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The current use of music in UK healthcare

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Abstract

This project researched how music is currently used in UK healthcare settings. Despite varying literature published on health benefits music can enable, there is a lack of material addressing the implementation of music in current healthcare practice. This project aimed to address gaps within the research area by obtaining current data results, researching the topic from the perspective of healthcare staff, and focusing specifically within the United Kingdom (UK). To reach these objectives, the research question of ‘How is music currently used in UK healthcare?’ was formed. Responses from 20 healthcare workers were received through an online questionnaire using open and closed questions to address areas related to the research aims. Responses were analysed using descriptive statistics and thematic analysis. Analysis of responses showed that the participants were using music for varying aims/outcomes, mostly in relation to improving wellbeing of people and environments within their workplace. The key findings were as follows: there appears to be a lack of awareness healthcare staff have of literature addressing health benefits of music, healthcare staff also appear unknowing of specialised professionals working specifically within music and healthcare, but despite this, many healthcare professionals are using music in their practice regardless. The findings support previous discussions indicating a lack of translation between healthcare staff, literature detailing of musical-linked health benefits and specialist professionals in this area. The project demonstrated the possible potential music possesses to be used more frequently and concretely in healthcare if the correct educational tools are used to increase awareness in this area.

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Abbreviations

Music therapy - MT

Social Prescribing – SP

Environmental music therapy – EMT

National Health Service – NHS

United Kingdom – UK

Northern Ireland – NI

Introduction

Since 2022 I have participated and led two music projects in special needs schools, one for children with profound and multiple learning difficulties and another for children with social/emotional difficulties and trauma. Alongside these I have witnessed the impact music can have on residents in care homes, community outreach projects and music therapy sessions. Being involved at first hand in these different experiences has inspired further research into this area.

The potential music holds to be effectively used in mainstream healthcare is a research initiative extremely relevant in 2024. Following the Covid 19 pandemic of 2020 and the spotlight this placed on our Healthcare and National Health Service (NHS), many have re-evaluated the ways in which modern medicine is viewed (D'Ambrosio 2020). These evaluations could also be linked to increasing engagement with person-centred practice, a healthcare initiative striving to rehumanise healthcare and place patients back at the centre of treatment focus (McCormack et al. 2016). During the pandemic, our healthcare services were largely stripped back to basic, meaning many 'non-essential' aspects of treatment were paused (World Health Organisation 2022). Although the UK health service is still dealing with the repercussions of a global pandemic, many aspects of treatment that were previously delayed are returning to the fore. The impact of the Covid-19 pandemic on the position of music in medical settings and the hyper-awareness of our personal health and wellbeing that followed, are some of the reasons that piqued my interest in exploring this research area. In this paper, the NHS will refer to the combined National Health Services of all 4 UK nations.

It could be argued that with increased discussion and research into the benefits of music within healthcare, this could potentially lead to an increase in its use for treatment. If this was to be done, there is hope that it could aid in potentially easing the extreme pressure many NHS staff members currently face. A 2023 BBC article listed staff shortages and overwhelming amounts of patients waiting to leave hospital as key reasons why the NHS currently faces extreme pressure (Cook 2023). Utilising music to treat and prevent different conditions could have potential to reduce these pressures by offering an additional alternative form of treatment, potentially accelerating recovery and recuperation times, thus reducing burdens on hospital workload.

Despite a variety of published literature addressing music and health benefits, there is an apparent lack of studies on the implementation of music in current UK healthcare practice. To address this research gap, this dissertation will begin by discussing current research relating to music and healthcare. From a review of current literature, the research question will be formed. Following this, methodology will be discussed, and design of the methods detailed. There will be an analysis of participant responses and discussion of how they relate to current research. In the concluding thoughts any further research questions will be highlighted, alongside drawing a close to this project.

With this piece of work being an undergraduate dissertation, it is recognised that there are limitations and constraints to achieving a large goal in one project. The aim of this work is to understand where music is placed within the field of healthcare in the UK currently and to question possible opportunities to develop its further use.

Chapter 1: Literature review

The purpose of this project is to provide information in an area lacking in published literature, the current use of music in UK healthcare. Although there are publications addressing the health benefits music can provide, there is subsequently a lack of material on how these benefits are currently being accessed in healthcare settings. Having sufficient material in this region is key for the progression of the field as when the health and livelihoods of people are the main area of focus, it is key that the materials used are relevant and up to date. Discussion on a range of topics will follow, beginning with areas relating primarily to the musical aspects of interventions, such as the use of music in healthcare settings and music therapy. This will be followed by social prescription, a discipline that relates to both music and healthcare areas and concluded with person-centred practice. Discussed previously, person-centred practice is a style of healthcare practice in which many of its underpinning theories and values align with parameters for using music in healthcare. There will be a variety of literature addressed, including academic journals, qualitative studies, books/book chapters, grey literature (often from the NHS), online handbooks, and guides. The sources will be organised thematically, moving between sections to compare and evaluate literature in relation to the research area. For the research, I am defining healthcare as any health or allied health related professions, not limited to NHS work only.

Music and creativity in healthcare settings

Regardless of where musical stimulus is used, there is often an overwhelming belief amongst many people that music is good for everyone, and this is no different in healthcare settings (Moss 2021). This belief can lead to the addition of music into varying situations as a perceived beneficial auditory factor, without understanding the implications it can have on the people and aesthetics of an area (Moss 2021). Due to this common assumption, the benefits and disadvantages of using music in healthcare must be addressed in order for the field to develop.

As mentioned previously, there are many positive impacts of using music in healthcare settings (Moss 2021). These are discussed by Moss in the opening of her book that reports on the role of music in healthcare settings. One area immediately addressed is how, since its use is a relatively new phenomenon, music can encourage those working in healthcare to view their

practice through the perspective of those who are ill, aiding to rehumanise the patients they work with (Moss 2021). This idea links closely with the aims of person-centred practice later discussed (McCormack et al. 2016) and is exemplified in this literature. Through multiple case studies, Moss gives a variety of musical intervention examples that aid with patients re-gaining sense of self in treatment. Individual engagement with self-reflection, feelings of validation, emotional expression and relaying of thoughts and feelings through various artforms are listed as key healing that music enables patients to action, in their treatment journey (Moss 2021). The methods through which these events occurred included musical composition, improvisation, performance, engagement with instrumental and vocal music as well as exposure to live and recorded material, all aiming to evoke emotions and actions to re-gain patients' feelings of individuality and self-worth (Moss 2021). There is an overwhelming feeling when looking at music in healthcare that a shift of practice is required as demonstrated by both Moss and McCormack et al., to use music as a medium of regaining focus on what should be at the heart of healthcare; the patients.

Although there are differing ways music can benefit patients, as mentioned above, there are issues surrounding music's implementation that must be addressed. A huge danger in the progression of this research area are the blanket statements often issued when talking about the effect of music in healthcare. Some of these statements are highlighted by Moss in a chapter dedicated to discussing the danger in over-claiming benefits of music in healthcare (Moss 2021). The first of these was mentioned previously, the belief many have that music is good for everyone, so employ its presence frequently without fully understanding the implications this will have. Alongside this, there is the lack of recognition many have for the professionalism required of musicians who are to work in healthcare (Moss 2021). If music is to be used to access some of the health benefits discussed previously, the standard of the music used must be of the correct level. If this is not done, Moss warns of the possibility of aesthetic poisoning in healthcare environments. Adding music into these areas where silence is so rare due to constant auditory stimulus from staff, machines, patients etc. must be a careful consideration; done so to improve the welfare of the people in the space. When this is not done, Moss suggests that the space has become aesthetically poisoned. Later in the book, Moss comments on how the thoughtful, or often lack of thought for, choice of music used in healthcare environments can contribute to noise pollution or deprivation of aesthetic needs for the space. This can be done all too easily if those administering music believe, as initially discussed, that any music is good for everyone. A lack of choice or engagement with decisions in what music is needed

for different healthcare patients, staff and spaces directly contradicts one of the fundamental principles of person-centred practice, that shared decision making and personalisation of treatment should always be considered in healthcare interventions (McCormack et al. 2016). These values should be reflected in the rising use of music in healthcare.

