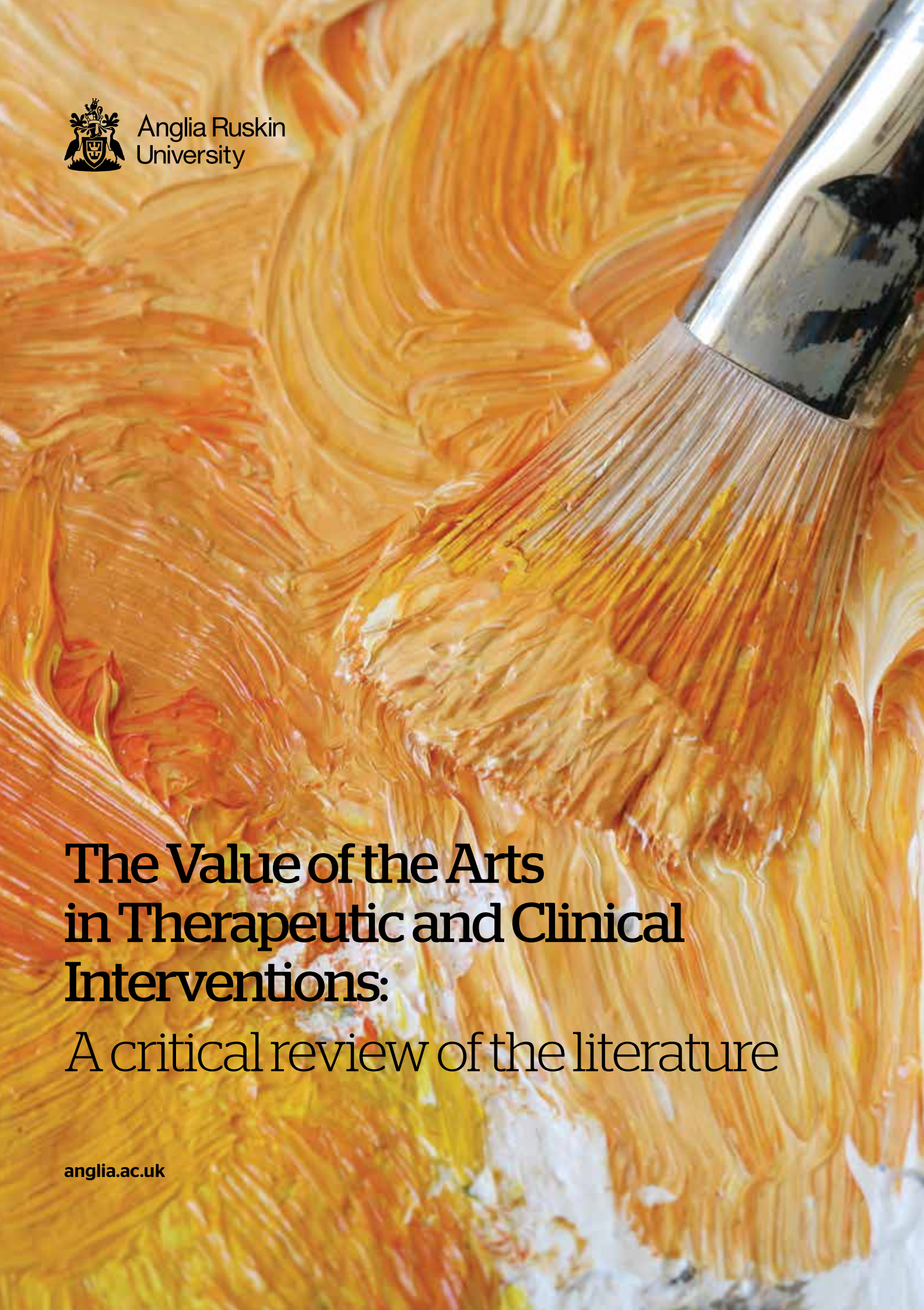

Anglia Ruskin University

The Value of the Arts in Therapeutic and Clinical Interventions:

A critical review of the literature

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The Value of the Arts in Therapeutic and Clinical Interventions:

A critical review of the literature

(i) The impact of arts in healthcare on patients and service users: an overview of the literature 2011 – 2014

(ii) Caregivers' perceptions of the value of the arts in healthcare 2004 – 2014

A cross faculty venture between the Faculty of Medical Science and Faculty of Health Social Care and Education

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Arts & Humanities Research Council

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Contents

Executive Summary

This report presents an updated critical review of the emerging body of literature on the value of the arts in clinical and therapeutic interventions. Based on a systematic search of the literature, there were two distinct strands of work undertaken for the review.

Introduction

The first strand, builds on the seminal review undertaken by Staricoff (2004), which examined and identified a number of benefits to using arts in healthcare settings. In 2011 Staricoff and Clift updated this review and provided further evidence of the positive effects of arts interventions on psychological and physiological outcomes of patients in a hospital environment. Therefore, the first strand of this review examines the impact of the arts in healthcare on patients and service users, and provides a further update on the literature since 2011 to 2014.

Staricoff's (2004) review briefly considered the outcomes of arts interventions on healthcare professionals. However, there appears to be no critical review of the literature around the attitudes of healthcare professionals to the use of the cultural activities in clinical or therapeutic settings, or of the impact of these activities on the professionals. There also remains a gap in our understanding as to whether the introduction of cultural activities into healthcare has an impact on the recruitment and retention of staff. These are important areas to investigate, because establishing successful projects in healthcare environments will to some extent, be reliant on the co-operation of the staff working in these settings. Caregivers and their cultural values are frequently the lynchpin in the relationship between the artists organising the activities and the 'patients' or 'service users'.

Therefore the second strand of the review, focuses on caregivers' perceptions of the value of the arts in therapeutic and clinical interventions, and has the following three objectives:

1 To explore the impact of using the arts on healthcare professionals, including any ethical issues raised.

2 To examine the perceptions of caregivers on the use of the arts in enhancing health and well-being in clinical and therapeutic settings.

3 To assess whether engaging with arts activities in the workplace may have the potential to improve self-esteem and so reduce staff turnover.

Methods

Database searches were carried out using MedLine, CINAHL, AMED, Web of Science and ASSIA. Keywords were derived from those used by Staricoff (2004) and Staricoff and Clift (2011), a scoping exercise to determine frequent use of terms in the literature, and suggestions from an e-advisory group. Keywords were grouped into four categories; cultural activities, outcomes, healthcare settings, and healthcare providers. The inclusion criteria for the first strand of the review were as follows: studies published from 2011 to 2014; studies written in the English language; studies exploring the effect of arts activities on health-related outcomes in clinical or therapeutic settings. The exclusion criteria were as follows: studies exploring arts activities in community settings; studies exploring the use of arts therapies; case studies; and studies written in a non-English language. For the second strand of the review the inclusion criteria were as follows: studies published from 2004 to 2014; studies written in the English language; studies exploring the effect of participatory arts activities on professionals in healthcare settings or the attitudes of these professionals regarding these activities. The exclusion criteria were as follows: studies in community settings; studies exploring the use of arts therapies; case studies; studies written in a non-English language; and studies only including informal caregivers (e.g. family members).

Findings

A number of different countries and cultures across the world are using, or experimenting with, the use of arts-interventions in healthcare settings. The emphasis in the reported literature has been on the use of music listening, indeed over half the studies reviewed during the course of this project use this as the intervention.

Both in the general update and the review of the caregivers' perspectives studies assessing the impact of music were positivistic- typically pre and post-test designs measuring physiological changes primarily focussed on measurable effects in relation to anxiety, stress and pain levels or some combination of these factors. This means that the results can be compared across studies –

although it was noticeable that many authors did not refer to the existing 'evidence base' in their write up of individual studies. The limited use of multi-method and qualitative designs in relation to music is a gap in the field and can be seen as particularly important in the future in exploring and understand why and how music is important from the perspectives of both service users and carers.

On the other hand designs used to assess the impact of other art-forms both in the general review and the review on caregivers' perspectives were more varied including mixed methodologies such as observations, reflective diaries and in-depth interviews – some alongside quantitative measures. These designs helped to illuminate important issues, for example those raised by research participants themselves during in-depth interviews which transcend the direct physiological and/or psychological impact on them of an arts activity. A limitation across studies is that designs tended to be cross-sectional rather than longitudinal in nature and in some settings (e.g. long-term residential care) the latter design would be particularly important in assessing the sustainability of the positive impacts of the art-form. Key findings from each strand are given below.

health benefits were also reported in relation to patient satisfaction, reduction in length of hospital stay, and cost benefits

The impact of the arts in healthcare on patients and service users.

- The majority of identified papers focussed on music listening and its effects on patients and service users
- The most common setting for the evaluations has been in a surgical context or settings that included surgical procedures. The main aim of these studies has been to look at the impact of music listening on reducing stress and anxiety, with some studies also evaluating its impact on pain management.
- Such clinical settings are linked by the potential severity and life threatening nature of the conditions managed in these areas, and as a result they may be considered as places where there are high levels of stress and anxiety.
- Findings from the studies are overwhelmingly positive and in most cases significant; with positive physiological effects on blood pressure, heart rate and respiratory rates recorded. There were also emotional impacts reported across the music listening studies including on resilience and the strengthened capacity to endure treatment, a sense of control in unfamiliar surroundings and a sense of calm and detachment.
- Wider health benefits were also reported in relation to patient satisfaction, reduction in length of hospital stay, and cost benefits.
- There were a number of tensions identified within the music listening studies. These were linked to lack of consideration for patient or service user choice or preferences in relation to the type or style of music.
- There were ethical issues involved in undertaking investigations on those who were unable or had limited capacity to consent or assent to the intervention.
- Methodologically, designs were pre-dominantly quantitative and there was inconsistency in the application of terms, sample sizes were generally small, and there were potential biases identified.
- Overall the findings on the use of other arts forms were again mostly positive with improvements to breathing, endurance and muscle strength reported. As with music listening there were also reductions in anxiety levels and depressive symptoms, including

the suggestion that the role of the intervention in recovery was as significant as medication.

- Studies which used art forms other than music listening (such as dancing, singing and drawing) also highlighted potential benefits to patients and service users' health and well-being, echoing similar findings to those which used music listening.

- Other benefits to the individuals included an increased appreciation of cultural traditions, enjoyment and satisfaction, and the opportunity to share and connect with others, and increased social interaction.

Findings from strand two: caregivers' perceptions of the value of the arts in therapeutic and clinical interventions

- The majority of studies concluded that healthcare staff believe that participating in arts interventions has a positive effect on patients' health and well-being.

- Listening to music is thought to reduce stress and anxiety for patients in a variety of heath care settings. However, there were conflicting views regarding the effects of music listening on patients' sleep in different settings.

- Displays of visual art were thought by staff to improve the environment for patients and service users.

- Staff also reported that communication in the form of interactions were enhanced by patients taking part in literary interventions.

- Many healthcare staff believe that the arts activities should be tailored to individual groups and settings.

- Methodologically, there were issues with the use of non-validated questionnaires, and small sample sizes. Furthermore in some studies the views of the staff were presented as evidence of improved patients health and well-being whilst not giving the patient a voice.

- In terms of the impact of arts on the staff themselves the majority of staff reported positive effects. For example reduced stress, improvements in mood, job performance, patient/staff relationships, and staff well-being.

- There were also some negative impacts described and these included increased stress, interference of work flow (from live music), embarrassment and over-attachment to patients.

- There were no studies identified which explicitly referred to the effects of arts interventions on staff self-esteem, or staff turnover.

- Ten years on from Staricoff's original review the potential for arts activities to contribute to the recruitment and retention of healthcare staff has yet to be evaluated.

Recommendations

Whilst there is a consistent and strengthening body of evidence that supports the use of different art forms in clinical and therapeutic settings there remains gaps in the literature and thus the evidence base. It is therefore recommended that further research is needed in the following areas:

- Caregivers' perceptions on the value of arts activities to support communication with patients and service users, and the promotion of compassionate care.
- The use and evaluation of other more participatory art forms in clinical and therapeutic settings other than music listening.
- Comparison of the effectiveness of arts interventions where service users and care staff have had an input in the type of art form before implementation, with the effectiveness of researcher-led interventions.
- Exploration of the direct effects of arts intervention in clinical settings on staff self-esteem and staff turnover.
- Many of the interventions reported are short term and outcomes are measured over a short time span. More longitudinal studies are required to evaluate long term outcomes of interventions.
- The social and cultural context of different settings should be explored to identify potential barriers to the use of art-interventions in healthcare.

In addition to further research in this area it is also recommended that

- Current research is disseminated more effectively so studies in art forms which have an existing evidence base such as music listening are not repeated unnecessarily.
- Assumptions around the lack of harm of interventions may cause need to be challenged. Ethical issues around choice and preferences of patients, service users and caregivers must be taken into account when introducing interventions.
- More creative approaches to evaluation should be considered using a broader range of methodological approaches such as: qualitative methods, mixed methods and participatory approaches.

1.0 Introduction

During the past 20 years there has been a developing arts and health agenda.

1.1 Background and Policy

Context

In 1999 the Policy Action Team 10, chaired by the Department for Culture, Media and Sport (DCMS), explored best practice in using arts and sport to engage people in deprived neighbourhoods, and explored how to maximise the impact of Government spending and policies on arts and sport. Their report concluded that participation in arts can improve community health, employment, education, and help to reduce crime, whilst acknowledging that robust evidence on the cost and benefit of such participation was needed (DCMS, 1999). The Arts Council England (ACE) responded by outlining five ways in which the arts and social exclusion work would progress: advocacy/profile raising, examining the work of regularly-funded organisations, research and evaluation, multi-agency working and targeting resources (ACE, 1999). This was achieved in their publications in the following years.

The ACE's Corporate Plan 2003-2006 (ACE, 2003) committed to developing strategies on arts and health, leading to the commissioning of a review of the medical literature on arts and health (Staricoff, 2004; updated in 2011 by Staricoff and Clift) to inform the development of policy. Following this review ACE published a national framework for arts, health and well-being (2007a). ACE stated that every day the arts are having a significant impact on people's health in various healthcare settings, and argued that Staricoff's (2004) review should provide impetus for continuing to build an already significant evidence base.

In 2005 the Department of Health (DH) commissioned a review of arts and health. A small Working Group carried out literature reviews and interviews with key individuals, as well as gathering evidence from over 300 health and arts professionals. The *'Report of the Review of Arts and Health Working Group'* (DH, 2007) concluded that the arts are integral to health, healthcare provision and healthcare environments, and that arts and health initiatives demonstrate "real results" for patients, service users, staff, local communities, the NHS and society as a whole. Arts and health was argued to improve health, well-being, quality of life, clinical outcomes, and provide a way of improving understanding between staff and their patients.

The DH then commissioned *'A prospectus for arts in health'* in partnership with ACE. The prospectus states that "the arts make a significant contribution to improving the lives, health and well-being of patients, service users and carers, as well as those who work in health and the arts" (ACE, 2007b, p.3). It also points out that many arts and health initiatives contribute to important objectives for the DH and the DCMS. Using many examples of practice across England, the prospectus demonstrates that the arts can be used within the NHS in a wide variety of ways in order to increase health and well-being.

