., 2019), and, accordingly, this chapter will focus on the evidence supporting the use of art on prescription to improve wellbeing, along with potential explanatory mechanisms for effects and consideration of practices of art for health facilitators that may enable this. Befittingly, this chapter is a collaboration between researchers and psychologists (NH and CE) and an artist and arts for

health facilitator (JM), and will draw on experience of delivering and evaluating arts on prescription programmes.

History and practice of art on prescription

The first scheme to use the term 'art on prescription' was Stockport Arts on Prescription, set up in 1994 (Huxley, 1997). Numerous other programmes subsequently emerged across the United Kingdom, for example, in Nottingham (City Arts) (Stickley & Hui, 2012), Cambridge (Arts and Minds) (Potter, 2013), Milton Keynes (Arts for Health) (Willis Newson, 2013), Bristol (Art Shine) (van der Venter, 2011) and Gloucestershire (Art Lift) (e.g., Daykin et al., 2008) (see Bungay and Clift [2010] for a useful review). Provision has been increasing across the UK, often provided by local voluntary and community sectors, but remains patchy and is supported through different funding routes, that are often temporary. The availability of arts on prescription has also been growing internationally, with programmes in Scandinavia and Australia, for example (Jensen et al., 2017; Poulos et al., 2018; Williams et al., 2019).

Despite variations in delivery, arts on prescription programmes usually offer weekly art workshops, of two hours duration, for small groups (e.g. between three to ten people, Crone et al., 2013). Some programmes offer further activities, such as group outings to local art galleries and an end of year celebration and exhibition of work produced in the art workshops (Clayton & Potter, 2017). People are referred for a range of reasons, usually: psychosocial (e.g. social isolation); mental health (e.g., low to moderate levels of stress, anxiety or depression); and physical health (e.g. chronic pain or illness). The art workshops focus on exploring visual materials, which may vary depending on the specialism of the different artists, for example, print making, ceramics, drawing, mosaic, collage, stitching, clay and wire work, felting, painting, textiles, photography and film (Clayton & Potter, 2017; Crone et al., 2013; Holt, 2020; van der Venter & Buller, 2015). There is also variation in the length of programmes, ranging from six to twelve weeks (although there is sometimes the opportunity for a second referral) (e.g. Crone et al., 2018; Holt, 2020; Willis Newson, 2019). Likewise, the setting in which they are held varies, including GP surgeries, community hubs and cultural institutions, such as museums and art galleries (Crone et al., 2013; Holt, 2020; Jensen & Bonde, 2020). These differing factors impact on the participant experience and potentially on attendance and wellbeing benefits (Crone et al., 2018; Jensen & Bonde, 2020).

Art on prescription is not a form of art therapy or psychotherapy. It is not expected that the artwork is used to consciously explore psychological issues or that these issues be discussed and shared with others in the group. The artwork is not used as a therapeutic tool to communicate or explore feelings or unconscious ideation, as it is in the context of group art psychotherapy (Malchiodi, 2011). Likewise, art on prescription differs from standard art classes – the development of artistic competence is not the goal (e.g. learning to draw in perspective or mastering watercolour techniques), nor is the ensuing judgement and assessment of these, either by the art instructor or peers. Rather, the emphasis is on enjoying the process of 'playing' with and exploring materials in a supportive atmosphere. In the following section, the typical practice of running art on prescription workshops will be described, based on the Bristol Arts on Referral programmes.

Before attending the first art workshop, the artist facilitator (lead artist) running the workshops discusses the programme, in a telephone call, with each participant. As well as establishing any support needs, this helps to encourage attendance, by making participants feel valued as an individual, and begins to build a relationship of trust and care. The venue and room for the workshops are chosen so that they: are accessible and on good transport routes; have good light; are clean and comfortable; have access to toilets and kitchen equipment; and feel welcoming and

supportive, with any reception staff knowing about the project and expecting participants. Each week, the lead artist ensures that the room is set up before the participants arrive, taking care to position worktables and chairs so that everyone can work around one large table to create a sense of companionship. The art materials and equipment needed are set out either on the group table or on a side table. Any individual requirements are catered for where possible, for example, placing cushions on chairs or leaving spaces for wheelchairs. Flowers and fruit are often set out on the table, windows are opened, if required, and sometimes pleasant background music is played (set up in agreement with the group). The door to the room is left open as a sign of welcome and, if needed, signage is placed in the building to guide people to the room.

When each participant arrives at the first workshop they are greeted by the lead artist, invited to take a seat of their choosing and offered refreshments (a simple gesture, that is a sign of care, value and welcome). They are introduced to anyone else who has already arrived. Once everyone is settled the lead artist offers a general welcome, and members are invited to introduce themselves. The lead artist then re-introduces the idea of the programme and the group guidelines are shared and discussed. These guidelines are designed to create a space that feels safe, relaxed, friendly and inspiring, and include items such as: respecting confidentiality; being kind to yourself and others; experimenting and exploring creative processes; being positive when reflecting on one's own work and that of others; and there are no mistakes in art making, just discoveries. The group is encouraged to make these guidelines their own and to add to them or adapt them.