Moss engages with the positive impact music can have on re-individualising healthcare. Whilst doing this, this book offers interesting internal debate around music being used in these settings and what to avoid when doing so. These topics require consideration whilst researching music in healthcare, to avoid the trap so many fall into of making general assumptions of the benefits of music in healthcare.

Music therapy:

An area that directly links music to healthcare is music therapy (MT). The Oxford Handbook of Music Therapy outlines this practice as the use of music to help and support clients and patients, always serving the needs of others, like healthcare staff themselves (Edwards 2017). This definition shows how MT directly links music's ability to aid those at the heart of healthcare, the patients.

To understand what music therapy is, a key differentiation must be made. Although music can have self-perceived therapeutic benefits, there is a key difference between this and music therapy as treatment. Further within the handbook mentioned above, Colwell discusses the differentiation between these two functions of music in a chapter titled 'Researching Music Therapy in Medical settings' (Colwell 2015). In this chapter music medicine is the term used to describe the therapeutic benefits of music that many perceive to be music therapy. It is explained as the independent use of recorded music facilitated by medical staff themselves. Music therapy, however, is a specific musical intervention for individual patients, facilitated by a trained music therapist (Colwell 2015).

Within music therapy there are a variety of different practice types. Some of these are listed by Edwards and include the Nordoff Robins approach (music-centred approach to practice based on the experiences of Paul Nordoff and Clive Robins) and Community Music Therapy (collaborative and active music making to improve the health and wellbeing of different communities) (Edwards 2017). Not included by Edwards is Environmental Music Therapy

(EMT), which is described by Canga et al. in 2012. In their pilot study Canga et al. describe EMT as a form of music therapy that uses musical intervention to try to alter and improve the environment in which caregiving takes place, hoping to have a positive impact on the people within that environment.

After understanding what the practice is and how it can be approached, then comes the question of the precise function of music therapy. Although practice outcomes differ between each individual session and client, there are some overarching themes that prevail when researching the impact of music therapy. Silverman et al.'s 2018 qualitative study found that staff in an acute mental health ward indicated music therapy to have a positive impact on the clients. This was noted in the perceived calming effect music had on patients observed by staff members and the motivation usually isolated patients had, to become involved in the therapy (Silverman et al. 2018).

In their EMT pilot study of 2012, Canga et al. concluded that there was a marked positive impact on both the patients and caregivers through Environmental Music Therapy's use at a chemotherapy infusion sight, seen in reduced stress levels and reduction in noise perception of external factors (Canga et al. 2012). Interestingly, this provides a possible solution to the aesthetic poisoning discussed previously by Moss, with this approach of MT directly addressing the issue of environmental noise in healthcare settings.

In a summary of ongoing research in medical music therapy settings, Colwell lists reduction of feelings of pain and anxiety surrounding and during healthcare treatment/s as further positive impacts of medical music therapy projects (Colwell 2015). Pavlicevic et al. provide a multitude of music therapy case studies in both adults and children, addressing improvement in non-verbal communication, social and emotional development as areas of improvement through music therapy sessions (Pavlicevic et al. 1999).

To access these benefits of practice, there are key stages of MT work that must be planned and executed for optimum response. Listed by Edwards, these are (Edwards 2017):

- Individual/Group Assessment
- Setting of aims and objectives for the client/client group

- The working phase
- Evaluation of sessions
- Conclusion phase

Throughout these five stages, different methodologies can be chosen and employed by music therapists in the working phase to achieve anticipated outcomes. These can include improvisation, use of technology, vocalisations, soundscapes, song writing (solo or co-creation) (Edwards 2017). Within these areas, there is use of live or recorded material, known and unknown music, group or solo material and improvised or pre-composed material (Colwell 2015). These short lists show how there is a multitude of method combinations that could be used to personalise music therapy sessions for each client. This compliments the importance person-centred practice places on personalisation of healthcare treatment that will be later discussed, as each client of MT can receive unique and individual sessions.

Within current research, there is a large variety of patient groups in healthcare settings with whom music therapy has been used. Colwell highlights how, in medical settings, music therapy is used with both inpatients and outpatients, before going on to list specific patient groups where research on music therapy interventions is recorded (Colwell 2015). These include, adult oncology, obstetrics and gynaecological, general medical and surgical. There is also Silverman et al.'s study located in an acute mental health ward and Canga et al.'s research within a chemotherapy infusion site.

Although the positive indicators from this research seem overwhelming, there are issues that must be addressed if a full understanding of the practice is to be obtained.

Firstly, Moss and Silverman et al. highlight a lacking amount of published literature supporting and general awareness of the specific field. Silverman goes on to explain some of the implications this can have on MT such as reduced employment opportunities, patient referrals, and utilisation of the practice (Silverman et al. 2015). In their 2015 qualitative study on staff perceptions of music therapy, Silverman et al. call attention to concerns that medical staff on an acute mental health ward have over the use of music therapy. These include concerns of over-stimulation for patients, confusion on the training required by music therapists, implications of different staff views on the area and how this affects sessions, and the importance many other parties place on musical talent progression within music therapy. Myth

3 from Moss's Dissonance chapter highlights another issue, the struggle music therapy has asserting itself within other mainstream WHO approved therapies (Moss 2021). This notion is challenged by Silverman et al. who argue that music therapy interventions are often undermined by the need to fit into existing therapeutic contexts (Silverman et al. 2015). This point of contention highlights that as a field, it is still unclear where music therapy situates alongside other therapeutic interventions.

As well as the previously discussed lack of specific literature, Colwell addresses a flaw with many studies that are branded as music therapy related. This being that there are many articles branded as music therapy studies where no Music Therapist was present to carry out musical interventions, making these music medicine not music therapy studies and diluting their relevance to the field (Colwell 2015). The influence of family, staff and patients on music therapy research are also not to be ignored. Family members may persuade/disapprove of participant involvement, staff can influence responses and patients themselves can choose their answers based on wanting to help the researcher, limiting the reliability and validity of materials (Colwell 2015).

Like any field, there are positive and negative aspects to the up-and-coming area of music therapy. The positive impact this treatment can have on patients is clear, and its ability to be personalised to each individual links closely to overarching themes throughout this discussion. Although there are some issues still to be ironed out, many of these can be linked to a lack of engagement with the literature of the relatively new field and external factors of branding music therapy incorrectly, both of which are not intentional faults of those who practice MT. Considering this, MT still shows the most direct link between music and healthcare in its aims, methodology, participant groups and outcomes.

Social prescribing

Another area supporting the relationship between music and healthcare is social prescribing (SP). SP involves the role of a community link worker to connect patients to various community activities/groups. The aim of this is to improve and maintain personal health and wellbeing (NHS England 2020). The 2020 NHS England social prescription guide addresses an identified gap between people and healthcare bodies, similar to that identified by the theories of person-

centred practice and suggests that social prescription is one way this could be reduced (McCormack et al. 2016).