It is noted elsewhere (Clift et al., 2009) that there was a decided lack of leadership from central Government departments and ACE following the publication of these documents. Clift et al. (2009) attribute this to a shift within ACE priorities towards supporting

"the arts make a significant contribution to improving the lives, health and well-being of patients, service users and carers, as well as those who work in health and the arts"

"high quality" artistic endeavour, and a cut in funding available from public and National Lottery sources as a result of the financial requirements of the 2012 London Olympic Games. Indeed, ACE's 2010 strategic framework for the arts, *'Achieving great art for everyone'*, acknowledges cuts in funding from central Government and has a very different focus from *'The Arts, Health and Wellbeing'* report of 2007. Arts for health is not mentioned, although there is some reference to the benefits of art to mental health, social cohesion, sense of identity, happiness and well-being. In March of this year ACE went on to publish an evidence review titled *'The value of arts and culture to people and society'* to inform future funding programmes (ACE, 2014). However, given that this was not a robust overview of developments in the field concerns have been raised by the All Party Parliamentary Group (APPG) for Arts, Health and Wellbeing (further information on this group is to follow) and leading academics in the field as to whether it offers a satisfactory basis for the development of new funding programmes to support development in policy.

Concerns about the lack of Government action that followed the Arts and Health Working Group Review previously led to a House of Lords debate on arts and health on 6th March 2008[1]. In his introduction to the debate Lord Howarth of Newport (Minister of the Arts 1998-2001) asked HM Government how they intended to develop their policies to link the arts with healthcare. Following an overview of some major research contributions in the field in England, Lord Howarth went on to explain the benefits of linking the arts with healthcare:

"...the arts can supplement and enhance the efficacy of conventional medical treatments...In a...review of the medical literature on the arts and health, Staricoff found significant evidence of reduced anxiety and depression during chemotherapy, improved blood pressure and heart rate in cardiovascular patients, improved clinical and behavioural states in intensive care, diminished stress before surgery and less need for pain-reducing medication after it." (Lord Howarth, 2008, Column GC208).

Lord Howarth continued by explaining that aside from "certain beacons" the arts are not systematically integrated into normal healthcare throughout the country, with one reason for this being a lack of hard evidence demonstrating its therapeutic benefits. Lord Howarth argued that, as well as the need for money to fund the arts and evaluation of its clinical outcomes, there is a need for "political leadership". In addition he stated that the *'Prospectus for Arts and Health'* should have had the explicit backing of the two Secretaries of State; instead the launch of this prospectus was "so low-profile as to be invisible. It was not a serious effort to induce culture change in the NHS" (Column GC210). He expressed a need to know whether the Government were going to take forward the recommendations in the report produced by the Arts and Health Working Group, and whether the DCMS and ACE were still committed to the strategy they previously set out. Lord Howarth also called for a speech from Alan Johnson (former Secretary of State for Health and Social Services), to make it clear that it was legitimate to mobilise arts in the mainstream of the NHS and social services delivery.

Lord Howarth and a number of arts and health practitioners and researchers met with Alan Johnson in July 2008. In response to the Lords debate and visit, an internal "Arts/Health group" was established within the DH. Additionally, Alan

[1] The text of the debate is available on the following website: http://www.publications.parliament.uk/pa/ld200708/ldhansrd/text/80306-gc0005.htm [Accessed 4 August 2014]

Johnson endorsed the value of arts for health in his speech at the launch of "Open to All," a training package designed to raise awareness of arts, social inclusion and mental health among gallery and museum staff, held at the Wallace Collection 16th September 2008:

"Music, poetry, dance, drama and the visual arts have always been important to our mental and physical wellbeing...The arts certainly have a key role to play in healthcare ... those hospitals and other care settings that pay close attention to the overall physical environment for patients... achieve real improvements in the health of patients...and... research shows that active involvement in the arts ... can have a profoundly positive effect on patients' wellbeing...I would like to see the benefits of participation in the arts recognised more widely by health and social care professionals...This is not some kind of eccentric add-on – it should be part of the mainstream in both health and social care. And through the Arts/Health group that's been set up in my department, we will be looking at what more we can do to provide guidance, where to go for advice on best practice and sources of funding for clinicians and arts professionals."[2]

Lord Howarth, in his address to the Culture, Health and Wellbeing International Conference in June 2013 explained that by 2009 Alan Johnson was no longer Secretary of State for Health and other priorities in policy thinking took over. During this intermittent interest from Governments, the National Alliance for Arts, Health and Wellbeing was established and Lord Howarth has now set up an APPG for Arts, Health and Wellbeing along with the Alliance. The APPG for Arts, Health and Wellbeing formally met for the first time in January 2014, attended by a significant number of peers and MPs from all parties. The group discussed key areas of interest in the field of arts and health relevant to current policy priorities. The group aims to encourage the evaluation of arts and health work and the dissemination of evidence. Further up-to-date information on the group can be found on their website: www.artshealthandwellbeing.org.uk/news/all-party-parliamentary-group.

1.2 Purpose of the Review

There were two distinct strands of work undertaken for this review and hence were led and carried out separately by the two research fellows. The first strand, led by Melanie Boyce, builds on the seminal review undertaken by Staricoff (2004), which examined and identified a number of benefits to using arts in healthcare settings. In 2011 Staricoff and Clift updated this review and provided further evidence of the positive effects of arts interventions on psychological and physiological outcomes of patients in a hospital environment. Therefore, the first strand of this review examines the impact of the arts in healthcare on patients and service users, and provides a further update on the literature since 2011 to 2014.

The second strand of the review, led by Dr Ceri Wilson, focuses on caregivers' perceptions of the value of the arts in therapeutic and clinical interventions. Staricoff's 2004 review briefly considered the outcomes of arts interventions on healthcare professionals. The review also reported on studies concerning job satisfaction, and the use of the arts in medical and nursing training to improve communication, empathy and understanding of patients' needs. A number of studies in a range of healthcare settings (spanning both physical and mental health) have since been conducted and discrete reviews of the literature e.g. Clift et al. (2008), and Daykin et al. (2008) have consistently

[2] The full text of Alan Johnson's speech can be accessed at: http://www.artsforhealth.org/news/alan-johnson-speech.pdf [Accessed 4 August 2014]

indicated the benefits to the 'end user' of arts interventions. However, there appears to be no critical review of the literature around the attitudes of healthcare professionals to the use of the cultural activities in clinical or therapeutic settings, or of the impact of these activities on the professionals. There also remains a gap in our understanding as to whether the introduction of cultural activities into healthcare has an impact on the recruitment and retention of staff. These are important areas to investigate because, for example, establishing successful projects in healthcare environments will to some extent be reliant on the co-operation of the staff working in these settings. Caregivers and their cultural values are frequently the lynchpin in the relationship between the artists organising the activities and the 'patients' or 'service users'.

Therefore, the second strand of the review has the following three objectives:

1 To explore the impact of using the arts on healthcare professionals, including any ethical issues raised.

2 To examine the perceptions of caregivers on the use of the arts in enhancing health and well-being in clinical and therapeutic settings.

3 To assess whether engaging with arts activities in the workplace may have the potential to improve self-esteem and so reduce staff turnover.

1.3 Scope of the Review

This review focuses on both UK and International studies. The general update includes studies published from 2011 to the present, and the caregiver strand includes studies published in the last 10 years (2004 to present). The caregiver strand also includes a small selection of papers from outside this time period that are relevant and significant to the stated areas of interest. Some studies are included in both strands of the review where reported findings are relevant to both areas of interest. Electronic databases and internet sites were searched to identify published empirical research and grey literature. Cultural activities; health-related outcomes; healthcare providers and healthcare settings were the four categories that informed the keyword search. Within each of these categories there were a range of search terms that informed the literature search and are outlined and discussed in greater detail in the next chapter.

1.4 Structure of the Report

The remainder of this report describes the way in which the review was conducted and outlines our findings and conclusions. Section 2 describes in greater detail our methodological approach, sections 3-4 outline the findings as they relate to our aims and objectives above, and section 5 discusses and interprets the findings. In section 6 recommendations for future research are outlined.

2.0 Methodology

The literature concerning participation in the arts is complex and wide ranging. Consequently terms and definitions are often used interchangeably and inconsistently.

2.1. Terms and definitions

As such, we have developed and applied a number of definitions to aid and encourage consistency, which have also been used to help express the review's inclusion and exclusion criteria.

The "arts"

There remains no agreed conclusive definition of "the arts" due to the diversity of activities and levels of participation that are involved. As a result definitions vary between emphasizing the art-form, sector, time, place, medium or mode of participation (Guetzkow, 2002). Clarity in definition though is important, as demarcating the scope of the arts under examination assists to some degree in defining their potential impact and development of appropriate outcome measures (Skingley, Bungay & Clift, 2011). In view of this our definition of "the arts" is informed and guided by the broad and inclusive definition provided by Arts Council England, which includes "visual and performing art forms, music, dance, theatre and literature" (Arts Council England, 2013, p.13).

Participatory arts

Although the range of arts of interest to this review is wide there are clear parameters around the practice and purpose of the art form. The focus of this review is concerned with examining both caregivers and patients' views and experiences of involvement in participatory art activities. ACE (2010) explains that "participatory arts are by their very nature collaborative...the professional skills of the artist combine with the creative energy of the participants to produce an event or an experience." The audience is actively engaged in the creative process, allowing them to become co-authors, editors, and observers of the work (e.g. Almenberg, 2010). There is some debate in the literature as to what constitutes active versus passive involvement in arts activities (e.g. Clayton, 2012). Music listening or the viewing of visual art may be considered passive as the listener/viewer is a spectator and not actively engaged in the creative art-making process. However, the listener/viewer may be considered as actively engaging with the music/art as they form opinions, interpret meanings, experience emotion, engage their imagination and thoughts, reminisce, and discuss the music/art with others. Debated activities such as music listening are included in the present review, following Staricoff (2004) and Staricoff and Clift (2011).

Arts therapies

Arts included in this review involve the non-professional arts practice and production that occurs in clinical and therapeutic settings. The review is not concerned with art/music therapy initiatives, as the therapeutic relationship is generally of primary importance rather than the creation of the art/music itself. This review is interested in the intrinsic value of the cultural activities rather than seeing them as a means to an end. Definitions of arts therapies are provided below:

- Music therapy is the use of interventions to accomplish individual goals within a therapeutic relationship by a professional who has completed an approved music therapy program (American Music Therapy Association, 2013; British Association for Music Therapy, 2012).
- Art therapy is a form of psychotherapy that uses art media as its primary mode of communication. The relationship between the therapist and the client is of central importance (British Association of Art Therapists, 2011).
- Drama therapy is a form of psychotherapy in which creativity, play, movement, voice, storytelling, dramatisation, and the performance arts have a central position within the therapeutic relationship (The British Association of Dramatherapists, 2005).

Caregiver

The term "caregiver" is used to refer to both professional and family care. However, in this review only care that is provided by professionals and practitioners, in a paid or unpaid capacity, is included and hence family care is excluded.

Clinical and therapeutic settings

For the purpose of this review clinical and therapeutic settings refer to inpatient settings (e.g. hospitals), outpatient settings (e.g. outpatient clinics, GP surgeries) and residential care home settings (e.g. hospices, older persons' care homes). This excludes schools, prisons, community settings, and private residences.

Summary of our definitional approach and interpretation

Our definitional interpretation of these key terms includes a broad and diverse range of *"arts"* activities, that range from visual and performing arts, to music, dance, theatre and literature. Both active and passive engagement informs our interpretation of *"participatory arts"* and therefore excludes art and music therapies where the emphasis

is on therapeutic goals, rather than the creation of the art form. Our focus encompasses only the professional *"caregiver"* and refers primarily to *"clinical and therapeutic settings"* that are of an inpatient and outpatient nature, along with residential care homes.

2.2. The search strategy

Database searches were carried out using MedLine, CINAHL, AMED, Web of Science and ASSIA. Keywords were derived from those used by Staricoff (2004) and Staricoff and Clift (2011), a scoping exercise to determine frequent use of terms in the literature, and suggestions from the e-advisory group (for information on the advisory group see the below subsection 'Advisory input'). Keywords were grouped into four categories (see Table 1).

Cultural Activities	Outcomes	Healthcare Settings	Healthcare providers
Music	"Clinical outcome*"	Surgery	Caregiver*
Painting*	Dementia	"Care unit"/ "Care units"	"Healthcare professional*"
Art/Arts	Health	"Care home"	"Health care professional*"
Singing	Pain	Hospital*	"Health professional*"
Drama	Symptom*	"Primary care"	"Medical professional*"
Dance/Dancing	Illness*	"Acute care"	Nurs*
Sculpture	Anxiety	Hospice*	Carer
Poetry	Depression	"Clinical setting*"	"Occupational therapist"
	Patient/patients	"Therapeutic setting*"	Doctor
	Inpatient*	"Residential care"	Practitioner*
	Outpatient*		Staff
	Well-being/wellbeing		
	"Service user"		

Table 1: Keywords

In addition to the database searches a grey literature search was also undertaken to capture any unpublished literature or reports relevant to this review. The search engine Google was used and the search term "participatory arts in health and social care settings" was applied. The search returned a range of reports and unpublished material, but upon review was not considered directly relevant to this critical review. An email request for any relevant reports or unpublished literature was also sent to a wide range of academics, practitioners and organisations working in this area. Again upon review, the literature returned was not relevant to the aims of this review. However, in Appendix 1 all the grey literature identified is referenced to illustrate the range and scope of work being undertaken in this field, nationally and internationally.

The impact of the arts in healthcare on patients and service users

Searches included combinations of words from three categories: cultural activities; health-related outcomes; and healthcare settings (see Table 1). The inclusion criteria were as follows: studies published from 2011 to 2014; studies written in the English language; studies exploring the effect of arts activities on health-related outcomes in clinical or therapeutic settings. The exclusion criteria were as follows: studies exploring arts activities in community settings; studies exploring the use of arts therapies; case studies; and studies written in a non-English language. Initial searches identified 123 potentially relevant studies. Abstracts and full-texts were screened for relevance and were then subject to quality screening using recognised critical appraisal tools (CASP, 2013; EPHPP, 2010). This resulted in 47 studies being excluded, as they did not meet the quality screening criteria, as a result a total of 76 studies were included in this strand of the review.

Caregivers' Perceptions of the value of the arts in healthcare

Searches included combinations of words from three categories: cultural activities; healthcare settings; and healthcare providers (see Table 1). The inclusion criteria were as follows: studies published from 2004 to 2014; studies written in the English language; studies exploring the effect of participatory arts activities on professionals in healthcare settings or the attitudes of these professionals regarding these activities. The exclusion criteria were as follows: studies in community settings; studies exploring the use of arts therapies; case studies; studies written in a non-English language; and studies only including informal caregivers (e.g. family members). Initial searches identified 52 potentially relevant studies. After screening abstracts and full-texts for relevance and quality 28 studies were excluded. Studies which fitted the inclusion criteria were added from relevant citations which were followed up, and from the general update searches. A final total of 32 studies were reviewed for this strand of the review.

