

ARTS AND HEALTH – A GUIDE TO THE EVIDENCE

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Christine Putland

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Introduction

Arts and Health is an emerging field encompassing an extremely broad and diverse range of practice that spans multiple disciplines and sectors. As a result, although evidence for the connections between the arts and health and wellbeing is growing, it remains relatively inaccessible and hard to synthesise. Increasing numbers of literature reviews are being published, however in order to provide a detailed *and* coherent account these tend to define selected areas of practice rather than giving a comprehensive overview. This report draws on such reviews, offering a quick guide to current evidence across the entire Arts and Health field to support the development of an inclusive National Policy Framework in Australia.

After a brief outline of the research context as background, a summary of key findings is presented using a health determinants framework. This is followed by an overview of key points in support of the evidence linking the arts to health and wellbeing and consideration of the economic implications. A short list of references is attached for more detailed consultation.

Research context

The broad field of Arts and Health which is the focus of the research represented in this report can be characterised as:

- Comprising arts and cultural programmes that are designed to improve health and wellbeing for individuals and communities
- Ranging across the arts spectrum from receptive (spectator) to participatory (active art making) experiences
- Addressing health and wellbeing across the spectrum of determinants, from health promotion and prevention of ill-health to the treatment and management of acute and chronic conditions
- Including settings such as health care and other services, community facilities, art centres, public spaces, virtual spaces (websites, blogs etc) and private homes
- Representing an inclusive array of art forms – from performance (dance, theatre, music) to visual (painting, photography, print making, sculpture), literature, film, public art and new media
- Consisting of 5 main domains: art in health care design; art programs (performance, exhibitions) in health care services; art therapy (visual, dance, music, drama); community-based (participatory) arts; arts and humanities in health professional education.

The two main types of research linking the arts to health and wellbeing are:

applied research – studies examining the effects of arts-based strategies or practical interventions and comparisons

small-scale studies and evaluations of practice - examining the extent to which particular arts initiatives have achieved goals and expectations and met needs

This research is underpinned by:

large-scale **epidemiological** studies of the association between broadly defined cultural participation and mortality and morbidity in populations. Such studies in Scandinavia, USA, UK and Australia have shown a link between receptive and active participation in arts and cultural activities and indicators of health and wellbeing outcomes.

basic research explaining the science behind the documented effects (eg studies of brain function and sensory responses in neuroscience).

Research designs in this field are extremely variable, based on the need to demonstrate different kinds of effects and answer different kinds of questions. Randomised controlled trials (RCTs) and systematic reviews (assessing quality and quantity of research) which represent the 'gold standard' in the health sciences, may be more appropriate in some parts of the field (for example, arts therapies) than in others (for example, small-scale community based projects). Both qualitative and quantitative methods are regularly employed in researching Arts and Health and both contribute equally to the development of a robust evidence-base.

Evidence at a glance

The following table, based on a continuum of the determinants of health and wellbeing, shows a very broad map of the identified effects of the arts across the spectrum. The evidence categories represented here are derived from studies available from one or more of the following reliable sources:

Reviews summarising published research literature (peer-reviewed) on selected aspects of the connections between the arts and health and wellbeing

Systematic reviews of literature (peer-reviewed) which appraise research findings according to standard criteria of quantity and quality

Reports of individual studies and evaluations published in peer reviewed journals, government and non-government organisation reports.

KNOWN EFFECTS OF ARTS AND HEALTH ON A CONTINUUM OF DETERMINANTS OF HEALTH AND WELLBEING

FOCUS	Well population Primary care & prevention Social and economic determinants	'At risk' population Secondary care & prevention	Established disease Tertiary care & treatment Clinical management	Chronic (controlled) Management
HEALTH INTERVENTION DOMAINS	Public health Health promotion (Other sectors)	Public Health Primary Health Care Preventative health	Acute hospital care Specialist care Therapy	Community care Primary Health Care
ARTS PRACTICE DOMAINS	(Public participation in art/culture) Community-based arts	Community-based arts (Art therapy)	Art in health care environment Art programs in health care Art therapy (Art & humanities in Health Prof Ed)	Community-based arts Art therapy
KNOWN EFFECTS OF ARTS & HEALTH	<p>Receptive & participatory arts are associated with <i>improved morbidity and mortality</i> in Europe, USA, UK, Australia.</p> <p><i>Personal development</i> (confidence, knowledge, identity, empowerment, quality of life measures).</p> <p><i>Sense of control</i> (efficacy, mastery) linked to immune system.</p> <p><i>Skills</i> (learning, team-work, flexibility, communication) lead to employability.</p> <p><i>Physicality</i> (dance, singing, musical instruments etc.) maintains cardiac function & fitness, brain health.</p> <p><i>Social engagement</i> (supports, networks, empathy, belonging) assists in coping.</p> <p><i>Community building</i> (engagement, motivation, cooperation, healthy environments).</p>	<p>(see effects for well population – also apply to the most vulnerable, at risk groups)</p> <p><i>Mental health needs</i> (improved self-worth, self-efficacy, mutual aid and positive outlook, mastery, autonomy).</p> <p><i>Raise awareness</i> of issues and promotes public understanding.</p> <p><i>Healthy lifestyles</i> (support systems, planning and organising skills).</p> <p><i>Health literacy</i> (knowledge and understanding, addressing sensitive issues, expressing needs).</p>	<p><i>Reduce stress & anxiety</i> for:</p> <ul style="list-style-type: none"> • Patients pre-operative • Intensive care • Cardiac care • Infants & children • Visitors & families • Outpatient procedures • Cancer patients <p><i>Reduced pain and increased comfort</i> for patients:</p> <ul style="list-style-type: none"> • post-operative • serious illness • nausea & vomiting in bone marrow transplant • sleep & rest <p><i>Reduced demand for pain medication, anaesthesia & sedatives:</i></p> <ul style="list-style-type: none"> • during procedures • post-operative • chronic conditions 	<p>(see effects for well population and 'at risk' effects)</p> <p><i>Management of conditions like dementia:</i></p> <ul style="list-style-type: none"> • cognitive, psycho-social, physical • caregiver support and respite.