Specifically looking at music and healthcare, it is crucial to understand how SP can bridge the gap between these two areas. Social prescribing involves the act of community link workers assigning patients community group intervention to aid recovery, prevention, and containment of various health conditions (NHS England 2020). Some of the health conditions listed, where patients have shown improvement through SP, are mental health conditions, isolation, complex social needs, long-term health conditions, Parkinson's disease, and lung problems (Chapman et al. 2022) (NHS England 2020). To understand its place within current healthcare policy, NHS England have created a guide entitled, 'Personalised Care: Social Prescribing and community-based support Summary Guide', which outlines the reasons and methods used by the NHS when incorporating more SP into their treatments (NHS England 2020). In the guide, the role of a community link worker is further detailed. There is further discussion of how this role comprises of connecting the gap between the healthcare sector and community groups through sourcing groups and matching patients to the right space for them (NHS England 2020). To understand how groups can get involved in this work, Chapman et al. designed an online handbook, created through collaboration with multiple community music groups and charities. This handbook outlines the benefits for involvement in social prescription for community groups as possibilities for increased funding and more inclusive memberships (Chapman et al. 2022). Practicalities for involvement are explained through a template provided including what community groups need to have in place before they can get involved, such as creating safeguarding policies and nominating representatives from the group to aid link workers, which is extremely useful for understanding the administrative requirements and commitments of SP. The recent publishing date of this guide is helpful as it allows for an understanding of SP requirements following the global pandemic, as the functioning of this practice has likely changed over the pandemic years.

After understanding what SP is from both a healthcare and community perspective, it is important to look at this area in relation to discussions surrounding healthcare and the arts, specifically. In searching for academic sources on the topic of SP and arts groups, a qualitative study conducted by Skivington et al. emerged, researching the impact of a social prescription initiative in Glasgow, Scotland (Skivington et al. 2018). The aim of the study was to investigate if SP could work effectively to decrease medical problems and GP pressure in a lower socio-

economic area of Glasgow. Overall, it was concluded that SP intervention had a positive impact on the health and wellbeing of participants, reflected in the reduction of GP appointments made within the local area following involvement in social prescription initiatives.

The findings of this study, alongside the patient groups who have benefitted from the initiative mentioned by the NHS previous, indicate a positive impact on the patients, healthcare systems and communities involved in SP programmes. Even considering these positive outcomes, further improvements could be made to this system. All literature discussed so far list limitations of current social prescription, one of the largest being funding. Notably, Skivington et al. address the impact of increased cuts to the welfare budget on the area. As many community groups are self-funded, even where there is demand for their services, inadequate amounts of funding to run the group could limit possibility for further participant involvement. As a need for an increase in funding is mentioned in all the SP discourse so far, it could be deducted that monetary issues have a large impact in this area. The 2020 NHS England guide highlights further limitations of the current state of social prescription. It suggests that a coding system to organise referrals and match them effectively to community link workers, community organisations, NHS staff, and patients is required immediately if involvement in this initiative is to be increased. Skivington et al. also bring up an interesting point of contention for this field; that of the impact of personality, which is not touched on in any of the other materials discussed. This was interesting, as it is something that can be extremely relevant considering the personal nature of allied health and community professions, especially if aiming to work effectively within person-centred practice. It raises discussion relating to outcomes of community link workers leaving their jobs. Since they often form a rapport with their clients, there is concern that pre-existing trust and relationships would cease following a change of link worker. All interesting points that would likely change on a case-by-case basis.

Overall, social prescription proves to be a useful initiative which can involve community groups to help with the treatment of patients and reduction of pressure on healthcare systems (Skivington et al. 2018). Although Chapman et al.'s guide is tailored for music groups and music is mentioned as one of the groups used in Skivington et al.'s 2018 study, there seems to be room for increased awareness of the impact of music specific intervention in this area. The work carried out by link workers directly connecting music/arts groups and healthcare bodies is important to acknowledge and understand when inquiring further into music's use in current healthcare.

Person-centred practice:

When researching music in healthcare, there is a continuing alignment between this area and principles that underpin person-centred practice (NHS England n.d.¹). Person-centred practice, as mentioned throughout this discussion, aims to place focus back on the patients within healthcare bodies, individualising their treatments and ensuring each patient is involved in shared decision making regarding their care (NHS England n.d.). McCormack and McCance's book based on this practice places importance on its ability to re-humanise healthcare, something extremely relevant following the 'stripped back' approach to healthcare required in the pandemic and discussed in the introduction (McCormack et al. 2016).

NHS England make it clear as to why they believe person-centred practice is important to current healthcare. They state that this approach is crucial to providing high quality healthcare and can improve the experiences of patients, all of which will foster an environment inviting improvement in patient lifestyle (NHS England n.d.). To obtain these positive results, person-centred practice itself must be understood in more detail. Key principles of the practice include specialising treatment for each patient through shared decision making, looking for treatment beyond modes traditionally used and shifting the focus from condition to person (NHS England n.d.). McCormack and McCance further emphasise the practice's requirement for increased accountability of how healthcare is centred currently and through this aims to empower those involved to create a more inclusive, collaborative, and personal environment (McCormack et al. 2016). In the following chapter of their book, McCormack and McCance provide an interesting argument questioning what healthcare systems classify as a person. They explain how often in healthcare people who have varying diagnoses/injuries (for example traumatic brain injury) can be classified as less of a person than people in better health, which is extremely problematic if acting through a person-centred approach as all patients should be treated as equals (McCormack et al. 2016).

When detailing how this approach can be carried out in practice, the NHS England guide provides different ways in which this can be done. One of these is through broadening

¹ <https://www.hee.nhs.uk/our-work/enhancing-generalist-skills/enhance-learning-resources/handbook/person-centred-practice>.

understanding of new ways to deliver healthcare such as working with community link workers and care co-ordinators as discussed previously in relation to SP (NHS England n.d.), although no further information is given here about the work these practitioners carry out.

Overall, when researching the use of music in current UK healthcare, many of the attributes music can provide are reflected in the fundamental theories underpinning person-centred practice. Music allows for personalisation of treatment on a case-by-case basis, involvement of new treatment forms and collaborative work with other specialised practitioners listed by the NHS.

Forming the research question:

Through discussion surrounding people of interest, modalities, practices relating to and specificities of music and healthcare, it is apparent that this research area encompasses various elements. From addressing issues and benefits of combining healthcare with music, directly linking the two areas with music therapy, connecting this to people through social prescription and exploring the relation of these to the person-centred approach, the research question for this work was formed. Although many interesting points were discussed, there still appeared to be a lack of literature addressing how these different approaches contribute to the current use of music in healthcare. There was also a lack of information reported through the perspective of medical professionals that aimed to gather a relevant understanding of how music is used within a variety of healthcare settings in the present day. To address these lacking areas, the research question below was formed:

How is music currently used in UK healthcare?

Chapter 2: Methodology

As this research is enquiring how music is currently used in UK healthcare, it seemed most productive to gather information from those who know this setting in detail; healthcare staff themselves. When gathering data from the participant group, the aim was to obtain differing accounts of how music is currently used in their workplace.

Data collection

To gather data for this research, a questionnaire was curated comprising three sections:

1. Demographic and context
2. Current understanding of music in healthcare
3. The use of music in healthcare

These sections used both open and closed questions, collecting quantitative and qualitative data. The first section addressed the work experience, cohort background and context of the recruited group, as understanding the background data of respondents is often highlighted as key when curating a new questionnaire (Langdridge et al. 2009). A summary of the participant group demographic can be seen in table 1.