Advisory input

An e-advisory group of four academics who are well-known experts in the field gave discrete strategic inputs to the early planning stages of the review in relation to definitional issues and relevant search terms. This group consisted of Dr Jenny Secker, who is Emerita Professor at Anglia Ruskin University, Dr Theo Stickley from the University of Nottingham, Dr Trish Vella-Burrows who is Assistant Director of the Sidney De Haan Research Centre for Music, Arts and Health at Canterbury Christ Church University and Professor Norma Daykin from the University of the West of England.

3.0 The Impact of the Arts in Healthcare on Patients and Service Users: An Overview of the Literature 2011 – 2014 – Melanie Boyce

This section presents the findings from the studies looking at the impact of the arts in healthcare on patients and service users. In total 76 papers were included in this part of the review and are differentiated and discussed according to art form.

3.1 The effect, impact and experiences of music listening

Of the 76 papers included in this strand of the review, the majority concerned the effect and experience of music listening on service users and patients, with a total of 60 papers (86%). Of these 60 papers 13 were either a systematic or literature review. The remaining 47 papers were empirical studies, although in two examples, Lee et al (2011; 2012) and Vaajoki et al (2011a; 2011b; 2012), a number of papers had been written on different aspects and findings from the same study.

Focusing firstly on the 47 empirical music listening studies a contextual background is provided in relation to geographical range and clinical setting. Next the research design and focus of all the music listening papers are discussed. An examination of the findings then follows, leading to a consideration of the tensions and limitations raised in all the papers on music listening.

Contextual background

The 47 empirical studies on music listening were predominately undertaken in Europe and Asia, as displayed in Table 2

Taiwan was found to be the most prevalent location for studies undertaken in Asia with six papers in total (Lee et al., 2011; Lin et al., 2011; Ni et al., 2011; Lee et al., 2012; Lin., 2012; Chen et al., 2013), although two of these papers were reporting on different findings from the same study (Lee et al., 2011; 2012).

Continent	Number of studies
Europe	17
Asia	15
North America	10
Australia	4
South America	1
Total	47

Table 2: The geographical range for music listening studies

For music listening studies undertaken in Europe, Turkey (Ozer et al., 2013; Kilic et al., 2014; Koca Kutlu & Eren, 2014; Korhan et al., 2014) and the UK (Dennis, 2011; McLeod, 2012; Sadideen et al., 2012) were the most prevalent areas with four and three studies respectively. In relation to clinical and therapeutic settings over half (51%) of the empirical music listening studies were undertaken in a surgical context or a setting that included surgical procedures. The surgical context ranged from post-operative cardiovascular surgery (Cutshall et al., 2011; Jafari et al., 2012; Jose, Verma & Arora, 2012; Trappe, 2012; Ozer et al., 2013), elective caesarean (Kushnir et al., 2012; Li & Dong, 2012) and abdominal surgery (Vaajoki et al., 2011a; Vaajoki et al., 2011b; Vaajoki et al., 2012) to day surgery procedures, such as the removal of the gallbladder (Graversen & Sommer, 2013) and procedures to see inside the urinary bladder and urethra (Zhang et al,. 2014). The remaining studies were undertaken in a range of clinical and therapeutic settings, as reflected in Table 3 below.

Emphasis on measurable effects and clinical outcomes

There were four studies that were informed by a more qualitative approach in relation to music listening. Two of these studies were by the same lead author. In the first study O'Callaghan et al. (2011) explored, through semi-structured interviews, paediatric cancer patients and their parents views about music and its potential therapeutic role in children's lives. In the second study O'Callaghan et al. (2014) examined adult cancer patients' views about music's role before and after diagnosis through semi-structured interviews. The qualitative exploratory study by

Clinical and therapeutic setting	Number of studies
Surgery and surgical procedures	24
Intensive care unit	8
Oncology and cancer treatment	5
Hospice and residential care settings	3
Renal	2
Neurology	1
Cardiology	1
Various hospital settings and conditions	3
Total	47

Table 3: The range of clinical and therapeutic settings for music listening studies

Dennis (2011) used a case study approach to examine the effects of music listening and caregiver singing during personal care for residents with dementia in a care home, whilst a mixed-methods approach was undertaken by Trangeberg and Stomberg (2013) who used semi-structured interviews and a quantitative anxiety scale to examine the effects of music listening on patients during anaesthesia.

The vast majority of the music listening papers however, were informed by a positivist methodology, as of the 47 empirical studies 43 (92%) were quantitative. Of the 13 reviews undertaken three were systematic reviews (Bradt, Dileo & Shim, 2013a, 2013b; Cole & LoBionda-Wood, 2014) one was a meta-analysis (Vasionyte & Madison, 2013) and the remaining nine literature reviews reported primarily on the findings from quantitative studies (Beccaloni, 2011; Bernatzky et al., 2011; Pittman & Kridli, 2011; Economidou et al., 2012; Gooding, Swezey & Zwischenberger, 2012; Ho et al., 2012; Trappe, 2012; Moris & Linos, 2013; Panigrahi et al., 2014).

A typical research design in the quantitative empirical studies was a pre-test/post-test study design that compared and measured the degree of physiological change that occurred due to an intervention, in this case music listening. Usually this was delivered to the patient via headphones, as with Ozer et al. (2013) who obtained first-day postoperative data on 87 patients who had undergone cardiology surgery. Data was collected in relation to their vital signs, such as blood pressure and heart rate, and pain intensity. Later the control group of 43 patients rested in their beds for 30 minutes, after which the same tests were applied, whilst the experimental group of 44 patients listened to their choice of music through individual headphones for 30 minutes and the same tests were then undertaken.

The focus for most papers was on the measurable effects of music listening on patients/service users in relation to anxiety, stress and pain levels or a combination of these features. For instance, there were 16 studies and four reviews that primarily assessed the effect of music listening on anxiety and stress in a variety of different clinical and therapeutic settings. For instance, Bae et al. (2014) investigated the effects of music listening on anxiety levels for patients undergoing regional anaesthesia for a range of surgical procedures, whilst Johnson, Raymond and Goss (2012) examined the effects of music listening versus noise-blocking headphones on anxiety levels for women undergoing gynaecologic day surgery. Similarly, of the four reviews undertaken, one systematic review examined the effects of music listening on preoperative anxiety in surgical patients (Bradt, Dileo & Shim 2013a), whilst the other systematic review, again by the same authors, investigated the effects of music listening on psychological and physiological responses in persons with coronary heart disease (Bradt, Dileo & Shim 2013b). The remaining two literature reviews examined the effects of music listening in pre/post-surgical patients (Moris & Linos, 2013) and in intensive care medicine (Trappe, 2012).

Measuring the effect of music listening on pain management was the next most common focus with 11 studies and 3 reviews primarily clustered in this area. However, although the focus across the studies and reviews was similar, the settings differed, as for example Guetin et al. (2012) examined the effects of music listening in the management of patients with chronic pain, whereas Jose, Verma and Arora (2012) assessed the effectiveness of music listening for managing pain in cardiac surgery patients. The two literature reviews in this area both examined the effects of music listening on pain management in post-operative patients (Bernatzky et al., 2011; Economidou et al., 2012), whilst the systematic review by Cole and LoBionda-Wood (2014) focused on the effects of music listening and pain control in hospitalized adults, which included critical care and surgical patients.

A number of studies also examined the effect of music listening in relation to both anxiety and pain levels. For example, Chlan et al. (2013) tested whether music listening reduced anxiety and sedative levels during ventilator support in critically ill patients, whilst Angioli et al. (2013) investigated the effects of music listening on anxiety and perception of pain during gynaecological procedures.

The focus of the remaining quantitative studies and reviews clustered around a number of similar areas. For instance there were a number of papers where the focus was on the effects of music listening in relation to perceptions of care and/or patient satisfaction in a range of different context settings, from a perioperative setting to Accident and Emergency (Beccaloni, 2011; Ho et al., 2012; Mogos et al., 2013; Kilic et al., 2014). Length of hospital stay and the relationship between music listening was the focus of two studies, one in relation to patients on a ventilation machine (Szilagyi et al., 2014), and the other in relation to abdominal surgery patients (Vaajoki et al., 2012). The study by Zhou et al. (2011) also examined duration of hospital stay, along with depression rates for breast cancer patients after a mastectomy. Similarly, Travers and Bartlett (2011) evaluated a radio programme that broadcast music relevant to residents in a residential care setting who grew

up in the 1920s – 1950s and looked at depression, quality of life and loneliness. Evaluating background music or ordinary sound was the focus of the study by Perez-Cruz et al. (2012) who asked patients, caregivers and healthcare providers to complete a survey that evaluated preferences.

Tools and measures

The tools that were used to measure anxiety and stress included the State-Trait Anxiety Inventory (STAI), which is a 40 question self-report survey that has a four-point likert scale (Li et al., 2011; Ni et al., 2011; Li & Dong, 2012; McLeod, 2012; Chen et al., 2013; Jimenez-Jimenez et al., 2013), and a Visual Analogue Scale (VAS) for anxiety (Lee et al., 2011; Lee et al., 2012; Sadideen et al., 2012). In addition, the Rapid Assessment Anxiety tool (Johnson, Raymond & Goss, 2012) and the Hospital Anxiety and Depression Scale (Trangeberg & Stomberg, 2013) were sometimes used instead of the STAI, as both these measures are shorter and hence take less time for the patient to complete. Other measures were the bispectral (BIS) index, which monitors the depth of anaesthesia (Bae et al., 2014), cortisol blood levels (Koelsch et al., 2011; Beaulieu-Boire et al., 2013), the Haemodialysis Stressor Scale that rates the incidence and severity of stressors associated with haemodialysis (Lin et al., 2012) and anaesthetic consumption (Koelsch et al., 2011). In addition, a number of studies also recorded patients' vital signs for indicators of stress and anxiety, such as heart rate and blood pressure (Lee et al., 2011; Ni et al., 2011; Beaulieu-Boire et al., 2013; Lee et al., 2012; Lin et al., 2012; Chen et al., 2013; Jimenez-Jimenez et al., 2013; Bae et al., 2014).

Vital signs were also predominately used to measures the impact of music listening on pain management (Jose, Verma & Arora, 2012; Kushnir et al., 2012; Chiasson et al., 2013; Ozer et al., 2013), along with a VAS for pain (Vaajoki et al., 2011; Guetin et al., 2012; Graversen & Sommer, 2013; Koca Kutlu & Eren, 2014; Korhan et al., 2014). A number of studies also devised their own pain scales and measures (Kushnir et al., 2012; Perez-Cruz et al., Ozer et al., 2013).

Similar tools and measures were also used in relation to anxiety and pain, with the STAI (Angioli et al., 2013; Comeaux & Steele-Moses, 2013; Kilic et al., 2014; Zhang et al,. 2014), VAS for anxiety (Cutshall et al., 2011; Kim, Kim & Myoung, 2011; Lin et al., 2011; Chlan et al., 2013) and pain (Cutshall et al., 2011; Kim, Kim & Myoung, 2011; Lin et al., 2011; Killic et al., 2014). Vital sign measures were also commonly applied (Kim, Kim & Myoung, 2011; Angioli et al., 2013; Zhang et al., 2014). However, the study by Ganzini et al. (2013), which examined the benefits of harp music vigils for terminally ill patients, required family members' to record their perceptions of the effect of the music vigil on their relatives breathing, relaxation and pain levels.

There were a number of tools and measures that were study specific. For instance, Puggina, da Silva and Santos (2011) assessed the impact of music listening and voice message influence on vital signs and the facial expressions of patients with disorders of consciousness and applied responses to the Glasgow Coma Scale and the Ramsey Sedation Scale. Electroencephalography (EEG) monitoring was applied by Olischar et al. (2011) to assess the effect of music listening activity for newborn babies admitted to a neonatal intensive care unit (NICU), whilst Zhou et al. (2011) applied the Chinese version of the Zung Self-rating Depression scale in their study on depression rates for breast cancer patients after a mastectomy.

in examining the effect of music listening on anxiety and pain levels for women undergoing a hysteroscopy Angioli et al. (2013) found that women who were allocated to the music listening group during surgery experienced significantly lower anxiety after hysteroscopy and less pain during and after the procedure

Findings

The findings from the music listening papers are clustered around five broad themes that consist of the impact of music listening on anxiety, stress and pain
Wider healthcare benefits; personally valued features of music listening; musical style and preferences; tensions and limitations.

Impact of music listening on anxiety, stress and pain

The papers that reported and examined anxiety, stress and pain in relation to music listening overwhelmingly reported positive outcomes, which in most cases were also significant. For example, in examining the effect of music listening on anxiety and pain levels for women undergoing a hysteroscopy Angioli et al. (2013) found that women who were allocated to the music listening group during surgery experienced significantly lower anxiety after hysteroscopy and less pain during and after the procedure. Likewise, Jafari et al. (2012) found that post-operative open heart surgery patients who listened to their preferred choice of music during specific times in the day recorded significantly reduced pain intensity scores to those patients who did not listen to music. Such positive effects were also recorded over a longer timeframe, as Koca Kutlu and Eren (2014) found when they examined the effects of music listening on patients during 12 sessions of haemodialysis. The authors report that the 30 patients in the music group displayed significantly lower pain and nausea scores than the 30 patients in the control group who did not listen to music.

A reduction in depression scores was also reported in a number of the reviewed papers. For example, Zhou et al. (2011) examined the effects of music listening on depression rates for breast cancer patients after a mastectomy and found that those in the music listening group had significantly lower depression scores than the control group. Likewise Guetin et al. (2012), who investigated the effects of music listening in the management of chronic pain, found the music group had significantly reduced anxiety and depression scores in comparison to the control group.

There were also a number of positive significant effects reported in relation to physiological changes that are commonly associated with stress and anxiety. For example, Vaajoki et al. (2011) measured the effects of music listening on blood pressure, heart rate and respiratory rate in abdominal surgery patients. Music was played on the evening of the operation and on the first and second postoperative days. For those in the music group respiratory rate and blood pressure was measured as significantly lower than the control group on first and second days postoperatively. Additionally, Lin et al. (2011) found that VAS ratings for anxiety and pain were significantly lower for patients assigned to the music group for spine surgery than those who were not, and one hour after surgery blood pressure was also significantly lower in the music

group than the control group. There was also a significant reduction in blood pressure and respiratory rate for women who were able to listen to music whilst waiting for an elective caesarean, as compared to the control group who did not listen to music (Kushnir et al., 2012).