	<i>Social cohesion</i> (group identity & pride, tolerance & understanding of difference).		<p><i>Neonatal care:</i></p> <ul style="list-style-type: none"> improved heart rate, sleep patterns <p><i>Health professional education</i> – improved observation, concentration, empathy.</p>	
SYSTEM IMPACTS WITH POLICY IMPLICATIONS	<p>Structural & social factors influencing <i>resilience</i></p> <p>Community safety & cohesion linked to reduced <i>crime and race-based discrimination</i></p> <p><i>Human capital</i> (education & skills) linked to productivity</p> <p><i>Social capital</i> (networks, trust & resources) linked to social cohesion</p> <p><i>Cultural capital</i> (creative skills, values & institutions) linked to social innovation</p> <p>Contribution to addressing key public health issues upstream</p> <p>PROMOTES GOOD HEALTH - PREVENTS DEVELOPMENT OF 'RISK' FACTORS</p>	<p><i>Empowerment:</i> Increased capacity for vulnerable people to make changes in their lives</p> <p>Harm reduction, problem prevention</p> <p>Reduced <i>burden of disease</i> (mental health, heart disease, obesity, diabetes, cancers)</p> <p>Reduced <i>health care costs</i> (fewer doctor visits, reduced medication)</p> <p>Effective vehicle to support behaviour change & address emerging risk factors</p> <p>PREVENTS ESTABLISHMENT OF DISEASE & PROGRESSION OF ACUTE OR CHRONIC CONDITIONS</p>	<p>Reduced need for analgesics, pain relief</p> <p>Shortened length of stay</p> <p>Environmental design reduces stress for patients – increases efficiency</p> <p>Improved perceptions of care quality</p> <p>Improved staff-patient communication & patient 'management'</p> <p>Improved staff morale & retention</p> <p>Culturally appropriate health care</p> <p>Contribution to improved service delivery, supporting staff to deliver patient-centred health care</p> <p>ENSURES BEST-PRACTICE, PREVENTS INEFFICIENCIES & UNNECESSARY WASTE</p>	<p>Maintaining <i>brain vitality</i> and function</p> <p><i>Quality of life</i> for those living with disease or disability</p> <p>Reduces <i>health care costs</i> (fewer doctor visits, reduced medication)</p> <p>Supporting people to live independently</p> <p>PROMOTES DIGNITY - PREVENTS RE-ADMISSIONS, COMPLICATIONS</p>

Evidence overview

The research literature is expanding at every stage of the continuum, although the kind and extent of evidence available depends on the level of population focus and corresponding type of health ‘intervention’.

Tertiary Care and Treatment, managing chronic conditions

The Briefing Report by the Deeble Institute (June 2012) provides a summary of the range of evidence in relation to art programmes in health care:

http://ahha.asn.au/sites/default/files/publication/15794/deeble_institute-evidence_brief-arts_and_health_0.pdf.

There are a growing number of controlled studies of interventions with individual patients in clinical settings, particularly in relation to art and music therapy, which demonstrate consistent patterns of effects as summarised in the table above. In addition there is a substantial body of research investigating the impact of the physical environment and documenting responses to the visual art, performance and music programmes that are now regarded as best practice in health care (BMA 2011). Clinical findings include diverse effects such as the positive impact of music and visual images on the body’s immune system resulting in reduced stress and anxiety, reduced blood pressure in high risk pre-natal patients, recovery from myocardial infarction (lowering heart and respiratory rate, reducing oxygen demand), a defence against infection, and better quality of life for cancer patients (Staricoff, 2004; State of the Field Committee 2009; Staricoff & Clift 2011). As an aid in the management of chronic conditions, the arts have been shown to be particularly effective in maintaining brain health, improving cognition for patients with dementia and confusion, and supporting ‘active ageing’ in a myriad of ways (Cohen 2009).

Population health – promotion and prevention

Art programmes addressing the upstream social and economic determinants are found throughout the world and are increasingly the focus of research and evaluation. Notwithstanding the great variety of initiatives and apparent unevenness of research methods, the evidence is strengthened by increasing numbers of:

- rigorous studies based on sound research designs
- synthesis of findings in significant parts of the field - eg mental health and participatory arts (Secker et al 2007)
- good quality programme evaluations showing a striking consistency in documented findings (Clift 2012).