Table 1: Participant demographic information summary table (ordered by career length)

Gender	Age	Career duration (years)	UK Area	Work Area
Female	21	3 years as student	Scotland	Children's nursing
Female	21	3.5 years (4 months qualified)	NI	Maternity services
Female	21	4 months	Scotland	ICU Staff Nurse
Female	22	4 years student, 1 year qualified	Scotland	Neonatal nurse
Female	25	2	Scotland	Adolescent inpatient mental health
Female	24	3	Scotland	Child nursing
Female	24	4	NI	Nursing
Female	27	10	NI	Nursing
Female	36	12	NI	Learning disability
Female	40	17	NI	Midwifery
Female	40	17	NI	Gastroenterology/Medicine
Female	42	20	NI	Midwifery
Female	46	23	NI	Midwifery
Female	54	25	NI	NHS Organ Donation
Male	56	32	England	General Practitioner
Female	50	33	NI	Maternity services
Female	53	34	NI	Maternity
Female	53	35	NI	Operating theatres
Female	55	35	NI	Intensive care
Female	62	43	NI	Maternity

The second section comprised of questions based on a Likert scale model, with participants invited to indicate the strength of their beliefs in relation to different statements (Bhandari et al. 2022). The final section was the largest of the three and entailed mainly of open-ended questions to gain insight of how the participants use/see music used in their workplace, who uses the services and what the purposes of the artform interventions are. Combining these question types allowed for both descriptive statistic discussion and thematic analysis to be carried out.

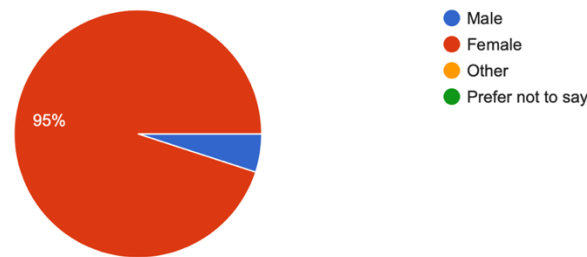
The questionnaire comprised of 11 questions and 10 sub questions, with a closing space for concluding comments. The questionnaire was distributed online as the participant group was sourced from across the UK, therefore sending the data online was a practical way to collect responses from various areas. With the data collation method remaining online, it allowed for anonymous responses due to separation of signed consent forms and response text. The full questionnaire can be viewed in figure 3 of the appendix.

Participants

Healthcare workers were invited to participate in this research as opposed to trained music specialists. This choice was made to address a gap in current research by gaining perspective of how music is used in healthcare settings by those who aren't specifically musically trained. Through previous discussion of the topic, it was clear how trained music specialists can utilise music in healthcare settings, but what was not so clear was how involved medical staff are in witnessing these processes or carrying out musical interventions themselves.

There were 20 respondents total (n=20) with an average age of 38.6 years. The inclusion criteria for the participant group were that individuals must currently work in UK healthcare. For this research, the term healthcare did not limit the recruitment pool to only NHS staff; employees of private healthcare firms, care giving organisation or healthcare charities qualified in the definition of healthcare worker. Of the 20 respondents, 70% of the group worked in Northern Ireland (NI) (n=14). There was one participant who worked in England (n=1) and the remainder worked in Scotland (n=5). There were no responses from anyone working in Welsh healthcare. Most responses came from females (n=19) with only one male response (n=1).

Figure 1: Number of male and female participants



When forming descriptive statistical values for participant's career length, time of study was excluded as the questionnaire had aimed to address those currently in full time employment. This eliminated one response for the curation of descriptive statistic values addressing career length. The average career length of the participants was 18 years and 3 months, ranging from 4 months (n=2) to 43 years (n=1). The most common work area was midwifery/maternity services with 35% of the participants working in this setting (n=7). This was followed by paediatric nursing/non-specified nursing with 10% (n=2) currently employed in each area. All other healthcare regions had only one participant working within them.

There were no financial rewards or incentives offered for participating in this research.

Recruitment protocol

Participants were gathered from a combination of the researcher's personal network and social media. An invitation to participate in the research was sent to healthcare workers known to the researcher via email with an attached link to the online questionnaire. There was also a post circulated on Facebook with a short message informing readers of the research project details and what the questionnaire would entail (see figure 1 of appendix).

Informed consent

As the questionnaire was online, dealing with sensitive data was straight forward. Discussions surrounding healthcare can be extremely personal and issues of patient confidentiality could be raised if participants chose to comment on patient-specific cases of musical intervention. For these reasons, it was crucial to make safeguarding information clear before any data was reported. Both participant information sheet and consent forms were attached as a questionnaire preface. These had to be read and signed before participants gained access to the questions.

Within the participant information sheet, aspects of how data would be stored and safeguarded were outlined (see figure 2 of appendix).

Ethics

Ethical approval for this project was obtained from the course organiser of the dissertation in music course (MUSI10016) within The Reid School of Music at The University of Edinburgh. All questions for the questionnaire were reviewed by the research supervisor before being sent out for completion.

Methodology limitations

When researching areas interlinked with healthcare, there are specific bias that must be considered throughout. Namely, desirability and gratitude bias (NHS England 2018). Desirability bias relates to participants answering questions in order to appear more socially desirable, and gratitude bias addresses how participant responses may be influenced by feelings of gratitude towards healthcare staff (NHS England 2018). The question of gratitude bias may be less relevant in the current research, as respondents themselves are those whom many may respond in thanks to. This could promote a different form of gratitude bias within responses, perhaps with some feeling gratitude towards their workplace/employer.

Another issue is that of sample bias. It could be deducted that participants choosing to fill in this questionnaire may have had a prior interest in this research area, thus the sample perhaps not being reflective of the thoughts of healthcare workers across the UK. Since some participants came from the researcher's own network and their respective colleagues, there was overlapping demographic and contexts of the participant group. The sample size was also a limiting factor as the participant group was more exclusive, but making the questionnaire online aimed to deal with this as it attempted to reach as many participants as possible. Despite the limitations, a questionnaire was concluded to be the best approach in researching the project aims from a selective participant group.

Chapter 3: Analysis

To analyse the current data, a combination of descriptive statistics and thematic analysis were used. The analysis was based on data content, not a particular theoretical framework, and followed Braun and Clarke's six steps for carrying out thematic analysis (Braun et al. 2022):

1. Familiarisation with the data – reading raw collated data multiple times.
2. Coding the data – organising material into code sets.
3. Creating initial themes – combining code sets into themes relating to the research area/question, addressing any arising sub-themes.
4. Reviewing themes – reflecting initial themes against the data set.
5. Refining themes - naming and describing each theme.
6. Writing analysis – combining the theme and sub theme explanations with information from the data set.

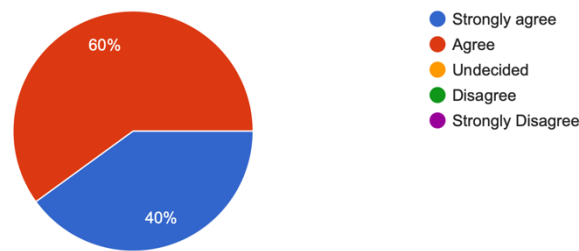
Names were replaced with participant numbers when addressing specific responses to keep the data anonymous.

Descriptive statistics

From section 2 of the questionnaire, Likert scale and closed question responses (Q6, 7, 8 & 9) were analysed through pie charts and later discussed in relation to research findings. Also included in this section were responses from questions 9c and 10. Statistical values for questions 8, 8d and 9 will also be discussed in relation to key findings.