Next, the first creative activity is introduced and participants are invited to take part. This is always an invitation. The lead artist reassures the group that there is no obligation to take part in the activity and that this is their time, their space, and they can use it in the best way possible to support their own wellbeing. They are reassured it is fine to just sit and join the group for a cup of tea, that they do not have to stay for the whole session, and can get up and walk around, or go out for a break. Usually the lead artist will demonstrate the activity and show examples, often work made by previous participants. One example of a first session activity is making a torn tissue paper collage around the theme of 'a lovely place to be'. Participants are invited to: "Close your eyes and dream … imagine your lovely place. Where are you? What can you see? What can you hear, smell, feel?". They are advised not to think too much, and if nothing comes to mind to just hold on to the idea of the theme and explore the materials. On the table is a range of coloured tissue paper, glue, glue brushes and pots. Each person chooses a piece of coloured card as a background colour. They are encouraged to work and make choices by instinct rather than over thinking things. They then gather their palette of torn tissue paper and start sticking. The lead artists suggest they think of the tissue as a palette of paints, to be used as a range of colours and textures, rather than trying to cut out actual shapes of things for their image, to layer the tissue, scrunch it to give texture, use lots of glue to give transparency and allow colours to show through each other. Participants can spend as long as they like on the activity, it can take them one session or many.

Participants work alongside each other to create their artworks. The lead artist moves around the group throughout the workshops. Their role is to encourage, give confidence, inspire, demonstrate if asked (but never to take over or work over a participant's work), and facilitate participants to find their own solutions. Everyone is given permission to work at their own pace, without deadlines or pressure. Each person is encouraged to interpret the activity in their own way. The lead artist will frequently reassure the group that we are here to play, explore, make discoveries and have fun. The lead artist often has a role to dispel the myths or mystique around artmaking. They explain the artist's work as an ongoing process of discovery involving many experiments. They explain that an artist's process produces a range of work, only some of which the artist will be happy with; that artists may work on several pieces of art at once, and may put something aside and revisit it later; that an artist does not just sit down and produce a 'masterpiece', there is a process behind the work, a learning of techniques and time spent experimenting; that no piece of work is a waste of time because it is part of this process of discovery. In this way it is hoped that participants begin to relax

about their own processes and start to enjoy the freedom to play and become confident to share their work with others in the group.

Over time, the lead artist adapts the programme to meet the needs of each group and individual. Each programme is not necessarily fully pre-planned - it is responsive. As well as making physical adaptations to the space and use of equipment, the lead artist continually responds to each individual's artwork and creative journey. They will spend time with each person during each workshop discussing their creative process and planning where it might go next. The lead artist will encourage sharing and discussion of work in progress during and at the end of each session. They will reflect with the group and ask for their input into the planning of the next workshop. This means that a few sessions into the programme individuals in the group could be working on different creative activities. The lead artist will do their best to enable this, bringing in a range of materials and equipment. The sessions can become like a shared artist studio setting, with a buzz of ideas and cross fertilization. As the course progresses participants are encouraged to bring in their own self-led projects in preparation for beyond the end of the programme. At this stage they are encouraged to think about 'what next', for example, attending local 'move on' groups or starting independent peer-led creative or friendship groups. As such, the lead artist works to establish routes for the participants beyond the initial programme, connecting with other organisations, such as local art galleries and museums, that offer opportunities for participants to engage with the cultural life of their community as a means to support and sustain their wellbeing.

Evidence for the benefit of the arts on prescription

Public Health England (2016) has recommended that evaluations of wellbeing interventions include three components in order to evidence their impact: qualitative data suggesting that the intervention is meaningful to the people who have taken part and is perceived, by them, to be beneficial; quantitative data suggesting that an intervention meets required patient outcomes, such as symptom reduction (the gold standard being systematic reviews of randomized control trials); and econometric data suggesting that the intervention is financially viable. This section will review the literature on arts on prescription that pertains to these three outcomes.