The systematic reviews undertaken in this area also supported and reiterated many of these positive outcomes. In relation to pain control the systematic review undertaken by Cole and LoBionda-Wood (2014) evaluated the evidence on music listening and pain management in hospitalized adults from 2005-2011. In total 17 random controlled trials met the review inclusion criteria from which the authors concluded support for the use of music as an adjuvant approach to pain control in hospitalised patients. Also in the Cochrane Systematic Review by Bradt, Dileo and Shim (2013a), who examined the effects of music listening on preoperative anxiety in surgical patients, concluded that from the evidence reviewed music listening may provide a viable alternative to sedatives and anti-anxiety drugs for reducing preoperative anxiety. An additional Cochrane Systematic Review that examined the impact of music listening in stress and anxiety levels for coronary heart disease patients concluded that music listening was likely to have a beneficial effect on anxiety in persons with coronary heart disease, along with a beneficial effect on blood pressure, heart rate and respiratory rate, quality of sleep and pain (Bradt, Dileo & Shim, 2013b).

Similar findings were also identified in the literature reviews undertaken, as positive outcomes were reported in music listening having the potential to lower anxiety and stress (Gooding, Swezey & Zwischenberger, 2012; Trappe, 2012; Moris & Linos, 2013; Panigrahi et al., 2014); affect psychological and physiological improvements (Ho et al., 2012; Trappe, 2012; Panigrahi et al., 2014); provide a reduction in sedative intake (Beccaloni, 2011; Gooding, Swezey & Zwischenberger, 2012) and pain management (Bernatzky et al., 2011: Economidou et al., 2012; Gooding, Swezey & Zwischenberger, 2012). However, the review by Pittman and Kridli (2011) found inconclusive evidence regarding music listening in lowering blood pressure, heart rate and respirations in anxious patients. Whilst the meta-analysis by Vasionyte and Madison (2013), on the effects of music listening on patients with dementia, found little or no improvements in anxiety scores in the seven studies included in this strand of their review. Such anomalies were also found in a number of other studies, as Graversen and Sommer (2013) reported that music listening did not lower pain three hours after surgery for patients undergoing the removal of the gallbladder, although the music group reported less pain seven days after surgery. Additionally, McLeod (2012) concluded that there was no significant difference in anxiety levels between the music and control group for patients undergoing minor surgery. Likewise Vaajoki et al. (2012) reported that there were no significant difference between the music and control group in terms of analgesic use for abdominal surgery patients.

Wider healthcare benefits

In the reviewed papers there were a number of areas where music listening was reported as potentially benefiting the wider healthcare system. One such area was in relation to patient satisfaction. In the study by Mogos et al. (2013) higher ratings to care were given by patients who had live music at the bedside in comparison to those who did not. Harp music vigils were also offered to terminally ill patients in the study by Ganzini et al. (2013), which involved family members' completing a short survey in relation to observed effects and perceived benefits. From this the authors report that music vigils have the potential to improve the patient and family member's experience of the dying process. The literature review by Beccaloni (2011) into the use of music listening for patients undergoing or recovering from anaesthesia also found that music can positively affect patient satisfaction and the quality of care received.

The cost effective benefits of music listening were frequently identified in the reviewed papers, as the intervention was considered to be safe, inexpensive and largely easy to incorporate into the routine care of patients (Bernatzky et al., 2011; Vaajoki et al., 2011a; Kushnir et al., 2012; Comeaux & Steele-Moses, 2013; Ganzini et al., 2013; Jimenez-Jimenez et al., 2013; Ozer et al., 2013; Trangeberg & Stomberg, 2013; Cole & LoBionda-Wood, 2014; Korhan et al., 2014).

Further cost effective benefits reported were in relation to music listening reducing hospital stays for patients. In the study by Zhou et al. (2011), which involved breast cancer patients who had undergone a mastectomy, duration of hospital stay was significantly shortened in the music group compared to the control group. Similarly, Szilagyi et al. (2014) reported that length of stay and time spent on a ventilator was significantly reduced in the study group who received a mixture of music and positive encouraging messages about recovery. Equally in the literature review undertaken by Ho et al. (2012) into music listening for patients on ventilators the authors found evidence to suggest that music listening can lessen hospital stays and potentially reduce further costs with a reduction in medication. However, Vaajoki et al. (2012) found no significant differences between the music listening and control group

in terms of length of hospital stay for abdominal surgery patients.

Personally valued features of music listening

There were only a small number of papers that considered music listening from a more exploratory and personalised study design. Primarily these studies were of a qualitative nature such as O'Callaghan et al. (2011) who explored the relevance of music from the perspective of paediatric cancer patients. From the semi-structured interviews undertaken with children and their parents the authors suggest that the adverse experiences of cancer are often alleviated by listening to music and that music often, but not always, helps to alleviate distress. Similar findings were echoed when O'Callaghan et al. (2014) examined adult cancer patients' views about music's role before and after diagnosis, as the authors found music was often used and adapted by many patients to ameliorate cancer's aversive effects. Patients spoke about how music provided emotional support that reduced their symptoms and strengthened their capacity to endure treatment, ongoing survival and impeding mortality.

Dennis (2011) applied a case study approach to examine the effects of music listening and caregiver singing during personal care for residents with dementia in a care home. It was found that music and singing aided a reduction in the residents angry vocabulary, improved their diction and number of words used, in addition more eye contact with caregivers, and observed enjoyment was also recorded. The study by Johnson, Raymond and Goss (2012), although quantitative in design, suggests the benefit of music listening is that it offers patients' a sense of control in an unfamiliar environment. Likewise, in the mixed-methods study by Trangeberg and Stomberg (2013), which explored patients' experiences of music listening during anaesthesia, found that music listening offered patients a sense of calm and detachment from what was going on around them and was overall a positive, empowering experience.

Musical style and preferences

There were a few studies that examined attitudes towards music in the wider hospital setting, such as in the accident and emergency department (Kilic et al., 2014) or in patient ward areas (Perez-Cruz et al., 2012). Overall patients responded positively and welcomed background music, recognising that it could improve mood and relieve pain (Perez-Cruz et al., 2012; Kilic et al., 2014). For those studies that examined the individual effects of music listening the selection of music style was very often chosen by the study investigators. This music was often slow in tempo, typically 60-80 beats per minute, such as nature sound music (Cutshall et al., 2011) ambient music (Perez-Cruz et al., 2012) instrumental (Koelsch, 2011) easy listening music (Sadideen et al., 2012) traditional and classical (Lee et al., 2012; Moris & Linos, 2013).

However, there were a number of studies that allowed patients to choose their own preferred music style (Jafari et al., 2012; Zhang et al., 2014), which was found to be of importance from the patient's perspective (Bernatzky et al., 2011; Ho et al., 2012). For instance, Trangeberg and Stomberg (2013) found that to facilitate the positive effects music listening can have on the individual, in this case during anaesthesia, it is important that the patient has the opportunity to select the music that is meaningful to them. In the Cohrane review by Bradt, Dileo and Shim (2013b) they found that the anxiety reducing effects associated with music listening appeared to be the greatest when individuals were given a choice of which music to listen to. The literature review undertaken by Trappe (2012) concludes that classical music has the most benefit in intensive care, whereas heavy metal or techno is possibly dangerous as it can lead to stress and/or irregular heartbeats.

Tensions and limitations

The choice of music in many of the studies was chosen by the study investigators, who similarly all favoured slow-tempo music. Consequently there was very little consideration for individual preferences and likings. Indeed very few studies provided any evidence to support their choice of slow-tempo music, which raises questions around the assumptive and accepted nature of this style of music.

Additionally, a number of studies investigated the effects of music listening and positive suggestions on patients who were mechanically ventilated, most of whom were reported as being in a critical condition within an intensive care ward. It was not always clear in the papers the level of patients' consciousness and the extent to which they could consent to the intervention, (Puggina, da Silva & Santos, 2011; Beaulieu-Boire et al., 2013; Chlan et al., 2013; Szilagyi et al., 2014). In the study by Ganzini et al. (2013) assent was provided by family members to examine the benefits of harp vigils for terminally ill patients. However, Olischar et al. (2011), who examined the effect of music on the brain activity of newborns in relation to sleep cycles, made no references to ethical consent or assent. There was no examination or discussion about the ethical issues in gaining consent or assent from patients in a critical condition. The only references made to ethics were the confirmation that ethical approval had been granted from the necessary approving boards.

At a broader descriptive level there was an inconsistent use of terms, as a large number of the papers included in this strand of the review incorrectly applied the term 'music therapy' to the intervention of music listening, (e.g. Li et al., 2011; Lin et al., 2011; Ho et al., 2012; Jose et al., 2012; Lin et al., 2012; Korhan et al., 2014). In a number of quantitative studies (e.g. Jimenez-Jimenez et al., 2013; Korhan et al, 2014; Szilagyi et al., 2014), the small sample size of less than 40 participants also limits the generalisability of the findings. A similar criticism was also raised by Vasionyte and Madison (2013) in their meta-analysis, along with publication bias that can over-estimate effects, as more often published studies report positive effects than unpublished ones. Further issues around bias were raised in the Cochrane review by Bradt, Dileo and Shim (2013a) who report that the lack of blinding in the studies reviewed means results need to be interpreted with caution.

3.2 The effect, impact and experiences of different types of art forms

The remaining 16 papers included in this strand of the review incorporated a range of different art forms and were conducted in a variety of different clinical and therapeutic settings. As there were only a few papers for the various art forms and a lack of grouping in relation to setting, the remaining papers have been combined. A contextual background is provided in relation to type of art form, study location and setting of the 16 papers. The design and focus of the papers are then considered, leading to an examination of the findings and tensions and limitations raised.

Contextual background

The art forms that made up the remaining 16 papers in this strand of the review were clustered around four broad areas and are outlined in table 4. There were equal numbers of five papers in the art form singing and dance (Froggett & Little, 2012; Guzman-Garcia, Mukaetova-Ladinsak & James, 2012; Guzman-Garcia et al., 2013; Yoon-Irons, Kuipers & Petocz, 2013; Maskarinec et al., 2014) and various participatory arts activities, which ranged from music, dance and creative writing to poetry, ceramics and drawing (Shorters, 2011; Baumann et al., 2012; Caddy, Crawford & Page, 2012; Crone et al., 2013; Hurdle & Quinlan, 2014). Four papers were focused in the area of visual art (Nanda et al., 2012; Thomson et al., 2012; Hanson et al., 2013; Mouradian, 2013) and poetry and reading was the artfrom for the remaining two papers (Haraldsottir, 2011; Dowrick et al., 2012).

Type of art form	Number of studies
Singing and dance	5
Variety of participatory arts activities	5
Visual art	4
Poetry and reading	2
Total	16

Table 4: The type of art form and number of different art form papers

The geographical range from where these 16 papers were drawn was less diverse in comparison to the music listening papers, as the papers were predominately UK or USA based with eight and five papers respectively. The clinical and therapeutic setting where the different art form papers were undertaken also varied, as outlined in table 5.

The clinical and therapeutic setting where the studies took place was not a predictor of the nature of the art intervention. For example, the art form in the three mental health inpatient setting papers ranged across various and multiple art forms, such as music, drama and painting (Shorters, 2011; Caddy, Crawford & Page, 2012), to dance (Froggett & Little, 2012).

Emphasis on evaluation of the art form intervention

The focus for the majority of the different art form papers were concerned with evaluating the effects of the art form on those that it primarily directly affected. However, unlike the music listening studies where papers were predominantly quantitative, the research designs were more varied. There were six qualitative and five quantitative studies, four mixed-methods studies and only one systematic review.

Semi-structured interviews were largely applied in the qualitative studies to evaluate the effects of the art form intervention. For example, such interviews were used by

Range of clinical settings and conditions	Number of studies
Mental health inpatients	3
Cancer inpatients	2
GP surgery common mental health problems	2
Stroke unit	1
Dementia care home	2
Cardiac outpatients	1
Neonatal intensive care unit	1
Cystic fibrosis ward	1
Palliative hospice care	1
Accident & Emergency	1
Various hospital settings and conditions	1
Total	16

Table 5: The range of clinical settings and conditions for the different art form papers

. . . improvements in well-being that was aided by the mental stimulation and interaction gained from the art intervention

Guzman-Garcia, Mukaetova-Ladinsak and James (2012) to examine the effects of a dance-based intervention on people with dementia by exploring the views and experiences of both residents and care staff. Similarly, semi-structured interviews were used by Maskarinec et al. (2014) to explore the views and experiences of 35 rehabilitative cardiac patients who were referred to a hula dancing programme. Adaptations were made by Baumann et al. (2012) in their study that evaluated the effects of a person-centred arts programme to hospital-based stroke patients, as the semi-structured interviews were organised around the patients' communication abilities. Additionally, Hurdle and Quinlan (2014) applied an in-depth interview approach to examine the views of the artists that delivered the various art forms to a range of different patients in a hospital setting. In the two remaining papers by Haraldsottir (2011), who discussed the effects on hospice patients taking part in poetry listening and writing sessions, and Shorters (2011), who described the impact of a hospital-based arts project for older people in a mental health trust, both applied patients' feedback comments in their evaluation. In neither paper was it clear how these feedback comments were gathered.

In the quantitative papers an evaluation of clinical outcomes was the focus for three out of the five papers. For example, Crone et al. (2013) investigated the processes and outcomes of an arts intervention for patients with common mental health problems, such as anxiety, depression and stress. The art intervention was a ten-week programme to which 202 patients were referred and took part in a variety of participatory arts activities, such as poetry and ceramics in small groups. The Warwick-Edinburgh Mental Wellbeing Scale was completed pre-and post-intervention to examine the effects and changes in overall mental wellbeing. To assess the effects of scrapbooking, which involved a variety of participatory arts activities, on parents' stress and anxiety in a NICU ward, Mouradian (2013) used the STAI measure, whereas Caddy, Crawford and Page (2012) used four psychometric measures, such as the Depression and Anxiety Stress Scale, to assess the effects of participating in a creative activity group for mental health inpatients.

The remaining two quantitative papers were both visual art studies, but differed in focus and purpose. For instance, the study by Hanson et al. (2013) examined photographic art styles and preferences. Images were viewed on a computer and patients with cancer completed an electronic survey to ascertain style preferences. In contrast, the study by Nanda et al. (2012) investigated the effects of visual art that depicted nature through either video or still images in two hospital waiting rooms over four months. The authors designed a behavioural observation tool that recorded two types of behaviours, from continuous behaviours like reading or watching TV, to discrete behaviours and specific events, such as changing seats.

To evaluate the art form intervention in the four mixed-methods studies a range of methods were applied. Observations, reflective diaries and questionnaires were used by Dowrick et al. (2012) to evaluate a reading intervention for people with common mental health problems, whereas Froggett and Little (2012) used semi-structured interviews and the Herth Hope Index to evaluate the effect of a dance intervention in a mental health inpatient setting. The mixed-method approach by Thomson et al. (2012) for female inpatients receiving cancer treatment in oncology wards involved half the study sample being able to handle museum objects,

whereas participants in the control group discussed photographs of the same objects. Both groups completed psychological measures, such as VAS for happiness and wellness.