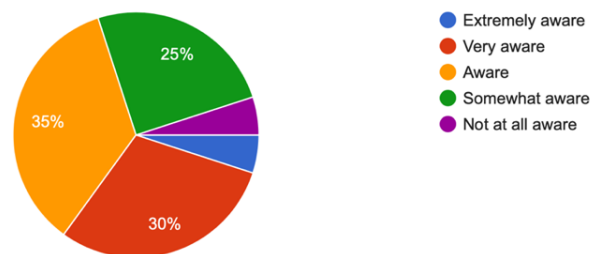
Question 6 asked participants to indicate their opinion on the following statement, '*Music has the potential to have a positive impact on a patient's health*'. In response it was found that all participants agreed with the statement. Sixty percent (n=12) agreed with this idea and the remaining 40% (n=8) agreed strongly.

Figure 2: Question 6 responses



Question 7 asked for a similar scale indication of how aware participants were of the health benefits music could provide. It showed that there was a wider variety of opinion in this area. The most popular indication was 'aware' (n= 7) followed by 'very aware' (n=6). Other responses can be seen in figure 3 below.

Figure 3: Question 7 responses

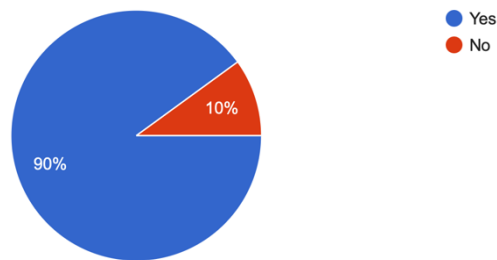


These responses related to the key finding that there appeared to be a lack of awareness within healthcare staff (that filled in this questionnaire) of published literature addressing healthcare benefits. Despite many participants having indicated in Q6 that they believed music could positively impact patient health, the Q7 responses showed varying levels of knowledge for direct music and healthcare benefits. Later discussions revealed that there is perhaps a lack of

translation between the overarching belief of musical intervention's positive impact and supporting literature.

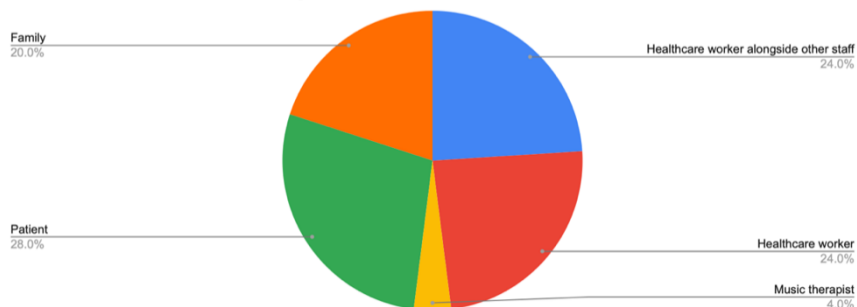
Question 8 inquired if the participants had either used music in their work or had seen others do so. Responses showed that there was musical presence in most of the participants workplaces (90%, n= 2).

Figure 4: Question 8 responses



Question 8d asked participants who facilitated the use of music in their workplace. It showed that the most common group who facilitated musical intervention was made up of healthcare staff alone (n=6) or in collaboration with their colleagues (n=7). Only one response stated a music therapist. Alongside this, other groups mentioned included patients, family members and one musician. This supports another of the key research findings, that there are healthcare workers who currently facilitate musical use in their practice.

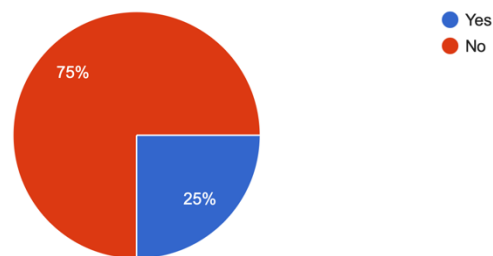
Figure 5: Question 8d responses *As multiple groups were mentioned in Q8d answers they were split accordingly, altering total response numbers for this question to 27*



The next closed question was question 9. This asked if participants were aware of any trained musicians conducting music sessions/interventions in their place of work and provided

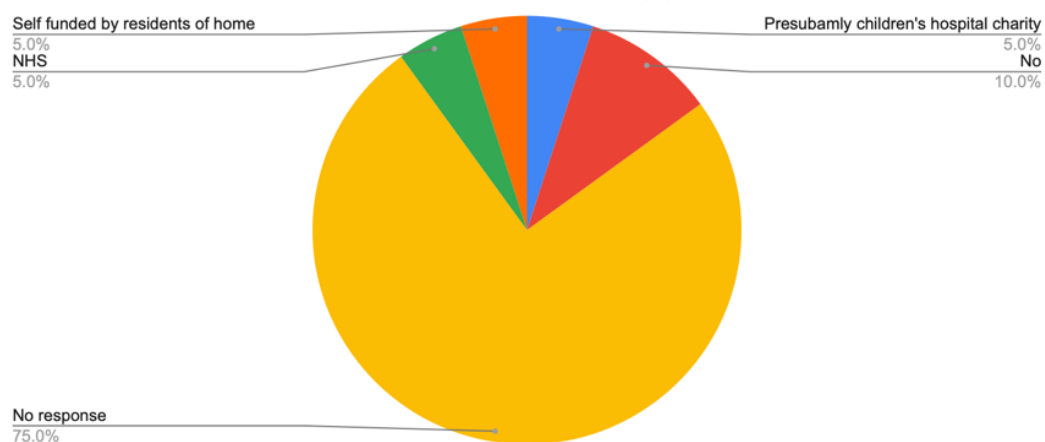
examples of people of interest such as music therapists or community link workers. Responses reflected that three quarters (n=15) of participants were not aware of any such activities. These values reinforce another key research finding, that there is a lack of awareness healthcare staff have of professionals working specifically in music and healthcare settings.

Figure 6: Question 9 responses



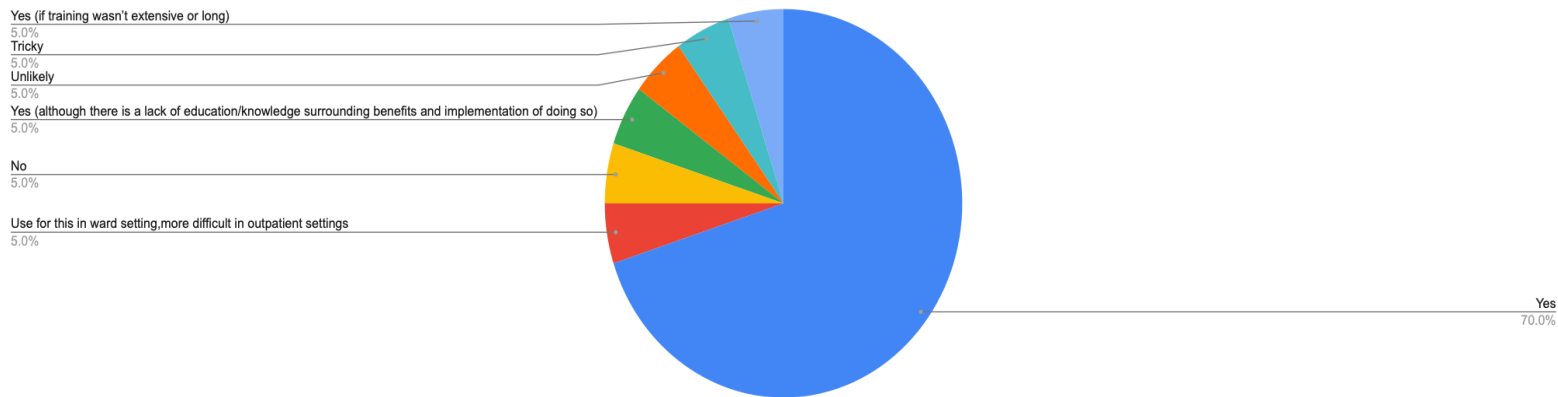
Question 9c asked the quarter (n=5) of participants who had noted that they were aware of musical interventions about funding origins of these activities. As there were only 5 responses in this area, answers mostly varied with only 2 participants sharing the same response. The question found that these participants were largely unaware of how the musical interventions were funded.