Initial research on the psychological impact of arts on prescription focused on the meaning involvement in programmes had for participants (e.g., Stickley & Hui, 2012; Stickley & Eades, 2013). Using narrative enquiry to explore the way individuals were influenced by the social context, Stickley and Hui (2012) analysed 16 interviews with participants referred to ten weekly art workshops delivered through City Arts Nottingham. The first theme articulated the supportive atmosphere of groups, where a caring and non-judgemental attitude (both from peers and artist facilitators) was described as creating a space that felt safe and where one was allowed to 'make mistakes'. This was associated with a second theme of 'social belonging' and the development of friendships, with ensuing psychological benefits such as increased confidence and self-esteem. For example: "It's been amazing. It's been absolutely amazing. It's got me talking to people, it's given me more confidence in groups" (Stickley & Hui, 2012, p. 577). The final theme focused on participants who found the group to be a 'catalyst for positive change', feeling equipped to experience new challenges in their life, perhaps due to increased confidence in their abilities. Stickley and Hui argued that arts on prescription may be life changing for some, improving wellbeing through increasing their sense of belonging, and aligned this with the accepting attitude thought to be a therapeutic agent in humanistic counselling (Cooper, 2009). In a subsequent study Stickley and Eades (2013) interviewed ten participants, two years after their arts on prescription course had ended. Previously described social benefits were still perceived as important elements that impacted on their subsequent journey. Participants reported both 'soft outcomes', such as sustaining 'new identities' (characterised by increased confidence, motivation, empowerment and associated labels [e.g. being

an artist]), and 'hard outcomes', such as educational and occupational achievements. That, for these participants, wellbeing benefits were sustained over time, supports the use of arts on prescription as a highly impactful intervention for some.

Taking a different qualitative approach, Redmond et al. (2019) used thematic analysis to analyse the written responses on the evaluation questionnaires of participants who had completed an arts on prescription course (Art Lift), enquiring about aspects of it that they had most enjoyed. This approach involved relatively superficial, but numerous (*N* = 1272), responses, arguably reducing selection biases. Nevertheless, findings supported the importance of the 'safe space' articulated by Stickley and Hui (2012), where connection with others and companionship was enabled. Other themes focused on physical and psychological qualities of this space: where time was carved out *for* them, enabling a change of routine and opportunities to 'get out of the house'; and where, in this space, they felt able to play and 'lose oneself' in the processes of art making, to relax and forget about worries or pain. This space was described as a stage on a journey, that helped participants to 'move out of a dark place' and that enabled personal growth (Redmond et al., 2019). Taken together, these qualitative papers suggest that arts on prescription programmes are meaningful for some participants, contributing to their wellbeing, both through art making and social connection, and potentially acting as a catalyst for personal development and growth. This is in line with qualitative findings from broader art and community wellbeing research, suggesting that involvement with the arts Is perceived by participants to have a range of salutogenic effects, including finding life more manageable and meaningful, improved social connection, feelings of hope, empowerment and positive self-identity (Jensen, 2019; Stickley, Wright & Slade, 2018; Tomlinson et al., 2019).

Quantitative research on the visual arts and wellbeing has burgeoned in recent years (Jensen & Bonde, 2018; van Lith, Schofield & Fenner, 2013) and suggests that art making is associated with a range of outcomes, including: decreased depression, anxiety and stress; improved mood and attention; increased meaning in life, empowerment, social inclusion and self-esteem (Forkosh & Drake, 2017; Hacking et al., 2008; Holt, 2018; Wilson et al., 2017). However, the quantitative evidence for arts on prescription is more limited and primarily consists of observational research, in which, questionnaires to measure wellbeing are completed before and after participating in a programme of art workshops (e.g., Crone et al., 2018; Holt, 2020; van de Venter & Buller, 2015). Much of this research has been conducted by academics evaluating the interventions of Art Lift in Gloucestershire (e.g., Daykin et al., 2008; Crone et al., 2013; 2018). Evidence in this setting has accumulated over twelve years, leading to a large database with over a thousand referrals. This has allowed recent work on the database to examine the characteristics and experiences of those for whom the intervention may work best (Hughes et al., 2019; Sumner et al., 2020).

The Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS; Tennant et al., 2007) is the most used measure to index change in the evaluation of arts on prescription interventions. The WEMWBS has been constructed to measure psychological wellbeing in the previous two weeks and enquires about numerous components thought to be theoretically important to healthy psychological functioning, including feeling connected to others, experiencing positive emotions, being able to think clearly and having high self-esteem. In research on the scale's norms and validity it has been reported to be sensitive to change over time and a minimum 'meaningful change' in scores has been defined as an increase of three points across measurement occasions (Maheswaran et al., 2012; Putz et al., 2012). A score of 40 or less has been associated with depression, and of 44 or less with possible depression (Bianca, 2012; Trousselard et al., 2016).

Crone et al. (2013) reported on the wellbeing outcomes of 202 patients referred to a ten-week-long course of weekly art workshops. Of those who attended the first session (*n* = 157) 63.7% went on to attend the final session (*n* = 100) (which was defined as 'completion'). Completers had significantly higher WEMWBS scores at the end of the programme (mean = 44) than at the start (mean = 38). This significant increase in wellbeing (of 6 points, on average) was also reported in a follow-up analysis of 1297 patients referred to Art Lift between 2009 and 2016 (Crone et al., 2018), as well as in further studies in different settings (Holt, 2020; van der Venter & Buller, 2015). In the latter, WEMWBS scores increased by eight points (from mean = 38 to 46; van der Venter & Buller, 2015) and five points (mean = 38 to 43; Holt, 2020); although, after a second referral, wellbeing scores increased to a mean of 45 (Holt, 2020). Collectively, these studies suggest, that despite different locations, artists and lengths of involvement (from 8 to 24 weeks), higher levels of wellbeing have consistently been reported at the end of programmes than at the start. They also suggest that, on average, people typically begin reporting levels of wellbeing indicative of depression (below 40), but at the end of the course, report levels on or above the threshold for 'possible depression' (44 or above). Further, the degree of change is at a 'meaningful level', involving increases of more than three points, providing support for the hypothesis that arts on prescription is effective at improving the wellbeing of participants referred due to low to moderate anxiety, stress and depression.