The mixed-method study by Yoon-Irons, Kuipers and Petocz (2013) collected quantitative data through a self-report satisfaction survey that young people with cystic fibrosis were asked to complete in response to taking part in eight individual singing sessions during hospitalisation. The findings were analysed by the study authors who used the International Classification of Functioning Disability and Health for Children and Youth as a qualitative framework. Both quantitative and qualitative studies were included in the systematic review by Guzman-Garcia et al. (2013) in their examination of the efficacy of dance studios for people with dementia.

Findings

The findings from the different types of art form papers are themed around four areas that consist of improvement in health and well-being, enjoyment and satisfaction, wider healthcare benefits, tensions and limitations.

Improvements in health and well-being

In a number of papers, improvement in well-being was reported. For example, Crone et al. (2013) found well-being scores improved for those with common mental health problems who completed a person-centred arts programme. Similarly, although the art form was different in the study by Baumann et al. (2012), which applied a variety of participatory arts activities, and Guzman-Garcia, Mukaetova-Ladinsak and James (2012) which involved dance, both studies reported improvements in well-being that was aided by the mental stimulation and interaction gained from the art intervention. Improvements in physical functional capacity were reported in cardiac rehabilitation patients in the study by Maskarinec et al. (2014) who took part in a hula dance programme. Participants also reported improvements in breathing, endurance and muscle strength and how it helped them to appreciate the surrounding cultural traditions.

A reduction in anxiety levels was recorded by Froggett and Little (2012) and Mouradian (2013). Likewise Dowrick et al. (2012) reported a reduction in depressive symptoms for those with common mental health problems attending reading groups for 12 months. Thomson et al. (2012) and Caddy, Crawford and Page (2012) found improvements in scores in psychological measures by those who participated in creative activities. The evaluative feedback comments for an art-project for older people in a mental health trust by Shorters (2011) reported that creative expression had a role in recovery from mental distress that for some could be as significant as medication. A similar finding was drawn in the study by Hurdle and Quinlan (2014) in their interviews with artists who delivered participatory arts activities to patients in a hospital setting, as most artists felt participation in the arts could facilitate healing and well-being.

Enjoyment and satisfaction

A common shared theme across the different types of art form papers was the enjoyment and satisfaction patients and service users gained from the art intervention. For example, the young people with cystic fibrosis who took part in individual singing sessions expressed a high degree of enjoyment and satisfaction from the initiative (Yoon-Irons, Kuipers & Petocz, 2013). As did the parents, Mouradian (2013) reports, who used scrapbooking whilst their child was in a NICU. Additional features of enjoyment and satisfaction related to how the initiative enabled parents to relax, provided a degree of distraction, a sense of hope, and an opportunity to share with others.

Gaining a sense of connection with others was also a valued feature in the study by Froggett and Little (2012) who evaluated a dance intervention in a mental health inpatient ward. Service users reported a feeling of inclusion from and within the group that was aided by a sense of everyone being in it together. Dancing also helped service users to relax by releasing tension. Additionally the systematic review that considered the evidence regarding the efficacy of dance for people with dementia by Guzman-Garcia et al. (2013) found dance enhanced patients' mood and improved social interaction with care staff. The study by Haraldsottir (2011) that evaluated poetry reading and writing sessions for hospice patients also identified how the intervention was positively received by patients and how it enabled connections with staff by fostering dialogue and sharing stories.

Wider healthcare benefits

Nature art displays were found to be the preferred style in the two studies that examined individual visual art preferences. Hanson et al. (2013), who investigated photographic art preferences, found the natural setting of a lake sunset was most popular for patients with cancer. From this the authors suggest photographic imagery can be used to provide a restorative intervention during long hospital stays.

Further benefits in the use of visual arts were identified by Nanda et al. (2012) who examined emergency department patients' behaviours towards displays of nature. From the observations recorded and observed, the authors report a

significant reduction in restlessness, noise level and people staring at other people in the waiting room. A significant decrease in the number of queries made at the front desk and a significant increase in social interaction was also reported. The authors conclude that a simple visual intervention can improve the patient waiting experience in the emergency department, which has implications for patient satisfaction levels.

Tensions and limitations

In some of the different art form papers a tension is identified in relation to whose voice is being heard and whose is being ignored. For example, the study by Hurdle and Quinlan (2014) only sought the artists' perspectives in their review of a hospital based arts programme. The views and experiences of patients, staff and family members were missing, which raises some doubts about the robustness and transferability of the findings. The robustness of findings that draw upon feedback comments from those receiving the art intervention was another area of weakness in some studies. For example, it was unclear in both the papers by Haraldsottir (2011) and Shorters (2011) what the response rates were and how these comments were gathered and analysed.

Summary

The vast majority of papers in this strand of the review, which examined the impact of the arts in healthcare on patients and service users from 2011 to 2014, mainly focused on music listening and its effects on patients and service users. The majority of these papers were quantitative in methodology and applied a pre-test/post-test research design to test anxiety, stress and pain. Similar tools and measures were also used to investigate potential effects, such as the STAI and vital signs. The studies were mainly undertaken in Asia and Europe and within a wide range of clinical and therapeutic settings, although a surgical setting was found to be the most common.

Despite the varied settings and context most studies reported a positive effect of music listening in reducing anxiety, stress and pain levels for patients and service users. The studies also illustrated wider healthcare benefits in relation to patient satisfaction, length of hospital stay and cost benefits. Many studies favoured slow-tempo music, which was often pre-chosen by the study investigators. However, in a few studies the study participants were allowed to choose their own preferred music style, which in some cases facilitated greater positive effects. Likewise, findings from the qualitative studies highlighted the personally valued features of music listening that enabled many patients/service users to cope with stressful situations and better manage their condition.

A lack of choice, voice and involvement were distinct tensions identified within the music listening studies. Little consideration was given to patients or service users preferences in relation to type and style of music. Likewise, there was limited attention towards the ethical issues involved in undertaking an investigation on those who were unable or had limited capacity to consent or assent to the intervention. Methodological limitations centred on small sample sizes and the potential for bias, along with inconsistency in the application of terms.

The art form for the remaining papers were mostly equally represented by singing and dance, visual art and a variety of participatory arts activities, and only a couple of papers were found in the category of poetry and reading. Unlike the music listening papers, the different art form papers were mostly undertaken in the UK and USA. Similarly, the settings were more varied than the music listening papers as no therapeutic or clinical setting dominated. Evaluating the effects of the art form on those that it directly affected was the main aim for the different art form papers. However, unlike the music listening papers the research designs were more varied, as there were fewer systematic reviews, more mixed-methods studies and a more equal distribution of quantitative and qualitative studies.

The findings from the different art form papers highlighted the potential for different art forms to improve patient and service users' health and well-being. Enjoyment of and satisfaction with the art intervention was also a common theme across the papers, as many patients and service users felt the art form helped them to connect and interact with others. Similar wider healthcare benefits, as identified in the music listening papers, were echoed in some of the different art form studies, as a few papers indicated that arts activities had the potential to improve patient satisfaction levels. Likewise, tensions in relation to whose voice was sought and heard was common to a small number of different art form papers, as a few studies did not directly seek the views of those directly affected by the art intervention.

4.0 Caregivers' perceptions of the value of arts in clinical and therapeutic interventions: An Overview of the literature 2004 – 2014 – Ceri Wilson

This section presents the findings from the studies in the caregiver strand of the review. In total 32 studies were included and are differentiated and discussed according to art form under the following headings: The perceptions of caregivers on the use of the arts in enhancing health and well-being in clinical and therapeutic settings; The impact of using the arts on healthcare professionals; and does engaging with arts activities in the workplace have the potential to improve self-esteem and reduce staff turnover?

4.1 The perceptions of caregivers on the use of the arts in enhancing health and well-being in clinical and therapeutic settings

In total twenty-three studies explored staff perceptions of the use of the arts in clinical settings. Twelve of these studies used qualitative methods, compared with seven using quantitative and four using mixed-methods approaches. This contrasts with the predominantly quantitative approaches of the studies identified in the general update. The studies exploring staff perceptions are discussed according to art form, beginning with music listening, followed by literary interventions (reading and/or writing activities), visual art, dance, and a variety of participatory arts activities. See Table 6 for the number of studies exploring staff perceptions of each art form.

Type of art form	Number of studies
Music listening and/or singing	13
Visual art	4
Literary (reading/writing)	3
Dance	2
Variety of participatory arts activities	1
Total	23

Table 6: The type of art form and number of different art form papers

Caregivers' perceptions of music listening

The majority of the 23 studies which explored staff perceptions of the use of the arts in clinical settings explored perceptions of music listening interventions (57%), as was the case in the general update (86%). All the located papers were empirical studies. A contextual background of these studies is provided in relation to geographical range and clinical setting, followed by an examination of the findings.

Contextual background

The largest proportion of the 13 studies exploring caregiver perceptions of music listening were conducted in Europe (see Table 7), as in the general update. However, a smaller proportion of studies were conducted in Asia compared with the general update. Studies in Europe were conducted in the UK (Dennis, 2011), Denmark (Thorgaard et al., 2005), Finland (Polkki, Korhonen, & Laukkala, 2012), Norway (Holm et al., 2012), the Netherlands (de Niet et al., 2011) and across multiple European countries (Topo et al., 2004). The two studies conducted in Asia were both undertaken in India (Ahmed et al., 2011; Jose, Verma & Arora, 2012). The remaining five studies were undertaken in America (Kemper et al., 2004; Bouhairie et al., 2006; Gallagher, 2011; Perez-Cruz et al., 2012; Mogos et al., 2013).

Continent	Number of studies
Europe	6
North America	5
Asia	2
Total	13

Table 7: The geographical range for studies exploring staff perceptions

In relation to clinical and therapeutic settings, the most frequent setting where caregiver perceptions were explored was in hospice or residential care settings (31%). Three of these were settings for patients diagnosed with dementia (Topo et al., 2004; Dennis, 2011; Gallagher, 2011) and one was for patients diagnosed with cancer (Perez-Cruz et al., 2012). Following this, the next most frequent settings were NICUs (23%) and surgical settings (23%). The remaining studies were undertaken in a range of clinical and therapeutic settings, as outlined in Table 8.

Clinical and therapeutic setting	Number of studies
Hospice and residential care settings	4
NICU	3
Surgery and surgical procedures	3
ICU	1
Oncology and cancer treatment	1
Mental health inpatient settings	1
Total	13

Table 8: The range of clinical and therapeutic settings where the healthcare professionals worked

Methodological approaches

Although the majority of papers that explored staff perceptions of arts interventions employed qualitative methodologies, the majority of the studies exploring caregiver perceptions of music listening employed quantitative methodologies. Seven studies used quantitative methods, with the majority using non-validated questionnaires developed by the researchers with Likert style and/or multiple choice responses (Kemper et al., 2004; Bouhairie et al., 2006; Ahmed et al., 2011; Jose et al., 2012; Perez-Cruz et al., 2012; Thorgaard et al., 2012). Only one study used a validated questionnaire, which the researchers personally validated prior to use (Polkki et al., 2012). Four of the music listening studies employed qualitative methodologies. Dennis (2011) conducted semi-structured interviews and analysed audio recordings of caregivers singing to patients, Holm et al. (2012) conducted focus groups, and two studies (Gallagher, 2011; Mogos et al., 2013) reported anecdotal feedback and comments from staff. The final two studies used mixed-methods. Topo et al. (2004) employed validated questionnaires (e.g. 15 D health-related quality of life questionnaire: Arinen et al., 1998), non-validated questionnaires and semi-structured interviews, and De Niet et al. (2011) gathered caregiver perceptions via non-validated questionnaires, semi-structured interviews, and observation notes.

Findings

Three studies explored staff perceptions of music listening for patients undergoing surgery (Thorgaard et al., 2005; Ahmed et al., 2011; Jose et al., 2012). Thorgaard et al. (2005) evaluated a music listening intervention in five post anaesthesia care units across three hospitals in Denmark, the opinions of both patients and staff were sought via a questionnaire. The survey asked staff about their experiences of music in the work environment and this is reported under section 4.2. In addition to the effects on the staff, 70% of 91 nurses who completed a survey believed that patients positively experienced the music. Ahmed et al. (2011) explored staff perceptions of music in a hospital operating theatre in India. Surgeons, anaesthesiologists and nurses who completed a survey perceived that volume and tempo were important to consider when choosing music. 62% thought that music helped reduce patient anxiety, 42% perceived that music made patients less fatigued, and 63% perceived that music produced a sense of familiarity in a strange environment for patients. In contrast to these positive perceptions, Jose et al. (2012) found using an attitude scale that only 20% of doctors and nurses working with patients undergoing cardiac surgery at a hospital in India had favourable attitudes towards music as a pain management strategy.

The use of music listening has also been evaluated in NICUs (Kemper et al., 2004; Bouhairie et al., 2006; Polkki et al., 2012). Overall, the findings are consistent with staff believing that music improves sleep and reduces stress in premature infants. Kemper et al. (2004) found that over 75% of physicians and nurses working in an American NICU who completed a survey perceived that music reduced stress and crying, and improved sleep in premature infants. Staff believed that recorded classical music was most suited to this setting. Attitudes were significantly associated with prior musical experience and training (i.e. greater musical experience/training was associated with more positive perceptions). In light of this, the results would have been positively skewed as 70% of participating staff had prior musical training. Using a validated questionnaire Polkki et al. (2012) explored perceptions of Finnish NICU nurses regarding the effect of music on premature infants. Contrasting with the sample in Kemper et al's (2004) study, only 22% of nurses had some previous musical training. Nonetheless 79% believed that music could increase the feeling of security, 75% believed it decreased stress, 72% believed it improved sleep, 71% believed it stabilised heart rate, and 52% believed it relieved pain. Positive perceptions were predicted by nurses' personal experiences of their child being hospitalised, their personal experience of singing to their own children, and their expectations of the effects of music on the hospitalisation of their own child. Older nurses were more likely to perceive that music could enhance infants' growth and weight gain, whereas younger nurses were more likely to perceive that music could decrease parent stress, 74% preferred recorded music to live music, and most preferred classical music or children's songs.

Bouhairie et al. (2006) investigated staff perceptions of music listening in

paediatric oncology and NICUs using a survey, 86% of NICU staff and 100% of paediatric oncology staff believed that music enjoyed by patients could reduce patient stress. In addition, 79% of NICU staff and 95% of paediatric oncology staff believed that music enjoyed by patients could improve sleep for patients. Corresponding with the findings of Kemper et al. (2004), attitudes towards music were significantly associated with prior musical training, experience and profession.

Using focus groups, Holm et al. (2012) explored the experiences and attitudes of nurses towards the use of music played during after-death care in an adult intensive care unit (ICU) in Norway. Some nurses perceived it positively as it was thought to benefit the families by making the situation more personal; however, some found it strange in this situation and did not perceive it to make a difference. It was apparent that the nature of the situation was crucial on deciding whether or not to play music (e.g. music was most suited in situations when death was expected). Ambient music at a low volume was perceived to be most suitable in this setting.