Figure 7: Question 9c responses



Question 10 asked if participants would be interested in using music more frequently in their work providing training and guidelines were accessible. It found that most participants in this data set (n=16) would be interested in this idea, with the remaining respondents having differing reasons for apprehension.

Figure 8: Question 10 responses



Thematic analysis

Following thematic analysis, four main themes arose from the raw data. These were named as people, impact, the music, and personal affiliations. Each theme had a variety of sub themes, addressed in table 2 below. The themes and sub-themes will be explained following, with quotations and descriptive statistical data to support them.

Table 2: Themes and sub-themes

Theme	Sub-themes
People	Healthcare staff Patients Labour/maternity personnel Family Music specific individuals
Impact	Calmness Distraction Stimulation Environmental
The music	Musical medium Genre Time specific music
Person affiliations	Preference Personal links to music

People

The first theme addressed the different groups of people mentioned throughout responses. Within this theme there were 5 sub themes: healthcare staff, patients, labour/maternity personnel, family, and music specific individuals.

Healthcare staff

As working in healthcare was the basis of participant recruitment, the influence and discussion surrounding this group was consistent. There was a large presence of healthcare staff presenting themselves as music facilitators. Thirteen respondents listed themselves or other healthcare workers as individuals responsible for creating a musical intervention/listening activity within their work. Most of these indicated a collaboration between healthcare staff when adding music into the setting, demonstrated in responses from P1, “Both myself and other practitioners...”, and P15 “Myself or a nursing colleague...”, when asked who was involved in implementing music in their workplace. The healthcare staff also showed reflection on the impact music had on themselves within their work, with 3 different responses noting how incorporating music helped to boost staff morale. Respondent 4 gave a specific example of this through musical activities set up for healthcare staff in the workplace, “Singing in a hospital choir and has provided a super outlet for staff after busy and long days”.

Patients

The patients themselves were another group that had a large presence in the data. The word patient was used over 50 times and 21 different patient groups were mentioned, making the importance of this group within the data clear. Patient ages mentioned varied from pre-natal babies to elderly and end of life care, demonstrating the large variety of contexts which musical activities had been performed within. There were 7 respondents who had witnessed patients themselves using music during their treatment. Patients were discussed most in relation to perceived outcomes of musical intervention, with this area forming its own theme discussed latter.

Labour/maternity personnel

As previously discussed, many participants (n=7) worked in midwifery and maternity services and referred to service users within. Varying aspects of this sector were mentioned: labour ward, intra parturition mothers, postnatal care, pregnancy, and hypnobirthing. In discussion of

this area, contributions were made to addressing who was using music in these settings - often women during birth - alongside the perceived outcomes music had on the women.

Family

In healthcare areas, it is sometimes easy to forget those involved who are not as obvious as the staff or patients, such as the families of those receiving care. The implications of musical intervention for family members were addressed by many respondents, with P5 having suggested that in healthcare settings music, “helps parents more than patient in my opinion”. P5 also described music as creating a “calm, familiar environment for client and partner”, further highlighting the impact music can have on the relationships between patients and their family in healthcare settings.

Music specific individuals

There were two examples of music specific personnel having active involvement in the use of music in healthcare. Participant 18 was a music therapist, with all answers related specifically to this specialist area. P1 gave the other example of a musician providing music in healthcare settings. They described a “... man who plays guitar and holds sessions in the playrooms on wards... he also goes around patient rooms of those who wish.” Both examples showed occasions where musicians were the people of interest when making music in healthcare settings, with one trained specifically in the combination of these two areas.

Impact

As mentioned above, there was a large discussion of the perceived impact of musical interventions amongst varying groups of people and locations of treatment. These discussions were divided into 4 sub-themes, calmness, distraction, stimulation and environmental.

Calmness

Over 70% of responses mentioned feelings of calmness and relaxation as outcomes seen in patients or staff following musical intervention. Most participants used calmness/relaxation as interchangeable terms but P3 separated these by stating that music was good for, “Calming agitated patients to try and relax them”, indicating that, in their opinion, these are two different states reliant upon each other. Calmness was related to its impact on patients during medical

procedures, exemplified by P7's comment of music, "aiding relaxation in labour", P17's use of music to, "...encourage focus and calm feelings throughout labour to aid breathing", and P12's observation of, "It (music) calmed the patient down and he gave more focused eye contact with nurse". Within this theme, there were linked discussions to music's involvement with sleep in healthcare settings. Since a certain level of calmness is required to sleep, these comments were included within this theme. This was addressed by P1 who noted that, "Lullabies or piano music is a great help in soothing babies and helping them sleep".

Distraction

Another impact of music in healthcare was its perceived ability to divert patient attention from other actions/events ongoing. One response, P11, noted that they witnessed music being used in distraction therapy, a form of cognitive behavioural therapy. Some discussion surrounding music's ability to distract was linked to feelings of relaxation/calmness previously discussed, perhaps indicating a link formed by healthcare practitioners between distraction from active treatment and the state of calmness a patient feels. This was highlighted by multiple respondents exemplified by P19 and P7 in their comments on the anticipated outcomes/aims for music use, "Calming patient mood, distraction from experiencing distressing emotions" (P19) and "Relaxation/diversion" (P7).

Stimulation

Contrasting to the calmness outcomes mentioned previous, there were multiple accounts suggesting that musical interventions were linked to increased levels of stimulation and other related reactions. Increased stimulative responses were listed as an objective aim for musical interventions through music therapy by P18, "aims to do with attention, interaction". Music interventions related to brain activity and responses were mentioned twice. First by P12 where they used music to, "stimulate awareness, reaction in traumatic head injury patient", and then by P14 where music was put on, "for intubated/sedated patients to stimulate brain activity". Alongside musical stimulation, P11 states that they have, "used dancing fruit with music for babies for visual stimulation.", to increase sensory exposure for patients.

Environments

The last sub-theme related to the impact music in healthcare settings had on the environment in which it occurred. One quarter of the responses mentioned the effect music had on surrounding environment. When discussing this, many participants addressed the unfamiliarity

of healthcare settings for patients. This was then related to the ability they believed music had to combat these feelings of uncertainty by encouraging normality and familiarity through environmental perception. P3 discussed the potential music had to improve emotions through environmental changes in patients becoming, “less agitated as they have something they can associate with even in an unfamiliar environment”. Links of environment and familiarity continued through P4’s, “(music) provided familiarity and calm in an unfamiliar situation”, P1’s “music makes the environment feel less stressful and more inviting for children”, and P2’s responses “(music) provided a familiar environment in new surroundings”. One response (P5) addressed the environmental impact of music for people other than the patient, “created a calm, familiar environment for client and partner”.

The music

There were various responses linked to the different elements of music used within current healthcare. These were divided as follows, musical medium, genre, and time-specific music.