Further analyses of the Art Lift data have explored who appears to benefit most from attending. Of the 1297 referrals, 818 (63%) attended the first session and 651 (51.7%) completed the programme. Participants who were rated by artists as engaging with the programme were significantly older, less likely to be referred for multiple reasons (but not for any *single* reason) and had higher levels of baseline wellbeing (Sumner et al., 2020). The latter concurs with the finding that completers had significantly higher wellbeing scores at the start of the programme than those who did not complete (Crone et al., 2018). Despite the overall finding that completers had improved wellbeing scores at the end of the programme, this was not the case for *all* completers (23.6% did not - some even reporting lower levels) (Sumner et al., 2020). Completers who *did* report improved wellbeing were statistically more likely to have lower wellbeing scores at baseline. Taken together, these findings suggest that while people with lower levels of wellbeing may benefit the most from attending the art workshops, they may also be more likely to cease attending, and may have multiple barriers to attending (multiple referral reasons). Consequently, participants with lower levels of wellbeing may need more support to engage.

Hughes et al. (2019) used a sequential mixed-methods design in order to explore whether the written feedback made on Art Lift evaluation forms could help to understand the differential experiences of 'completers' who did (*n* = 312) and did not (*n* = 95) report an increase in wellbeing scores from the first to final session. A thematic analysis suggested that the two groups differed in their experiences of social interaction during the art workshops. Completers with a decrease in wellbeing described unsupportive or unpleasant interactions with others, for example: "Other participants can make you feel uncomfortable" (Hughes et al., 2019, p. 10). In contrast, completers with increased wellbeing scores described enjoying meeting people with shared experiences and feeling encouraged and supported by others in the group. They also described the art workshops as relaxing, providing a welcome distraction from any health problems and worries. Hughes et al. (2019) proposed a process of change model, where being able to socially relax in the art workshops enables absorption in the art activities and distraction from health concerns and symptoms, in turn leading to increased wellbeing. This process could be inhibited by feelings of social isolation and judgement in the group, leading to an inability to relax, and reduced opportunity for absorption and distraction.

The importance of relaxation during the art workshops was supported by Holt (2020), using a mood tracking approach to explore processes of change across participation in an arts on prescription programme. Participants completed a six-item mood measure (Wilhelm & Schoebi, 2007) at the start and end of each workshop, using an anonymous code to track their mood data and link it to WEMWBS scores. The mood scale measured participant's current feelings of happiness or contentment, relaxation (versus feeling tense and anxious) and energy (feeling awake and energetic). Participants reported significantly improved mood (on all three dimensions) after the art workshops, and, mood on arrival at the sessions significantly improved over the course of the twelve-week programme. Of most interest, however, was that the degree of relaxation experienced in the art workshops was a significant predictor of wellbeing change (from the start to the end of the programme). Individuals who showed little or no improvement in wellbeing scores at the end of the programme also tended to report feeling less relaxed in the art workshops. This suggests that anxiety reduction is a key component of arts on prescription sessions and supports the importance of relaxation during the sessions outlined in Hughes et al.'s (2019) process of change model.

Van de Venter and Buller (2015) also used a mixed methods approach, interviewing people at the end of an arts on prescription course (Art Shine, Bristol) who did and did not report increases in WEMWBS scores. Final wellbeing scores (controlling for baseline levels of wellbeing) were significantly predicted by more frequent attendance and identifying as having black and minority ethnicity (BME). Through a thematic analysis of six semi-structured interviews, it was suggested that participants identifying as BME may have benefitted from improving their social connection and building 'identity capital'. In addition to emphasizing the importance of social connection as a therapeutic agent, this study also draws attention to problems with pre-post designs that have so far typified research in this area. Despite variations in the increase of WEMWBS scores, all interviewed participants described the art workshops as being beneficial. Other factors in the timeline of the intervention may have affected wellbeing reports (such as dealing with stressful life events or beginning a course of anti-depressants). This highlights the need for control and comparative groups in order to rule out a broad range of contextual effects, including potentially concurrent treatments and simply the passing of time.