There were three studies which explored staff perceptions of the use of music for dementia patients (Topo et al., 2004; Dennis, 2011; Gallagher, 2011). A number of benefits were identified, and an important finding is that music should be individualised for the residents, i.e. it is the preferred music choice of each patient. Topo et al. (2004) conducted a mixed-methods evaluation of a music-based multimedia program called the 'Picture Gramophone', which combines individualised music, lyrics and photos. Participating staff from dementia care units in Finland, Ireland, Norway and the UK perceived that 21 out of 23 participating patients benefitted from the intervention. They perceived that the program had a very positive impact on mood (except in the UK where patients were described as happy people already). Gallagher (2011) evaluated the perceptions of staff at a dementia hospice in America, regarding the use of individualised music. These were mostly positive in terms of the effect on the patients with only one out of 24 hospice workers who provided anecdotal feedback stating that music did not enable them to meet the agitation management needs of their patients. Workers perceived that patients were more inspired and enthusiastic and less agitated as a result of the music, but workers also reported that it was challenging to implement a new practice in a busy schedule. Dennis (2011) explored care staff perceptions of individualised music listening and caregiver singing at a dementia care home in the UK. In the staff interviews it was identified that the most significant feature of the music was that it was preferred by each resident. The main benefits perceived were that the music served as a conversational stimulus, it improved mood, was enjoyed by patients, increased eye contact and improved patient language/ communication skills.

Carers perceptions of music listening have also been explored in hospices and acute hospital settings. Staff at a cancer hospice in America were surveyed about their perceptions of the use of background music (Perez-Cruz et al., 2012). Most thought that music improved mood, boosted energy and vitality and reduced stress in patients. Live music at the bedside was used by Mogos et al. (2013) who reported on staff comments and feedback regarding live music at the bedside of patients on cardiac and orthopaedic units at a hospital in America. Staff believed that patients were more at ease, breathed more deeply, fell asleep more easily and seemed to be in less pain. Staff also felt that music lowered tension levels on the unit.

Whilst the findings of the majority of the studies reported so far were mostly positive in terms of staff perceptions of the value of music listening in different settings, the findings from the study conducted in a mental health setting were ambivalent. A mixed-methods approach was used to determine the perceptions of mental health nurses with regard to music listening for patients in a mental health inpatient setting in the Netherlands (de Niet et al., 2011). The aim of the study was to examine the effectiveness of interventions to improve sleep quality of in-patients. Nurses perceived that music listening was easily-applicable in general; however, problems were reported with the mp3 players breaking and being awkward to use. There were also a number of barriers to using the intervention including: lack of cooperation from patients, lack of time, and lack of commitment from some of the nurses. Unfortunately, the staff did not perceive that sleep quality had improved as a result of the intervention.

Caregivers' perceptions of literary interventions

Contextual background and methodological approaches

Literary interventions include creative writing and reading groups. Only three studies were identified that evaluated staff perceptions of the use these activities in clinical and therapeutic settings (Higgins, McKevitt and Wolfe, 2005, Bolton, 2008, and Haraldsottir 2011). All three studies were empirical studies conducted in the UK, with two conducted in hospital settings and one in a hospice setting. All three studies employed qualitative methodologies including semi-structured interviews and observation of sessions (Higgins et al., 2005), and written and/or verbal responses of staff (Bolton, 2008; Haraldsottir, 2011).

Staff believed that the reading intervention increased patient motivation to participate in rehabilitation therapies and addressed patients' spiritual and psychological needs , which had otherwise not been met . . .

Findings

Staff perceptions of the use of literary interventions for people who were recovering from a stroke and for people with cancer were positive and a range of benefits were described. The common factor in all three settings was that of communication, although there was different emphasis on the aspects of communication considered in each setting which may be expected due to the nature of the patients' condition. Higgins et al. (2005) evaluated a reading intervention for stroke patients in a London hospital. The intervention involved professional actors reading to, stimulating, entertaining and engaging patients relevant to their own interests. Staff members who were interviewed (one speech and language therapist, one charge nurse, and one designated reading service liaison nurse) perceived a rapport being built between readers and patients with complex communication difficulties. Staff believed that the reading intervention increased patient motivation to participate in rehabilitation therapies and addressed patients' spiritual and psychological needs, which had otherwise not been met or not been recognised. However, despite these positive perceptions there was some concern about one patient becoming upset when read war stories because it reminded him of his time as a soldier.

A creative writing project for cancer patients receiving palliative care at a London hospital was studied to explore staff perceptions of its value to patients (Bolton 2008). Staff felt that writing gave patients the opportunity to discover what they thought, felt, and remembered; it enhanced patients' awareness of and ability to express issues which needed attention; and offered patients satisfaction and fulfilment. In the third study, Haraldsottir (2011) explored hospice staff perceptions of a combined poetry reading and creative writing intervention at a hospice in Scotland. The sessions were facilitated by a poet and co-facilitated by a clinical nurse specialist. Poetry reading sessions involved reading a wide variety of poetry (including requests from patients) followed by discussion. In creative writing sessions the poet assisted patients with writing their own poems, with a specific topic chosen for each session. Staff members attended the sessions with the patients, and perceived that it provided positive occupation, brought back positive memories for patients, and fostered dialogue both between patients and between patients and staff.

Caregivers' perceptions of viewing and/or discussing visual art

Contextual background and methodological approaches

Visual art–based interventions involve the displaying, viewing and discussing of visual art. There were four studies (17%) which explored staff perceptions of visual art-based interventions in hospital settings The studies were conducted in a number of countries Canada (Suter & Baylin, 2007), Chile (Horwitz & Trucco, 2007), America (Nanda et al., 2011) and Norway (Ingeberg, Wikstrom & Berg, 2012). All four were empirical studies conducted in hospital settings. One study employed a mixed-methods approach (Horwitz & Trucco, 2007), and three studies employed qualitative approaches including semi-structured interviews (Suter & Baylin, 2007; Nanda et al., 2011) and focus groups (Ingeberg et al., 2012).

Findings

Visual arts, like literary interventions were believed to foster communications between healthcare professionals and their patients. In addition visual art displays were also thought to improve the environment. In Canada, Suter and

Baylin (2007) used interviews to evaluate the implementation of 'Art a la carte' which enabled long-term care patients to choose an art print with which to decorate their hospital room. Staff (one physician and five nurses) expressed in interviews that art was meaningful for patients and their families, provided a better environment, enhanced mood, and facilitated interaction between patients and healthcare providers. Staff also perceived that patients choosing their own art provided a sense of control that was beneficial for their psychological well-being.

A similar study in Chile (Horwitz and Trucco 2007) investigated the views of 40 members of hospital staff (including physicians, physiotherapists, occupational therapists, nurses and clerical staff) regarding the impact of displaying visual art in a hospital. The majority of staff (74.4%) perceived that displaying art was beneficial for patients. There were no significant differences between patients, visitors or hospital staff in perceived benefits.

Different forms of art were the focus of Nanda et al. (2011) study to explore nurses' perceptions of the impact of displaying visual art on patients in a mental health inpatient setting. Three types of art were displayed: abstract, abstract-representational (of nature) and realistic nature. No differences in patient reactions between the realistic nature image and the abstract-representational art were perceived by the staff but nurses thought that artwork in the room helped to create a positive environment for patients (although the nurses themselves had unfavourable perceptions of the abstract art). Nurses perceived that the nature image in particular was calming for patients and was something patients could relate to. Use of pro re nata (PRN) medication (as needed) significantly reduced when the nature image was displayed, indicating a reduction in agitated behaviour. Although nurses perceived that the nature image had a positive impact on patients, they did recommend displaying art which contained an element of social engagement.
'

Art communication' was used in an older person's psychiatric hospital in Norway as a conversation instrument, using a semi-structured dialogue, Ingeberg et al. (2012) explored health professionals' perceptions of the use of art dialogues. In focus groups which included nurses, psychiatrists, psychologists, aides, an occupational therapist and a physiotherapist it was suggested that the art made the wards more home-like, and confirmed Suter and Baylin (2007) finding that it promoted communication between patients and staff.

Caregivers' perceptions of dance interventions

Contextual background and methodological approaches

The use of dance activities in clinical settings is not commonly reported in the literature and just two studies explored staff perceptions of dance activities in these settings. However, one of the studies grouped together the perceptions of service users, staff and the dancer, and it was therefore not possible to tease out staff perceptions alone (Froggett & Little, 2011). The remaining study employed a qualitative approach to explore perceptions of care staff working in a UK-based dementia care home (Guzman-Garcia, Mukaetova-Ladinska & James 2013a).

Findings

Staff were interviewed to determine the perceived benefits and concerns around introducing Latin-ballroom dance classes in dementia care homes (Guzmán-García et al. (2013a). Care staff perceived that the classes had a positive impact on residents' well-being and satisfaction. It was believed by those interviewed that there were a number of benefits to residents taking part this included; a positive effect on behaviour, affective states, physical health, and mobility of those residents who took part in the classes. They also perceived that it provided mental stimulation, provided an opportunity to socialise and communicate, and promoted reminiscence. There was also a benefit for spectators, for whom staff perceived that the classes improved affective states, promoted reminiscence, and provided a conversation stimulus.

Caregivers' perceptions of a variety of participatory arts activities

Contextual background and methodological approaches

There was only one study which explores staff perceptions of an intervention incorporating a variety of participatory arts activities (Ross, Hollen & Fitzgerald, 2006). This study was conducted in a hospital setting in America and explored staff perceptions using an observational qualitative approach.

Findings

'Arts-in-Medicine' for long-term haemodialysis patients consisted of a range of participatory arts activities led by artists. The sessions included artwork, crocheting, crafts, seasonal displays, poetry and playing musical instruments. The programme was evaluated by Ross et al. (2006) who reported that the Staff (nurses, technicians and physicians) believed that the programme had a positive impact on individual patients and the unit as a whole.

Summary

The majority of studies concluded that healthcare staff believe that participating in arts interventions has a positive effect on patients' health and well-being. Listening to music is widely believed to reduce stress and anxiety for patients in a variety of healthcare settings (Kemper et

al., 2004; Bouhairie et al., 2006; Ahmed et al., 2011; Gallagher, 2011; Perez-Cruz et al., 2012; Polkki et al., 2012; Mogos et al., 2013). However, staff perceptions of the effect of music on patients' sleep varied across the settings. Staff in NICUs (Kemper et al., 2004; Bouhairie et al., 2006; Polkki et al., 2012), paediatric oncology (Bouhairie et al., 2006) and cardiac and orthopaedic units (Mogos et al., 2013) perceive positive effects of music on their patients' sleep. Whereas, staff members in a mental health setting did not believe there was any improvement in their patients' sleep quality (de Niet et al., 2011). Likewise, whilst staff members working in cardiac and orthopaedic units thought music to be effective at reducing patients' pain (Mogos et al., 2013), only 52% of staff in an NICU (Polkki et al., 2012) and only 20% of operating theatre staff (Ahmed et al., 2011) believed music as effective pain management. There is some evidence that staff believe that music decreases cancer and surgery patients' fatigue (Ahmed et al., 2011; Perez-Cruz et al., 2012), and improves dementia and cancer patients' mood (Dennis, 2011; Perez-Cruz et al., 2012).

The most frequent perception of staff regarding the displaying of visual art in clinical settings was that it improves the environment for patients (Suter & Baylin, 2007; Nanda et al., 2011; Ingeberg et al., 2012), and for literary interventions staff frequently perceived an improvement in patients' psychological/emotional well-being (Higgins et al., 2005; Bolton, 2008; Haraldsottir, 2011). Communication in the form of interaction was also mentioned a number of times in the studies of literary interventions and visual arts. Staff perceptions of other activities are scarcely reported and so common themes cannot be identified.

Many healthcare professionals believe that arts activities should be tailored to individual patient groups and settings. Specific patient groups are perceived to benefit from specific genres of music, art and literature. For example, classical or children's music is perceived as suitable in NICU wards (Kemper et al., 2004; Polkki et al., 2012), ambient music is preferred in after death care (Holm et al., 2012), and realistic art images (not abstract) are preferred in psychiatric settings (Nanda et al., 2011). For music in particular, staff also highlight the need to consider music volume, tempo and delivery (Holm et al., 2012; Polkki et al., 2012). Some healthcare professionals believe that finding music that the patient enjoys is more beneficial than a specific genre or type of music (e.g. Bouhairie et al., 2006; Dennis, 2011). This is particularly important for staff to consider, as one study found that patients often prefer listening to music styles that are different from what staff think they may prefer. Caregivers over-estimated patients' preferences for classical music and underestimated their preferences for pop, country and rock music. (Perez-Cruz et al., 2012). Furthermore, in relation to displaying visual art work, staff believe that patients' having the control to choose the art work they want in their room is particularly beneficial to their psychological well-being (Suter & Baylin, 2007).

Tensions and limitations

One limitation of a number of the studies reviewed, concerns the use of non-validated questionnaires to glean staff perceptions of arts interventions. This is especially prevalent in music listening studies. It is not possible to compare findings across studies when individually developed non-validated measures have been used. It is also not possible to know whether the measures used are acceptable to those filling them in, whether they are measuring what they are intended to measure and whether they measure views reliably over time. One further concern regarding data collection methods is the use of verbal and/or written anecdotal feedback and comments from staff. This method was employed in four of the reviewed studies (Bolton, 2008; Gallagher, 2011; Haraldsottir, 2011; Mogos et al., 2013). In these cases is it not always clear how comments were gathered and analysed which makes it difficult to ascertain the robustness of the findings. A further limitation identified in one of the reviewed studies (Froggett & Little, 2011) concerns the grouping together of service user and staff views. Meaningful information could be lost from this approach of reporting results as additional insight could be gained from looking at these views separately. One further methodological concern relates to sample size. Seven of the 23 studies reviewed (30%) had a sample size less than 10 (Higgins et al., 2005; Suter & Baylin, 2007; Dennis, 2011; Froggett & Little, 2012; Guzman-Garcia et al., 2013a) which restricts the ability to generalise findings from these studies.

As previously explained, the views of healthcare professionals regarding arts activities in clinical settings have not been widely acknowledged in the literature. However, some of the studies reviewed in this strand of the review have presented staff views as evidence of improved/worsened patient health and well-being, whilst not giving patients a voice (and there has been no explanation as to why this is the case). This is particularly evident in evaluations of arts interventions for patients with dementia (Topo et al., 2004; Dennis, 2011; Gallagher, 2011) and mental health problems (de Niet et al., 2011; Nanda et al., 2011; Ingeberg et al., 2012;). For one of these studies (de Niet et al., 2011) it would have been particularly insightful to hear what patients' views were, as staff reported that they were uncooperative and difficult to motivate to take part. Therefore, whilst it is valuable to learn what staff perceptions of these

interventions are, these perceptions should not replace patient views. A fuller picture of the value of cultural activities in healthcare settings is more likely to be drawn from both patient and staff views.

4.2 The impact of the arts on healthcare professionals

Twenty-one studies reported on the impact of arts activities in clinical settings on healthcare professionals and some of these studies were also included under 4.1. "The perceptions of caregivers on the use of the arts in enhancing health and well-being in clinical and therapeutic settings". They are also discussed under this heading because here the focus is on how they perceive the cultural values of the arts on themselves in the setting rather than those they care for.