Musical Medium

The main way music was consumed in healthcare, as suggested by the 20 responses, was through music listening. There were two common areas within which this was suggested to be done. First was personal downloads and playlists created by patients. These forms of organised listening were mentioned 10 times throughout the data. The second was the radio, although specific channels were not always listed. Live music interventions were mentioned on five occasions. Once for patient participation by P4, “...patient with low mood encouraged to bring guitar in to play as (they) used to be part of a band”. The second by P1, “We also have someone who comes in and plays live music on guitar”. The third by P18 (music therapist) who involved collaborative live music making through improvisation in sessions. P11 stated they had, “seen a lot of work done within the RHC hospital with musicians coming round bedside to perform to patients.”. Finally, P13 described settings where, “Parents were singing to babies”.

Genre

Through musical forms listed above, there were varying mentions of musical genres within the data. Country was identified by 3 participants, and one (P14) provided a specific artist and patient relationship, “Shania Twain for my dementia patient, he was a big fan”. Lullabies were

frequently mentioned, usually discussed in relation to sleep exemplified by P1, “lullabies to help babies sleep”. The presence of instrumental music (a term used to represent non-vocal music) was identified by 7 participants. The final genre/musical area of interest was hymns/religious music. Some responses listed hymns as a stand-alone genre where others, P14, discussed religious music in relation to a family requesting music on behalf of a patient, “different religious stations requested by a Muslim family for their relative in hospital.”

Time specific music

Some respondents gave time indications for the music they played to patients opposed to genre classification. P6 commented that they played, “50’s and 60’s music for the elderly patients, nursery rhymes for children”. P3 suggested a possible link between earlier discussed hymns and older patients, “old fashioned dance songs and hymns”, assuming that the dance songs were played for those from an older generation who were most likely to recognise them. For children and babies P1, who earlier identified themselves as a children’s nurse, mentioned that they used, “most commonly lullabies and piano covers of Disney music” with children on the ward, two music types often associated with young children.

Personal affiliations

An overwhelming importance within what type of music was used in healthcare was placed on the impact of personal ties individuals had to music. This was discussed in relation to two main areas, preference and personal links.

Preference

There were four ways in which the importance of personal preference was indicated when music was used in healthcare. The first of these was patients choosing to play their favourite songs, with the term favourite used in relation to music played on 4 different occasions. Next was the implications playing preferred music had on patient reactions, demonstrated by P18, “they got excited by music, able to say it was their preferred music”. Family members were noted to have an important role in providing information on patient’s favourite music, as described by P3, “the family members helped to provide a genre of songs which the patient liked”. Lastly, P4’s comment when asked who implemented music in their work reflected how some healthcare workers from this group used knowledge of individual preference to introduce

musical intervention, “myself based on patients own likes”. Many respondents also stressed the importance of choice when music was used in care, with some respondents stating that patients were involved in choosing the music they were exposed to.

Personal links to music

Personal links people had to music were also mentioned in relation to the use of music in healthcare. These connections were often used as reasoning for specific music being played. Music linked to past happy memories was addressed by P15 who mentioned they had previously played patient’s wedding songs for them. Personal links to music were not only discussed in relation to patients, but also to family members by P15 who played music that, “represented some significance with the patient/family”.

Overall, the 4 main themes and 14 sub themes that arose from the data provided an interesting outlook on when, how, and why music was used in current UK healthcare.

Chapter 4: Discussion

Having witnessed the potential for music to impact people in different areas of health and social care, this research aimed to gather understanding of how music is currently used in different healthcare settings. Despite current publications supporting the health benefits music can enable, there remains a lack of literature addressing how music is currently implemented in healthcare. To address this lacking area, the research question was formed, inquiring how music is currently used in UK healthcare. With a variety of theories and professionals relating to musical intervention in healthcare settings, as discussed in the literature review, the intention here was to relate these to current data on the topic. This aimed to highlight the commonalities between published research and current practice.

Key findings

There were several key findings that arose following data analysis. The first demonstrated that there was a lack of engagement with literature/findings addressing healthcare benefits of music by the healthcare staff involved in this research. Following this, there also appeared to be a lack of acknowledgement for professionals working specifically in this area. Despite both findings, healthcare workers from this research appeared to frequently use music in their practice anyway, with over 80% of respondents stating they had seen music used in their workplace. The music was commonly present through music listening activities, usually through downloaded material or radio play. The music used within healthcare settings was facilitated mostly by participants themselves (healthcare staff). The main reasons for musical intervention were the perceived impacts it had on patient welfare and healthcare environments, usually evoking emotional responses such as calmness and relaxation combined with feelings of comfort and familiarity. There was a lack of understanding of the practical aspects of musical interventions, with origins of funding mostly unknown. Despite this, there was considerable support from healthcare workers involved in the study in the belief that music could positively impact patient's health and nearly all respondents were eager to use music more frequently in their work.

Interpretations

Most participants reported that musical interventions were present in their work. When considering why this might be, there is possibility that it could be linked to the increased presence of person-centred practice. As demonstrated previous, many of the fundamental theories that underpin person-centred practice linked closely to reasons for musical intervention given by participants, reflected in the thematic analysis. These included the importance of patient choice in treatment, personalisation of healthcare interventions, shared decision making and encouragement of alternative forms of treatment (McCormack et al. 2016). The current relevance of person-centred practice is further reflected through constant updating of materials encouraging this approach, with information in all NHS guides accurate as of 2024. This could suggest a rise in the need, awareness, and implementation of this practice due to its frequent addressing in publications.

There is possibility that an increase of engagement with person-centred practice objectives could lead to more musical opportunities in healthcare, due to the shared fundamentals of practice. If this was to be the case, the information gathered throughout responses provided insight into how musical interventions were being carried out within healthcare currently, largely through music listening. Although music listening was indicated to evoke a multitude of responses, thoughts, and actions throughout healthcare, there was a lack of engagement present with active music making and live performance. When analysing the different reported patient responses to music listening, it became obvious that obtaining more examples of outcomes following varying forms of musical consumption or involvement was necessary. This would provide a more detailed insight into how different musical elements could impact patients. Through further research into the impact different musical forms had on healthcare groups, it could provide clearer insight into how these musical forms could then be used in treatment.

Considering this, there are remaining benefits for music facilitators using music listening activities that should not be ignored. For example, the ability to implement music without facilitators requiring musical training. Since the most common forms of music listening occurred through downloaded materials and radio, the accessibility of these mediums is a crucial factor in understanding why they were used so frequently by healthcare staff. With the extreme pressures healthcare staff currently face, as addressed in the introduction, having forms

of music that can be employed easily with minimal effort or training appears to be the perfect fit for these settings.

Despite the frequent use of digital music forms by healthcare staff, they are also present in more specialised areas of music and health services. Edwards mentions not only digital music, but specifically pre-composed and recorded materials as being actively used within music therapy sessions, demonstrating that these musical forms, although the most easily accessible, are not to be viewed as lesser when examining their impact on healthcare areas (Edwards 2017). Perhaps the focus on digital pre-composed music throughout responses reflects a wider societal shift towards streaming and online music downloading rather than a specific alteration within the healthcare sector. Similar to Edwards' list of musical forms used in music therapy, there were varying musical styles identified as being used in healthcare practice (Edwards 2017). The lack of commonality in the specific genres/styles of music used in healthcare would indicate that the previous theories of treatment personalisation in person-centred practice are being reflected through personalised music choice, catering each musical experience to be reflective of the individual.