There is only one published report, albeit in book chapter form, that has included a comparison group, using the wait-list control method (Clayton & Potter, 2017). Following a twelve-week-long art on prescription intervention (Arts and Minds, Cambridgeshire), participants (*N* = 18) had significantly higher WEMWBS scores and lower levels of anxiety (but scores on depression and social isolation were not significantly different from baseline scores). Eight individuals on a waiting list completed the same measures at the same time points. For this group there was no significant change on any of the measures, and *lower* mean WEMWBS and higher anxiety scores at the second measurement point. While this supports the hypothesis that the arts intervention played a role in improving wellbeing, there is a lack of statistical power in this study (potentially leading to some non-significant results) and no randomisation to conditions (meaning that participant characteristics could explain group differences). This represents the challenges in completing such designs in local programmes with a small number of people in each art group, small or no waiting lists, and where it is not ethical to randomly assign individuals in immediate need to a 'no treatment' condition. Any larger scale randomised controlled trials would need to be carefully designed to address such issues (perhaps with a cross-over design) and may sacrifice ecologically validity due to the personalized 'social prescription' that individuals receive (Fixsen & Polley, 2020). Theoretically, randomised control trials would be useful to help isolate wellbeing effects to arts on prescription. A triple-arm trial, not only with a passive control (e.g. treatment as usual) but also with a comparative, active control (e.g. a group socialising or a low intensity group therapy) would be optimal, in order to control for time-based and contextual factors (e.g. social interaction) and identify specific benefits of art-based interventions (Karlsson & Bergmark, 2015). However, other methods may also help to

build the evidence base, and link the art workshops causally to wellbeing change, such as n of 1 methods and the experience sampling method, where individuals can act as their 'own controls' by measuring wellbeing longitudinally and in 'treatment' and 'no treatment' periods (McDonald et al., 2017; Verhagen et al., 2016). Such methods could also help develop understanding of the long-term impact of arts on prescription.

While much of the research on arts on prescription has worked with a broad range of people, with multiple reasons for referral (especially low to moderate levels of anxiety, depression and social isolation), a small number of studies and evaluation reports have examined its efficacy for specific groups: older adults in the community (Poulos et al., 2018; Vogelpoel & Jarrold, 2014); and adults diagnosed with cancer, dementia and chronic pain (Crone, Hughes, Sumner & Darch, 2018; Willis Newson, 2019). This is an important development, since it is useful to know if arts on prescription works for different referral reasons and also whether, and how, it helps with specific symptoms (e.g. reducing social isolation or the self-management of pain and other symptoms). For example, an art on prescription programme in Sydney for community dwelling adults (over the age of 65), reported a significant increase in WEMWBS scores (in a pre- post design), and also self-reported creativity, which was very low at baseline. However, there were no changes in measures of frailty [exhaustion and physical frailty]. Participants reported that the group helped to reduce feelings of social isolation, but also that the creative activities gave them a sense of purpose, autonomy and achievement, helping to counteract experiences of loss associated with ageing: "as you get older it's very easy to sit there and feel sorry for yourself and say there's nothing out there for me, what can I do?" (Poulos et al., 2018, p. 488). Evaluations of pilot programmes for specific groups (cancer, chronic pain and dementia), in both primary and secondary care, have reported a meaningful increase in WEMWBS scores for cancer and chronic pain groups (Crone et al., 2018; Willis Newson, 2019). The Flourish art on prescription programme was run by Art Lift for adults experiencing or recovering from cancer (Crone et al., 2018b). Participants (N = 21) had significantly higher WEMWBS, and lower depression and anxiety scores at the end of the programme than the start, suggesting that art activities can improve the wellbeing *and* mental health of this population. This concurs with reviews on participatory art more broadly, with people diagnosed with cancer (Ennis, Kirshbaum & Waheed, 2018). Further work with specific referrals is required, focusing on relevant symptoms (such as pain management and cognitive failure), and drawing on best practice for interventions with these specific groups (Crawford, Lee & Bingham, 2014; Shoesmith, Charura & Surr, 2020).

The econometric evidence for art on prescription is currently the most limited of the three evidence strands, with no peer-reviewed research on this topic. However, several unpublished evaluation reports have approximated cost benefits and reduced burden on the NHS. For example, van der Venter (2011), reported a reduction of 87% in GP visits during the course of a programme (for participants for whom this data was available); and 42% of participants reported making fewer visits to GPs (Sefton MBC & NHS Sefton, 2009). Opher (2013) conducted a cost-benefit evaluation for 90 individuals who attended Art Lift between 2009 and 2012. Compared with the year prior to their referral, consultation rates with GPs dropped by 37%, with an estimated reduction in health spend of 27% (equating to £42,423). McDaid and Park (2013) modelled cost per Quality Adjusted Life Years (QALY) based on the Arts and Minds programme in Cambridgeshire. QALY is used by commissioners to compare the efficacy of interventions, and takes account of the resources required (e.g. materials, staff costs, etc.) and the benefits accrued (in terms of future quality, and quantity, of life for participants of an intervention). Focusing on reduction in depression, modelling suggested that art on prescription would be cost effective if a recovery rate of 70% was achieved (but, if costs were reduced, e.g., by reducing the intervention from twelve to eight weeks, it would be cost saving with a lower recovery rate of 40%). A social return on investment approach was taken to evaluate the economic benefits of another twelve-week-long programme, Creative Alternatives in St. Helens (Whelan, Holden & Bockler, 2016), comparing the relative value of the intervention (in terms of