Two of these studies were reviews (Kemper & Danhauer, 2005; Guzman-Garcia et al., 2013b) and the remaining 19 consisted of eight qualitative studies, seven quantitative studies, and four employing mixed-methods. These studies are discussed according to art form, beginning with music listening, followed by literary interventions (reading and/or writing activities), visual art, dance, and a variety of participatory arts activities.

See Table 9 for the number of studies according to art form.

Type of art form	Number of studies
Music listening and/or singing	13
Visual art	3
Dance	2
Variety of participatory arts activities	2
Literary (reading/writing)	1
Total	21

Table 9: The type of art form and number of different art form

Music Listening

The majority of the 21 studies which reported on the impact of the arts on healthcare professionals, explored the impact of music listening interventions on staff (62%) corresponding with the studies discussed in the general update and those studies exploring staff perceptions. The majority were empirical studies, with one literature review (Kemper & Danhauer, 2005). A contextual background of these studies is provided in relation to geographical range and clinical setting, followed by an examination of the findings.

Contextual background

The largest proportion of these 21 studies were conducted in Europe and North America (see Table 10). A smaller proportion of studies were conducted in Asia compared with the general update. Studies in Europe were conducted in the UK (Dennis, 2011), Denmark (Thorgaard et al., 2005), Finland (Polkki et al., 2012), Norway (Holm et al, 2012) and Ireland (Moss, Nolan, & O'Neill, 2007). The two studies in Asia were conducted in India (Ahmed et al., 2011) and Israel (Ullman et al., 2008), and the study in South America was conducted in Brazil (Gatti & Silva, 2007). The remaining studies were conducted in America (Allen & Blascovich, 1994; Bittman et al., 2003; Kemper et al., 2004; Mogos et al., 2013).

Most of these studies explored the impact of music on healthcare staff working in surgical settings (Allen & Blascovich, 1994; Thorgaard et al., 2005; Ullman et al., 2008; Ahmed et al., 2011), as was the case in the general update. See Table 11 for the range of clinical and therapeutic settings.

Methodological approaches

Although the majority of papers identified in the caregiver strand employed qualitative methodologies, the majority of the studies exploring the impact of music listening on

Continent	Number of studies
Europe	5
North America	4
Asia	2
South America	1
Total	12

Table 10: The geographical range for studies exploring staff perceptions

Clinical and therapeutic setting	Number of studies
Surgery and surgical procedures	4
Variety of hospital units	3
NICU	2
ICU	1
Hospice and residential care settings	1
Emergency department	1
Total	12

Table 11: The range of clinical and therapeutic settings

caregivers employed quantitative methodologies. Six studies used quantitative methods, with the majority using non-validated questionnaires developed by the researchers with Likert style and/or multiple choice responses (Kemper et al., 2004; Ahmed et al., 2011; Thorgaard et al., 2012). Two studies used validated questionnaires. Polkki et al. (2012) developed their own measure and validated it prior to use, and Bittman et al. (2003) used the Maslach Burnout Inventory (Maslach, Jackson & Leiter, 1996) and the Profile of Mood States (McNair, Lorr & Droppleman, 1992). The remaining study assessed surgeons' speed and accuracy (Allen & Blascovich, 1994).

Three of the music listening studies employed qualitative methodologies. Mogos et al. (2013) reported on anecdotal feedback from staff, Holm et al. (2012) conducted focus groups and Dennis (2011) conducted semi-structured interviews. The final three studies used mixed-methods.

Two studies used non-validated questionnaires with open and closed questions (Gatti & Silva, 2007; Ullman et al., 2008). Finally, Moss et al. (2007) used a questionnaire and conducted staff consultations where staff were invited to give open-ended comments.

Findings

The impact of both live and recorded music on healthcare staff has been explored. Moss et al. (2004) found that a live professional orchestra in a hospital enhanced the quality of the aesthetic environment for staff, and helped staff relax, feel happier and be more positive. Likewise, Mogos et al. (2013) found that live music on cardiac and orthopaedic units led to staff feeling less tense, more relaxed, happier and more energetic. On the other hand, live music has been thought to interfere with work flow in a NICU environment (Kemper et al., 2004).

A number of positive and negative outcomes of recorded music being played in clinical settings on healthcare staff have been reported. Decreased stress has been found amongst staff in post anaesthesia care units (Thorgaard et al., 2005), operating theatres (Ahmed et al., 2011) and emergency departments (Gatti & Silva, 2007). However, small minorities of staff in two of these studies also reported increased stress (10.5%: Gatti & Silva, 2007; 16%: Thorgaard et al., 2005).

Improved mood as a result of recorded music being played has been reported by NICU staff (Polkki et al., 2012), operating room staff (Ullman et al., 2008), adult ICU nurses (Holm et al., 2012) and emergency department staff (Gatti & Silva, 2007). However, the study by Polkki et al. (2012) only surveyed NICU staff about their views on music being played in NICUs and when they asked if they actually played music in the NICU, only 44% reported that they did, despite their positive views of its impact on them (Polkki et al., 2012). Additionally, Holm et al. (2012) found that a small minority of adult ICU nurses reported that recorded music made them feel sad, and Gatti and Silva (2007) found that 10.5% of emergency staff reported irritability as a result of recorded music.

Positive effects of recorded music on job performance have also been reported: increased efficiency (operating room staff: Ullman et al., 2008); improved concentration and focus (operating room staff: Ahmed et al., 2011), increased focus (adult ICU nurses: Holm et al., 2012), higher concentration, enthusiasm, and order (emergency department staff: Gatti & Silva, 2007). However, Gatti and Silva (2007) also found that 15% of staff reported a negative impact on job performance (irritability and sleepiness), and Ahmed et al. (2011) found that 28% of operating room staff thought that music restricted communication with other staff in the operating theatre.

One study reported on effects on staff of recorded music and caregiver singing (Dennis, 2011). This evaluation revealed that the music eased the caring role for the staff, and acted as a conversational prompt enhancing the emotional connection between staff and patients. The impact of the intervention on the carers was not entirely positive as all staff expressed anxiety in singing (which was partly due to being recorded as part of the evaluation). However, they all agreed that the background music offered a support which facilitated greater singing confidence as the intervention went on.

Kemper and Danhauer (2005) conducted a review of recorded music listening interventions, which included a small section under the subheading 'Effects on Clinicians/ Caregivers'. Only three studies were reviewed, one of which was published in the timescale of the review (Kemper et al., 2004) and

. . . music eased the caring role for the staff, and acted as a conversational prompt enhancing the emotional connection between staff and patients

two which were published prior to 2004. The findings of these earlier studies are worthy of note. One suggested that self-selected music enhanced speed and accuracy of surgeons' performance on a stressful non-surgical task compared with those who did not listen to music or who listened to music selected by the researcher (Allen & Blascovich, 1994). However, the impact of music on real-life surgical performance was not explored. The other found that participation in group music-making reduced burnout and improved mood in long-term care workers (Bittman et al., 2003).

Literary Interventions

Contextual background and methodological approaches

The impact of literary interventions on caregivers in clinical and therapeutic settings was evaluated by Higgins et al. (2005) who explored the impact of a reading intervention on staff working on a stroke unit in a hospital in the UK. The authors employed a qualitative methodology using semi-structured interviews and observation sessions to glean the impact of the intervention.

Findings

It was found that staff felt that the intervention improved both the overall environment on the ward and patient/staff communication Higgins et al. (2005). One staff member reported that after witnessing the rapport built between the reader and the patients, she subsequently read to non-communicative patients herself in order to build a rapport with them. She described the reading as an extra resource to draw upon.

Viewing and/or discussing visual art

Contextual background and methodological approaches

The impact of visual art interventions (displaying, viewing and discussing visual art) on healthcare staff in clinical and therapeutic settings were explored in three (14%) of the studies. The studies were conducted in Canada (Suter & Baylin, 2007), Chile (Horwitz & Trucco, 2007), and Norway (Ingeberg, Wikstrom & Berg, 2012), and all three were empirical studies conducted in hospital settings. One study employed a mixed-methods approach throughout a hospital (Horwitz & Trucco, 2007), whereas the other two studies employed qualitative approaches, semi-structured interviews in long-term care units in a hospital (Suter & Baylin, 2007) and focus groups in an inpatient mental health setting (Ingeberg et al., 2012).

Findings

All the reported outcomes on staff from visual art-based interventions were positive. Visual art was perceived as an excellent conversation point, creating opportunities for staff to communicate more effectively and connect more personally with their patients (Ingeberg et al., 2012; Suter & Baylin, 2007). Visual art was also thought to improve the working environment for staff (Suter & Baylin, 2007; Ingeberg et al., 2012) and improve staff well-being (Horwitz & Trucco, 2007; Ingeberg et al., 2012).

Dance

Contextual background and methodological approaches

There were only two studies (10%) reported on the impact of dance interventions in clinical and therapeutic settings on healthcare staff. One of these was a systematic review (Guzman-Garcia et al., 2013b), and the other was conducted in a care home in the UK using qualitative interviews with care staff.

Findings

Guzmán-García et al. (2013a) evaluated the effect of Latin-ballroom dance classes in dementia care homes. Care staff reported that promoting socialising between residents provided a sense of personal satisfaction. Staff also reported that the dancing enabled

. . . staff felt that the intervention improved both the overall environment on the ward and patient/staff communication

a building of trust through dancing, provided a means for acceptable social touch, allowed for an exchange of learning between care staff and residents, enhanced communication, facilitated staff's ability to reassure and interact with residents and enabled staff to discover details of people's lives and capabilities. Overall, the staff viewed the intervention positively; however, a few negatives were mentioned. Some staff commented on the unsatisfactory layout of the care home, some expressed concerns about staff shortages and about becoming too attached to residents, and some were embarrassed about participating.

With a team of other authors Guzmán-García conducted a systematic review of the efficacy of dance for people with dementia living in long-term care homes (Guzmán-García et al. 2013b). Only three of the ten included studies reported the views of people with dementia and care staff. All studies had small sample sizes and the majority had substantial methodological problems. The studies revealed the following ways dance interventions positively impacted on care staff: empowerment, greater job satisfaction, improved interaction with residents and improved caring strategies. However, dance interventions were also found to negatively impact some staff in the following ways: fear of over-attachment, fear of embarrassment, and concerns about staff shortages. These findings support the views expressed in the empirical study by Guzmán-García et al. (2013a) reviewed above.

Variety of participatory arts activities

Contextual background and methodological approaches

Hospice workers were the focus of two studies reporting on the impact of a variety of participatory arts activities on healthcare staff. Van Westrhenea and Fritz (2012) conducted their study in South Africa, and Salzano, Lindemann and Tronsky (2013) conducted their study in America. Van Westrhenea and Fritz (2012) employed a qualitative approach by conducting interviews, focus groups and observations, and Salzano et al. (2013) took a quantitative approach by using validated questionnaires (the Maslach Burnout Inventory: Maslach et al., 1996, and the Support Appraisal for Work Stressors Inventory: Lawrence, Gardner & Callan, 2007).

Findings

It was reported by Van Westrhenea and Fritz (2012) that hospice workers thought that participating in creative arts workshops provided the opportunity for debriefing by the caregivers, and provided support in contexts where there are scarce supportive resources. The creative workshops included painting, writing, making music, and dance (amongst other activities). These results were supported by Salzano et al. (2013) who evaluated the effect of a collaborative art-making task (creating quilt panels) on hospice workers in America. Hospice workers who participated had significantly reduced burnout and significantly increased in scores on measures of work colleague social support. Reduced stress was also evident during the art intervention as participants frequently verbalised that they found it to be relaxing, enjoyable and therapeutic.

Summary

The majority of reported staff outcomes were positive. Music was found to decrease stress, improve mood, improve job performance and reduce burnout; literary interventions were found to improve patient/staff relationships; visual art interventions were found to improve patient/staff relationships, improve the working environment and improve staff well-being; and dance activities were found to ease the caring role and again improve patient/staff relationships.

However, a small minority of staff from various clinical settings reported the following negative outcomes from music: interference of work flow (from live music), increased stress, worsened mood, and restricted communication between staff. Negative outcomes from dance activities were also reported: over-attachment to patients, embarrassment, and lack of time.

One plausible reason for some of the negative outcomes on staff from music is a lack of enjoyment of the music selected. For example, Gatti and Silva (2007) found that 39% of emergency department staff in their study did not enjoy the music selection and 76% suggested other preferable musical genres. Furthermore, Thorgaard et al. (2005) found that negative outcomes reported coincided with more negative perceptions of the pleasantness of the music. In future it would be informative to compare the impact on staff of researcher-selected music, and staff-selected music. It is also possible that some instances of increased stress could be due to lack of time to implement new practices because of busy schedules. This was acknowledged as a barrier for staff in a dementia hospice (Gallagher, 2011) and staff in a psychiatric hospital (de Niet et al., 2011).

Tensions and limitations

A few of the limitations addressed in section 4.1. are also relevant to the present subsection. For example, the use of non-validated questionnaires and anecdotal feedback to glean the impact of music listening on caregivers is prevalent. Additionally, sample sizes were less than 10 in four out of the 19 empirical studies reviewed (21%): Higgins et al. (2005), Suter and Baylin (2007), Dennis (2011), Guzman-Garcia et al. (2013a).

4.3 Does engaging with arts activities in the workplace have the potential to improve self-esteem and reduce staff turnover?

Potential impact of arts activities on healthcare professionals' self-esteem
None of the research studies discussed in the present review explicitly reported on a direct effect of arts interventions on staff self-esteem. However, a number of identified staff outcomes have well-established relationships with self-esteem:

- **Improved mood** is one of the most frequently reported positive effects on staff resulting from arts activities in clinical settings. Six of the studies reviewed have demonstrated this (Kemper & Danhauer 2005; 2003; Moss et al., 2004; Gatti & Silva, 2007; Holm et al., 2012; Polkki et al., 2012; Mogos et al., 2013).
- **Improved job performance** of healthcare staff as a result of music in clinical settings has been demonstrated in five of the studies reviewed, either through a general improvement or through improving specific aspects such as concentration, focus, efficiency, or accuracy (Allen & Blascovich, 1994; Gatti & Silva, 2007; Ullman et al., 2008; Ahmed et al., 2011; Holm et al., 2012).
- **Improved relationships** between staff and patients and between co-workers has been reported as an outcome of music listening (Dennis, 2011), literary (Higgins et al., 2005), visual art (Suter & Baylin, 2007; Ingeberg et al., 2012), dance (Guzman-Garcia et al., 2013b) and art-making interventions (Salzano et al., 2013).
- **Increased well-being** of staff has been found as a result of music listening (Ahmed et al., 2011) and visual art interventions (Ingeberg et al., 2012) in clinical settings.
- **Increased personal satisfaction** of care home staff as a result of a dance intervention at a dementia care home has been demonstrated (Guzman-Garcia et al., 2013a).
- **Increased empowerment** of care home staff as a result of dance interventions in dementia care homes has been identified in a systematic review (Guzmán-García et al., 2013b).