Collectively these sources present a persuasive case for the health and wellbeing benefits of art programmes in relation to known social and economic determinants of health and wellbeing, as represented in the table above. The research also documents the particular characteristics of the arts which act as pathways to achieving these powerful psycho-social and socio-structural effects:

- Arts programmes tend to provide composite experiences and so typically ‘bundle’ many of the benefits (Craemer 2009). As such they are able to address the complexity of health promotion, taking into account the connections between different determinants and fostering the *interactions* between emotional and cognitive, physical and mental health aspects of health and wellbeing.
- Most arts programmes are social activities, providing opportunities for people to form friendships, networks and *social support systems* (Raw et al 2012).
- People voluntarily become involved because they are enjoyable, making the arts an ideal *vehicle* for transmitting information in accessible and acceptable ways (health knowledge and literacy) (Daykin et al 2008).
- The creative process involves experimentation, decision-making, expressing ideas and forming judgements – by its very nature the arts helps people to learn life skills while developing a sense of *control and mastery* over their circumstances and surroundings: these qualities are central to action on the social determinants (Marmot et al 2010).
- The arts employ metaphor and expressive forms, providing a ‘safe’ setting within which particularly *vulnerable groups* are able to address difficult issues that have profound health and wellbeing implications (eg domestic violence, race-based discrimination) (VicHealth 2010).
- The flexibility of art programmes makes them accessible and adaptable to a wide range of needs and an effective medium in addressing health inequalities (Clift 2012): *marginalised groups* have found a ‘voice’ through which to raise issues; ‘hard to reach’ groups, including young people, have explored *new technologies* as creative forms and settings.
- *Diversity* within the population is reflected and celebrated in arts programmes; as groups come together across age and cultural differences in a spirit of cooperation, they develop understanding, respect and tolerance (VicHealth 2010).
- Arts programmes are integral to most *community renewal projects*, bringing people together to engage with others in their local communities and to take action to improve their environment (Evans 2005).

Economic benefits

To date there has been limited research into the cost-effectiveness of arts programmes for health and wellbeing, however with the emergence of stronger evidence for their effects, there is growing interest in the economic implications and potential cost savings. Analysis in the UK context highlights opportunities to relieve the burden associated with physical and mental illness in terms of:

- high cost of treatment
- loss of productivity through reduction in skills and employability

- overloading health care services
- longer term impact on families and communities (Aston 2010).

Efficiencies in health care services associated with faster recovery times, shorter stays, and lower staff costs through improved satisfaction and retention, have also been identified (Aston 2010).

Studies in the USA (State of the Field Committee 2009) have specified a range of cost-benefits in health care linked to arts programmes including:

- improvements in environmental design resulting in reductions in hospital staff turnover
- introduction of music found to eliminate the need to administer sedation in certain procedures with the result of conserving nursing resources
- integrating art in 'wayfinding' systems to facilitate navigation of the environment not only found to reduce stress in patients and visitors but also found to avoid unnecessary distraction and loss of staff time in giving information and directions
- participation in singing groups for older people living independently was found to be associated with less falls, reductions in use of medication and fewer doctor visits, leading to considerable savings in health costs (Cohen, 2009); this aligns with assessments of cost-savings resulting from 'healthy ageing' programmes in the UK (Mayhew 2010).

In Australia, three pathways have been identified whereby the documented effects of the arts in promotion and prevention directly address some of the most important causes of disease burden (Craemer 2009):

- Mental health – addressing anxiety and depression, developing coping strategies
- Physical and mental activity – reducing risk of heart disease; maintaining brain health – vital with increased longevity in the population
- Social connection – alleviating social isolation which is associated with morbidity and mortality and a range of lifestyles risk factors.

A health economics analysis compared the cost-effectiveness of an arts-based approach in the treatment of mild to moderate depression with pharmacological and psychotherapeutic interventions. Based on the literature indicating broadly similar levels of clinical effectiveness, it is suggested that the arts-based approach is likely to be cheaper whilst yielding similar health improvements in participants (Craemer 2009).

Concluding comments

Bearing in mind the difficulty in synthesising findings from individual studies examining such a diverse range of activities and purposes, when appraising the evidence base for Arts and Health it is important to note certain features which Clift (2012) asserts have considerable face validity. Firstly, the growth, scope and variety of practical initiatives in the field can and should be regarded as prima facie evidence in support of their effectiveness: ‘such activities would not... continue to happen, if their value was not recognised and if the experiences on the part of artists, health professionals and participants did not point to tangible benefits’ (p.123). Secondly, the consistency in the widespread reporting of benefits is remarkable: ‘we are not dealing with a situation of extraordinary claims requiring extraordinary evidence, nor are we dealing with forms of invasive treatments where there are risks to be weighed against possible benefits... The experiences of people who feel they have benefited from participation in arts-based interventions for health deserve to be taken seriously, not as anecdotal evidence but as serious personal testimony’ (p.124).

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