improved wellbeing for participants, cultural engagement and reduced GP visits) to its cost. A Social Return on Investment ratio of £1: £11.55 was estimated, suggesting that for every pound invested in the arts on prescription programme there was a social value of £11.55. It would be useful for further evaluations to include an econometric strand, since the economic impact is difficult to assess from the current data. Whilst these results suggest that working with artists in primary care may be economically viable, modelling and estimates lacked sufficient clarity, due to a lack of data (e.g. data only being available for selected participants, minimal data available on depression, and none on the longitudinal impact of arts on prescription, needed to model QALY and social value).

Despite the limitations of the evidence base, which will be considered further, below, there are consistent reports to suggest that arts on prescription is: meaningful for participants, helping to reduce social isolation and improve confidence and self-care (Stickley & Hui, 2012; Redmond et al., 2019); associated with increases in psychological wellbeing over time (e.g. Crone et al., 2018); and is most beneficial when people feel able to relax in the art workshops (Holt, 2020; Hughes et al., 2019). However, the evidence base leaves various questions unanswered. There is a lack of data on the longitudinal impact of the programmes, meaning that it is not known how long any increases in wellbeing last for; it is not clear *who* arts on prescription works best for; or what the mechanisms driving change are. Further, it is not clear whether different mechanisms might differentially help people with different reasons for referral (e.g. building social capital versus developing coping strategies for health conditions).

Limitations, implications and future directions

There are numerous limitations with, and evidence gaps in, the current evidence base, including: a lack of control groups (as discussed above); attrition bias (since complete wellbeing data is only available for those who attend the course to the end); selection biases (for example, individuals who did not enjoy the programme are less likely to be interviewed); reporting biases, including social desirability (where participants may feel obliged, even subconsciously, to report feeling better at the end of a programme); and a lack of specific outcome measures in quantitative studies (which mostly focuses on the generic WEMWBS).

Attrition rates are a problem in longitudinal research and interventions more broadly, especially if reasons for dropping out are systematic, meaning that the remaining sample is not characteristic of the original cohort (Nunan et al., 2018). Crone et al. (2013) commented that the completion rates for Art Lift referrals were favourable compared with other referral types, e.g. sports interventions. However, that 'non-completers' scored significantly lower on the WEMWBS than non-completers at the start of the programme, suggests that the final sample was 'more well' than the entire cohort, which could limit the generalizability of the findings and suggests an inherent bias to have data for those who enjoyed the programme, perhaps leading to inflated wellbeing outcomes. Future work could, like Crone et al. (2018), include data on attrition rates, and characteristics of non-completers, in order to evaluate its impact. Irrespective of potential bias, more work on who is most likely to attend sessions (both to uptake referrals and attend throughout) would be useful, in order to help identify best practice. For example, identifying whether some participants face barriers to attendance (e.g., social anxiety or a lack of child-care or transport) that targeted retention techniques can assist with, building on work suggesting that those with low wellbeing and additional health burdens may struggle most to attend (Sumner et al., 2010). Piloting methods of support in future programmes (e.g., familiarization sessions or buddy schemes) and evaluation of their impact on attrition rates would be useful.

In order to help evaluate the impact of response biases, future work could consider using performance or objective measures as an adjunct to subjective reports, which are less sensitive to biases such as expectation effects and social desirability (Davidson & Kaszniak, 2015). Experimental work on the immediate impact of art making has included physiological indices of stress and anxiety, such as blood pressure, heart rate, vagal tone, and cortisol levels (Kaimal, Ray & Muni, 2016; Sandmire et al., 2016). But, depending on the predicted outcomes and population, performance measures, such as executive functioning or problem-solving ability might be useful (Holt et al., 2018; Young, Camic & Tischler, 2016). In addition to triangulating subjective and objective measures, attempts could be made to reduce reporting biases through measuring immediate experience, a more achievable aim in evaluations. Retrospective questionnaires, such as the WEMWBS, ask people to report past feelings and experiences (e.g. across two weeks), which is liable to recall errors and retrospective biases (Ben-Zeev, Young & Madsen, 2009). Individuals do not accurately remember fluctuations in moods over time, and there are systematic biases in the way people complete such questionnaires. For example, people diagnosed with depression have remembered more negative moods (and forgotten positive ones) across a week-long period, while generally people tend to better recall positive moods and their most salient or recent experiences (Ben-Zeev et al., 2009). Hence, further consideration could be given to tracking moments of immediate experience across and beyond arts on prescription programmes (Dolan, Kudrna & Stone, 2017; Holt, 2020), taking advantage of developments in experience sampling software that enable further cognitive, contextual and physiological data to be measured over time. Such approaches are increasingly being used to explore processes of change and the longitudinal impact of interventions (Verhagen et al., 2016).