Summary

It remains to be investigated whether cultural arts activities in healthcare settings directly or indirectly impact on healthcare professionals' self-esteem; however, the *potential* for this is evident. Arts activities in the workplace can improve healthcare professionals' mood, work performance, relationships, well-being, personal satisfaction and empowerment, which in turn could improve self-esteem.

Potential impact of arts activities in clinical settings on staff turnover

None of the research studies discussed in the present review explicitly reported on a direct effect of arts interventions on staff turnover. However, a number of the identified outcomes for healthcare professionals from arts activities have well-established relationships with staff turnover:

- **Reduced burnout** amongst healthcare staff as a direct result of arts interventions in clinical settings has been demonstrated in three of the reviewed studies (Kemper & Danhauer 2005; van Westrhenea & Fritz, 2012; Salzano et al., 2013).

- **Increased job enjoyment/satisfaction** amongst healthcare professionals as a result of arts activities in clinical settings has been demonstrated in three of the studies reviewed (Gatti & Silva, 2007; Polkki et al., 2012; Guzman-Garcia et al., 2013b).

- **Improved working environment** for healthcare staff as a result of arts interventions in clinical settings has been demonstrated in four of the reviewed studies (Moss et al., 2004; Higgins et al., 2005; Suter & Baylin, 2007; Ingeberg et al., 2012).

- **Decreased stress/increased relaxation** amongst healthcare staff as a result of arts interventions in clinical settings has been demonstrated in eight of the reviewed studies (Moss et al., 2004; Thorgaard et al., 2005; Gatti & Silva, 2007; Ullman et al., 2008; Ahmed et al., 2011; Holm et al., 2012; Mogos et al., 2013; Salzano, 2013).

- **Increased social support from work colleagues** amongst healthcare staff as a result of arts interventions in clinical settings has also been demonstrated (Salzano et al., 2013).

Summary

As with self-esteem, it remains to be investigated whether cultural arts activities in healthcare settings directly or indirectly impact on staff turnover; however, the *potential* for this is evident. Arts activities in the workplace can reduce stress and burnout, and improve job enjoyment, the working environment and work-related social support. These factors are all related to staff turnover. Therefore, it is possible that arts activities may indirectly increase staff retention through changes in these factors. Staricoff (2004) stated that the effect of the arts and humanities as contributing factors in the recruitment and retention of staff had not yet been evaluated and recommended this as an important avenue for future research. However, 10 years on, this gap in the literature still remains.

5.0 Discussion

The aim of this critical review was to examine the value of the arts in therapeutic and clinical interventions. To achieve this, two distinct strands of work were undertaken.

The first strand provided a general update on the Staricoff and Clift 2011 review and identified and examined literature that investigated the impact of the arts in healthcare on patients and service users from 2011 to 2014. The second strand identified and examined literature that explored caregivers' perceptions of the value of the arts in therapeutic and clinical interventions since 2004.

In both cases only articles that were available written in the English language were included and therefore it is possible that that there is a wider research base that has been excluded from this review. In the following sections, the current state of knowledge about the value of arts and culture in clinical and therapeutic interventions is discussed. This is followed by a discussion on the potential and limitations of currently used approaches to evaluation of the arts-based interventions. To conclude the cultural value of the use of arts-interventions is considered in relation to the healthcare context, and recommendations for further study are provided.

What do we currently know about the value of the use arts in clinical and therapeutic settings?

It is interesting to note from this review that a number of different countries and cultures across the world are using, or experimenting with, the use of arts-interventions in healthcare settings. The emphasis in the reported literature has been on the use of music listening, indeed over half the studies reviewed during the course of this project use this as the intervention. The most common setting for the evaluations has been in a surgical context or settings that included surgical procedures, where the main aim of the studies has been to look at the impact of music listening on reducing stress and anxiety, with some studies also evaluating its impact on pain management. Other areas where music listening has commonly been used and evaluated is in Intensive Care Units, Oncology, and Hospices. This is perhaps unsurprising as all these clinical settings are linked by the potential severity and life threatening nature of the conditions managed in these areas, and as a result they may be considered as places where there are high levels of stress and anxiety.

The findings from the studies are overwhelmingly positive and in most cases significant; positive physiological effects on blood pressure, heart rate and respiratory rates were recorded. There were also emotional impacts reported across the music listening studies including on resilience and the strengthened capacity to endure treatment, a sense of control in unfamiliar surroundings and a sense of calm and detachment. It is noteworthy that overall caregivers' perceptions about the benefits of the arts in therapeutic and clinical interventions matched patient/service users' views and experiences. In relation to music listening, positive effects were recorded in the reduction of anxiety and stress levels by patients/service users, which also matched caregivers' perceptions about the intrinsic value of music listening for patients/service users. However, in relation to the effects on pain levels opinions and evidence differed, particularly in a surgical setting. For instance, there were a number of music listening studies where positive effects on pain levels for surgical patients was recorded (e.g. Beccaloni, 2011; Gooding, Swezey & Zwischenberger; Economidou et al., 2012; Bradt, Dileo & Shim, 2013a), but very few caregivers in the studies reviewed identified this as a potential benefit. Indeed the study by Ahmed et al. (2011) indicated that only 20% of operating staff considered music to be an effective pain management intervention for patients.

Whilst music listening is the most commonly reported intervention other art forms were also evaluated, these included; singing, dancing, and a range of participatory arts activities. In contrast to music listening, studies were mainly conducted in the UK and the US, with two also in Australia. These countries are considered 'westernised' states, and the reasons why other art forms have not been used in healthcare settings in other cultures may be worthy of investigation, particularly with the movement of the healthcare workforce and transferability of technological developments in medicine around the world. Overall the findings on the use of other arts forms were again mostly positive with improvements to breathing, endurance and muscle strength reported. As with music listening there were also reductions in anxiety levels and depressive symptoms, including the suggestion that the role of the intervention in recovery was as significant as medication. Other benefits to the individuals included an increased appreciation

of cultural traditions, enjoyment and satisfaction, and the opportunity to share and connect with others, and increased social interaction.

There were also wider healthcare benefits, in relation to patient satisfaction, length of hospital stay and potential cost saving gains. These were identified by some study investigators, primarily in the music listening studies, but were mostly missing from the caregivers' accounts. Instead, in the caregiver studies reviewed, direct benefits were mostly considered. For instance, improvements in the patient/staff relationship was identified by both caregivers and patients after taking part in arts activities that required a degree of collaboration and participation between them both, such as dance or singing activities. Tensions in relation to embarrassment, discomfort and lack of time were also identified and hence cannot be ignored.

There were fewer studies around caregivers' perceptions of the value of the arts in clinical and therapeutic interventions and whilst a range of countries from around the world were represented, studies were predominantly conducted and/or reported in English in the 'western' world, and again reasons for this may be worthy of exploration. The majority of studies concluded that healthcare professionals believe that participating in arts interventions can have a positive effect on the health and well- being of patients and service users. Benefits included; improved sleep quality, improved mood, conversation stimulus, increased eye contact and improved patient language. These last three factors are all linked to enhanced communication, and other identified factors which also assist communication are the rapport built between staff and participants through undertaking the arts activity together, and the facilitation of dialogue and interaction between patients and healthcare providers.

The impact of on-going arts activities in healthcare settings on the staff working in that environment was also considered and the predominant art form evaluated was again music listening. There was a cross-over with articles reviewed in the previous section on caregivers' perception on the use of the arts in enhancing health and well-being, but there were important additional findings found in this part of the review.
The majority of reported outcomes were positive with caregivers reporting the direct benefits to them associated with the playing of recorded and/or live music in a clinical or therapeutic setting. It was found in a number of studies that music improved mood, improved job performance, reduced burnout, and decreased stress levels. Conversely, negative effects were also recorded by caregivers, as the playing of music could interfere with work flow, increase stress and restrict communication between staff. Dance activities could also create different problems for caregivers with feelings of embarrassment and getting over attached to patients.

On the whole, it is apparent in the studies reviewed, that both caregivers and patients/service users positively valued the arts in therapeutic and clinical settings and recognised its potential positive effects, benefits and gains.

Unfortunately, in the 10 years since the initial Staricoff review there were no studies identified that had explored the potential impact of arts activities on healthcare professionals' self-esteem or staff turnover. However, from the literature on caregivers' perceptions it can be seen that there would be the potential for participating in arts interventions in the workplace to have a direct effect on the overall wellbeing of staff, their relationships

with the people they are caring for, and between co-workers. Research in this area could be a useful addition in the near future as particularly in the UK with the ageing workforce and reduction in training places for healthcare staff, retention of existing staff becomes increasingly important.

Research approaches used – strengths and limitations

The majority of studies included in this review situated and only considered the impact and effect of the arts intervention within the boundaries of the study's clinical setting or contextual condition. This can be seen in the number of studies that were undertaken to examine the effects of music listening on patients/ service users, which were all very similar in research design, but were differentiated largely only by context and setting - with over half of studies undertaken in a surgical context or setting that included surgical procedures. By contrast studies focussing on caregivers' perspectives were predominately based in hospice and residential care settings.

Both in the general update and the review of the caregivers' perspectives studies assessing the impact of music were positivistic– typically pre and post-test designs measuring physiological changes primarily focussed on measurable effects in relation to anxiety, stress and pain levels or some combination of these factors. Most studies used similar tools such as the State-Trait Anxiety Inventory (STAI) and the Visual Analogue Scale (VAS) – although some used the Rapid Assessment Anxiety and Hospital Anxiety and Depression Scale as these were considered shorter and therefore more manageable for patients. This means that the results can be compared across studies – although it was noticeable that many authors did not refer to the existing 'evidence base' in their write up of individual studies. The limited use of multi-method and qualitative designs in relation to music is a gap in the field and can be seen as particularly important in the future in exploring and understanding why and how music is important from the perspectives of both service users and carers.

It is interesting to note that the designs used to assess the impact of other art-forms both in the general review and the review on caregivers' perspectives were more varied including mixed methodologies such as observations, reflective diaries and in-depth interviews – some alongside quantitative measures such as VAS. These designs helped to illuminate important issues, for example those raised by research participants themselves in in-depth interviews which transcend the direct physiological and/or psychological impact on them of an arts activity such as enhancing their appreciation of cultural traditions (Maskarinec et al. 2014) and illuminating caregivers' assumptions about their patients musical preferences (Perez-Cruz et al. 2012). These latter findings would be missed by the simple use of pre and post-test designs. Qualitative studies, by nature, tended to be small in sample size with instruments designed for the specific study so comparison and generalisability is clearly limited. A limitation across studies is that designs tended to be cross-sectional rather than longitudinal in nature and in some settings (e.g. long-term residential care) the latter design would be particularly important in assessing the sustainability of the positive impacts of the art-form.

However, by continuing to approach arts in healthcare by setting and condition the evidence base continues to remain narrow and limited reflecting the gaps in knowledge this critical review has identified. For instance, the evidence

…healthcare professionals believe that participating in arts interventions can have a positive effect on the health and well- being of patients and service users.

on the role of the caregiver in arts healthcare and the potential direct effects remains largely unexplored, particularly in relation to self-esteem and staff turnover. So too does the more subjective experiences and views of patients/service users in relation to arts activities in healthcare. Therefore, this review concludes that now is the time that different voices and art forms are considered and represented in the arts in healthcare. In both strands of the literature reviewed there was a preference towards music listening studies over and above any other type of art form, which was undertaken in a wide range of clinical and therapeutic settings. A common theme identified across the two strands was a lack of participant choice and control, as the style of music played was often chosen by the study investigators. In those studies that examined the effects of music listening on patients/service users, slow-tempo music was usually the preferred choice and little consideration or accommodation was given to the diversity of individual style preferences. However, in the few studies that allowed patients and service users to choose their preferred style of music there was some evidence to suggest this approach facilitated greater positive effects (Bradt, Dileo & Shim, 2013b; Trangeberg & Stomberg, 2013). Similarly, from the perspective of the caregiver the choice of the music played was very rarely informed by their preferences.

A lack of choice and control was not just identified in the music listening papers, as in a number of studies the art intervention would be introduced with little or no discussion in its implementation with those it directly affected. For example, in the study by Nanda et al. (2011) neither the mental health inpatients nor the staff had any involvement in choosing the visual art styles displayed. Instead this was controlled and decided by the study investigators. Indeed, the patients' voice was missing entirely in this study as only the staff nurses were asked to observe and record inpatients' responses to these various art styles.

The representation of voice was an issue identified across both review strands. In relation to patients/service users their voices were missing in a number of studies. Instead, the views of family members, artists or caregivers were sought to examine the effects of the art intervention on patients/service users. Likewise, caregivers' views and experiences were noticeable in their absence in a number of papers, which is surprising considering they are likely to be pivotal to the implementation of arts activities in clinical and therapeutic settings. The lack of consideration in the representation of voices in a number of the identified study papers thus raises questions about whose views are actually expressed and the ethical groundings of these studies.

Conclusion

In the UK in recent years there has been growing concern regarding the quality of care provided by the NHS, to the extent that has been a drive to improve care and provide more positive experiences for patients and their families. This drive has been underpinned by the 6 Cs: compassion, competence, communication, courage, care and commitment. This review has examined the current research evidence regarding the value of arts interventions in therapeutic and clinical interventions, and has identified a range of studies from the UK and beyond. There is a growing body of evidence which strongly suggests that introducing arts activities into a variety of different healthcare settings can have a positive impact on the health and well-being of patients and service users. Specifically in terms of enhancing communication, through building rapport between people making compassionate care more likely, staff will also require courage to engage and implement new activities which may be unfamiliar and outside the traditional healthcare boundaries.

6.0 Recommendations for Future Research

Whilst there is an emerging body of evidence that supports the use of different art forms in clinical and therapeutic settings there remains gaps in the literature and thus the evidence base. It is therefore recommended that further research is needed in the following areas:

- Caregivers perceptions on the value of arts activities to support communication with patients and service users, and the promotion of compassionate care.
- The use of other more participatory art forms in clinical and therapeutic settings other than music listening.
- Comparison of the effectiveness of arts interventions where care staff have had an input in the type of art form before implementation, with the effectiveness of researcher-led interventions.
- Exploration of the direct effects of arts intervention in clinical settings on staff self-esteem and staff turnover.
- Many of the interventions reported are short term and outcomes are measured over a short time span. More longitudinal studies are required in order to evaluate long term outcomes of interventions.
- The social and cultural context of different settings should be explored to identify potential barriers to the use of art-interventions in healthcare. In addition to further research in this area, it is also recommended that
- Current research is disseminated more effectively so studies in art forms which have an existing evidence base such as music listening are not repeated unnecessarily.
- Assumptions around the lack of harm of interventions may cause need to be challenged. Ethical issues around choice and preferences of patients, service users and caregivers must be taken into account when introducing interventions.
- More creative approaches to evaluation should be considered using a broader range of methodological approaches such as: qualitative methods, mixed methods and participatory approaches.

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