There is little work exploring mechanisms of change within art on prescription groups, yet speculations on this can be made from research and theory from arts for health interventions more broadly. It is important to gain understanding of mechanisms of change in order to:
help communicate how and why the art groups might work to referrers and commissioners; and to help identify active features of interventions and optimize these in delivery of programmes in order to gain optimal wellbeing benefits. However, since these are complex interventions it is likely that there are multiple mechanisms at play, and these might differentially meet the needs of participants. Potential mechanisms in the wider literature have focused on: social connection and 'social capital' that come from group activities; and various psychological benefits that may arise from engaging with the arts (when alone and with others), including, but not limited to: improved mood and emotional regulation; absorbed states of attention; cognitive restructuring of stressful events (developing a meaning or healthy narrative); and self-affirmation and efficacy (Holt, 2018; Sloan & Marx, 2004; Stickley, Wright & Slade, 2018; Tomlinson et al., 2019).

The outcomes from qualitative studies emphasise the importance of the social connection that art on prescription provide (e.g. Stickley & Hui, 2012). Recent work has focused on social capital and the 'social cure approach' as drivers of wellbeing change in arts programmes (Daykin, 2020; Williams et al., 2018). Williams et al. (2018) included a measure of group identification in order to test whether social identify theory could explain the wellbeing impact of referral to choirs and creative writing groups. Indeed, the increase in WEMWBS scores across both programmes was significantly predicted by the degree to which people identified with their group (irrespective of activity). People who did not identify with the group were less likely to report any increase in wellbeing over time. Consequently, they argue that social identification is an important mechanism in social prescribing, enabling norms and values of the group to be internalised, such as empowerment and being on a pathway towards recovery and growth, and the development of a new identity as a chorister or writer – noting that this approach could be less stigmatising than other interventions (that include diagnostic labels). Daykin et al.'s (2020) review of qualitative research on the impact of participatory arts and sport on wellbeing and loneliness, likewise emphasises the import of connection and social

bonding that these interventions can enable, but also social *bridging*, where participation can encourage engagement with cultural spaces not previously encountered. Yet, Daykin et al. also emphasise the potential negative side of social bonding reported in some studies, where the creation of 'in-groups' can also create 'out-groups' where some participants feel excluded. They also point out that people can feel like they are facing a 'void' when a programme (and group) is nearing its end. These points have implications for practice, how to: develop groups to optimise group identification (e.g., the optimal group size and providing opportunities to socialise; Williams et al., 2018); take account of the needs of those who may feel excluded; and help the group transition at the end of the programme (Daykin et al., 2020).

In addition to social benefits associated with the group, some psychological mechanisms may relate directly to art making. Here, focus will be made on the role of the flow state and distraction, since it is beyond the scope of this chapter to review this literature, and distraction has been implicated in Hughes' et al. (2019) process of change model. The flow state, when attention is fully engaged in an activity and a person loses awareness of self, space and time, has long been associated with engagement with the artistic process, and with 'optimal psychological wellbeing', being thought to enable skills development, feelings of control and autonomy, as well as a coherent sense being in the moment (Csikszentmihalyi, 1996). Experiencing flow whilst art making has been reported to predict eudemonic happiness – a sense of having a meaningful life (Holt, 2018), and has been described as helping to cope with both pain and anxiety in qualitative research on art interventions, for example: "It's focusing the mind by having something to concentrate on that stills your mind … and it's not dwelling on all your problems and letting them get out of proportion" (Reynolds & Prior, 2006, p. 258). Experimental research seeking to understand the mechanisms by which art making reduces stress and anxiety has reported that drawing to distract one from stressful events, better repairs mood than drawing to explore and depict stress (catharsis) or control activities (Forkosh & Drake, 2017). However, the efficacy of distraction may depend upon the level of absorption enabled in the task. The flow state is thought to occur when there is a balance between task complexity and skill level. When the task is too easy, boredom may ensue, and when too hard, stress be experienced. This has implications for practice, since, in order to facilitate the flow state, art activities need to be matched with participants' skill sets in order to obtain maximal wellbeing benefits and activities scaffolded appropriately across the programme.

While the reliance on the WEMWBS in the evaluation of arts on prescription has enabled ease of comparison across studies, future work could profitably add additional measures, based on the expected outcomes and impacts for particular populations, and process factors driving these. Such work could develop understanding of 'active ingredients' that meet particular wellbeing needs (e.g., promoting group cohesion, distraction from anxiety, play or meaning making), and what active ingredients work best for specific populations (e.g. individuals with depression or chronic pain). Further measures could help to identify whether arts on prescription have specific impacts (e.g., anxiety, depression, loneliness, happiness, self-efficacy, trait flow [feeling engaged in meaningful activities], cognitive failure or pain severity). This would require more theoretically driven research, drawing on relevant health and wellbeing models, for example, self-determination theory (Ryan & Deci, 2000), which includes three elements thought to be essential to wellbeing: autonomy (being intrinsically motivated and able to follow one's own interests); relatedness (feeling connected to others); and competence (a belief in one's own ability and efficacy). The extent to which arts on prescription, and experiences and practices within programmes (e.g. social bonding, flow state), affect these three components of wellbeing could be explored.

The outcomes from empirical studies thus far has numerous implications for practice, not only relating to reducing attrition, enhancing social bonding and creating conditions for flow, but also to: diversity; programme duration; barriers to attendance; importance of move on groups; location; and

training and supervision for artist facilitators. Firstly, the diversity of people attending arts on prescription groups, and how to expand the service to a broader demographic needs to be considered, since attendance is largely composed of female, older adults (Crone et al., 2013; 2018; Holt, 2020; van der Venter & Buller, 2015). Crone et al. (2013) question why this might be, for example, whether older adults have more free time and/or higher levels of social isolation, and whether attendance amongst younger people would be greater if, for example, childcare was available. Secondly, it would be useful to identify the optimal length of programmes, which vary greatly in the literature (from six to 24 weeks). Crone et al., (2018) noted that those who attended eight-week-long courses had larger increases in wellbeing scores (than those who attended for ten weeks) and were more likely to complete the course (Crone et al., 2018). This has implications not only for wellbeing and attendance, but also, for cost-benefit analyses, which may be more favourable with a shorter programme (McDaid & Park, 2013). This needs to be balanced against the need for re-referrals. Sumner et al. (2020) note that for some people, issues may not be resolved, and programmes may end too soon – emphasising the need to determine when to re-refer, and also when to signpost people to the next step on a pathway for continuing personal growth, such as a move on group. Thirdly, the impact of the location of groups on wellbeing and experience deserves further attention. Arts on prescription workshops take place at different locations, including hospital sites, GP surgeries and community hubs. A non-medicalised setting, with access to aesthetic spaces (e.g. within a museum or art gallery) may provide a stronger sense of being an artist, rather than being a patient (Jensen & Bonde, 2020), whereas a medical setting might encourage attendance for some as the 'prescription' may be taken more seriously and be seen as 'safe' (Daykin et al., 2008). More consideration of how mental health and cultural institutions can collaborate to enable arts on prescription to be delivered in a broader range of settings is needed (Jensen & Bonde, 2020).

The importance of the artist facilitators and the creation of a 'therapeutic alliance' between them and participants, facilitating exploration and autonomy, comes through strongly in qualitative research. For example, in the focus groups conducted by Poulos et al. (2018, p. 489): "Well she encourages no matter what you do. The encouragement that you're doing well. Oh yes...she'll come beside you and say, well how about, have you thought of this? And it was just the gentle way she interacted with me." However, best practice within the role of artist facilitators requires further research (Baxter & Fancourt, 2019; Daykin, 2008). For example, the extent to which artist facilitators make personal disclosures and set protective boundaries for themselves has been reported to vary, with implications for practice and their own wellbeing (Baxter & Fancourt, 2019; Daykin et al., 2008). Recent qualitative research with artist facilitators and organisations across the UK highlights concerns about a lack of support for artist facilitators, to ensure that they receive regular clinical supervision and affective support, in addition to opportunities for ongoing training around issues relevant to group's work (e.g. safeguarding policy, data protection, equal opportunities, health and safety, confidentiality policy, ethical guidelines, and evaluation) (Baxter & Fancourt, 2019; Daykin, 2008; Naismith, 2019). Baxter and Fancourt (2019) identified numerous additional barriers to implementing best practice in community art and health projects, including a external challenges such as a lack of funding, regional differences in ability to engage with commissioning processes and anxiety about funding supporting link workers rather than activities to which people would be referred. Such issues relate to social prescribing more broadly, where there is concern about the fragility of the programmes that are on offer and calls for longer periods of funding to enable long-term provision of interventions (Clifford, 2017; Skivington et al., 2018).

Research and evaluation on arts on prescription has burgeoned in recent years and suggests that attending art workshops can increase wellbeing, and that building social capital and relaxation through absorption in creative tasks play a role in this. However, more rigorous and theoretically driven work is required to isolate and better understand active ingredients of these complex

interventions and mechanisms of change. Further work to identify their long-term impact on wellbeing, benefits for different reasons for referral, and econometric impact is required. Research and evaluation currently works in isolation, and it would be useful for arts on prescription programmes to collaborate, sharing data and evaluation methods in order to produce more powerful analyses and build the evidence base (on all three levels; qualitative; quantitative and econometric), as well as sharing and building protocols for best practice.

Cross-References

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