The UK healthcare staff who participated in the research indicated that perceived outcome of musical interventions often underpinned the reasoning for its facilitation. As reflected in the data, most musical interventions in healthcare settings were carried out by participants themselves (the healthcare staff), not trained area specialists. Although it is positive for the research area to understand how music is currently used in healthcare, it could also indicate a requirement to raise awareness for those trained in healthcare and music sectors specifically (such as music therapists and community link workers). There was a lack of acknowledgement for these practitioners by staff surveyed, indicating a need for further education on these areas. Despite the lack of recognition for music therapy specifically, healthcare staff appeared to understand and identify the valuable therapeutic outcomes musical interventions could have on patients. As reflected in the responses, outcomes of musical activity usually arose from music medicine settings (therapeutic benefits of music enabled following musical intervention from healthcare staff (Colwell 2015)). Since therapeutic outcomes were identified by participants following musical interventions, there is danger this could encourage incorrect labelling of music medicine as music therapy. Not only does this disregard the specialist training music

therapists undergo but could lead to an increase of absent-minded music exposure for patients, diluting the perceived benefits of this practice.

With that said, findings from this research indicated that positive musical interactions occurred currently within a variety of patient groups. Many groups that currently used music in their care, that were identified by respondents, overlapped with those Chapman et al. and Colwell found to present positive outcomes following music interventions (Chapman et al. 2022) (Colwell 2015). To progress the research field, if these same patient groups continued to benefit from different forms of musical intervention, more evidence could be gathered to demonstrate the positive impact music had on their healthcare experience. There was however, one large group that was not present in the previous literature discussed but had an overwhelming presence in the data, midwifery and maternity services. Although many in this area saw staff and service users using music during treatment, there was a lack of midwifery-based literature to support these findings. There were other patient groups who were not mentioned in previously discussed literature, indicating that relevant research needs to continue to showcase evidence of the outcomes musical interventions could have with patient groups not yet addressed.

Some participants mentioned family importance and influence when reasoning choice of music for patients. This was an interesting addition to Colwell's previous discussion of the group (Colwell 2015). Through indicating that family interventions are not always productive in music and healthcare relations, Colwell comments that families have potential to influence patients to do things they don't want to or often speak on behalf of them altogether. This encouraged questioning of the productivity of family's indications of patient's musical preferences or request for music when patients were unable to discuss their own wishes. Not only could this undermine the patient's involvement in their care demonstrated in person-centred practice, but also could potentially lead to unwanted musical exposure.

However, when selected carefully, the presence of patient preferred music in healthcare settings links to aspects of shared decision making and personalisation of treatment within person-centred practice (McCormack et al. 2016). The use of personal music preferences in practice encourages treatment to become more personalised which is highlighted as a key focus area for current healthcare by the NHS in their social prescription guide (NHS England 2020). The importance of patient choice when using music was highlighted not only by Moss in 2021, but also by the healthcare staff who filled in the questionnaire. This was exemplified through

respondent indications that patient choice was often considered when choosing what music was to be played. Despite the importance of personalisation and choice in this area, there are questions of how this can be done successfully on ward settings. As people have differing musical preferences, playing the preferred music of one may be counterproductive to others in a shared setting (presuming there were limited individual listening options). This could perhaps demonstrate an example of the aesthetic poisoning described by Moss previously and indicates requirement for further organisational aspects to be addressed when attempting to access clinical benefits of musical intervention (Moss 2021).

Findings relating to the positive impact of music in current healthcare aligned with the literature published addressing health benefits of music. For example, the same perceived feelings of calm in patients following musical interventions were seen both by staff participating in this research and Skivington et al. in 2018. This is a positive indication, as participants suggested similar results relating to patient welfare were found despite those who usually facilitate these events, a music therapist or musician, not being present. This has potential to widen possibility for the implications of this practice in relation to the facilitators required for activities. Although largely a positive outcome, this could continue to confuse differences between music therapy and therapeutic music. If healthcare staff are aware that they could achieve, on a general level, similar outcomes to socially prescribed music/music therapy sessions without extensive training in the area, it could minimize the specialism of these practices.

Reflecting another positive indication of this research area, both Colwell and current healthcare workers both believed in the functionality of music to distract from ongoing medical procedures (Colwell 2015). Both the respondents and Colwell described the possibility of music to distract from the unpleasantness of medical procedures as a motive for its use within healthcare, linking staff action to theoretical knowledge. An area that connected respondent's perception of musical function in their work to another form of specialised treatment was environmental music therapy (EMT). EMT was not mentioned by any of the respondents, yet it specifically addresses the same discussion many highlighted of how music could impact environments and change the feelings of people within them. The pilot study carried out by Canga et al. explains the specialism of EMT and its aims to alter environments through music. This linked directly to many responses that addressed the belief that music had a positive impact on healthcare environments. This relates to one of the key research findings, that there is a lack of translation between published literature on music and health benefits and healthcare

staff themselves. The responses indicated that the practice of EMT was being approached by healthcare staff yet as it was not mentioned in the responses there appears to be a missing link between current practice and specialist areas that correspond.

Another area that lacked awareness was the origins of funding for music and healthcare related activities. The social prescribing literature previously discussed repeatedly addressed a lack of funding for SP initiatives, perhaps explaining the reduced knowledge of this area as again, it was not discussed in any responses. This could be seen as a current example of the implications funding shortages have on this initiative, addressed previously by Skivington et al. in 2018. They believed that an absence of funding contributed to the lack of awareness of trained professionals and utilisation of music and healthcare related services. This perhaps explained why specialist practices such as music therapy, EMT, and social prescription were rarely mentioned throughout the data.

Overall, throughout responses support was demonstrated for music to have an increased use in UK healthcare. Almost all respondents indicated that they would use music in their work more frequently, the next question therefore, is how this would be done. One potential answer could be increased implementation of social prescription. SP addresses many of the same patient groups and anticipated outcomes relating to music and health mentioned by participants. The social prescribing guides discussed previously also directly link varying healthcare occupations to the implementation of musical interventions. Perhaps if published findings in relation to music and healthcare areas were engaged with more or included in staff training, the practices would be used more frequently. For example, if more healthcare staff were aware of Skivington et al.'s 2018 findings of reduced pressure on and number of appointments made within a Glasgow GP practice following social prescription intervention, they may be more inclined to seek involvement. Other publications also directly addressed questions healthcare staff raised for using music more frequently in their work. One participant stated they were unsure of how musical intervention would work with outpatients, yet this is mentioned directly by Colwell in 2015 when discussing which patient groups can receive music therapy sessions. Again, this further indicates that there is space within healthcare for focused musical interventions, but a large barrier for implementation is the lack of engagement with published literature of the subject.

The responses reflected support of the theory that music could positively impact patients' health. This could aid in progressing this research field as it showed the practitioners involved believed in the positive functions of music in healthcare settings. Yet this also intertwines with the continuing danger of blanket positivity statements. In the questionnaire final remarks there were two statements that related to this issue. These were, "music promotes wellbeing so can only be a positive influence in healthcare", and "I feel everyone likes some sort of music so any patient/client would benefit from some". Although seemingly positive, these comments could demonstrate that the blanket positivity statements relating to Moss's ideas that music is assumed to be good for all, could be evident in current healthcare (Moss 2021). These views may lead to enforced musical exposure that, if not carefully thought through, could dilute the impact music has within healthcare settings overall. This demonstrates that although it is positive that the participants were in support of music being used more frequently in their work, there is still progression required in the education of this area to ensure each musical intervention is meaningful, productive, and important.

Limitations

As this is an undergraduate dissertation, there are a variety of limitations within this body of research. In relation to data, there was no inter reliability carried out, as coding was only performed by the researcher themselves. Due to the small-scale size of the study, there was not time for a specialised recruitment strategy to ensure participants from all UK areas were present. This resulted in obtaining no responses from Wales, weakening the aim of this research to look at healthcare UK wide. The sample size proposed another issue, with the researcher having only 20 responses to analyse when aiming to understand attitudes towards musical activity of the whole UK healthcare system. Although this was unavoidable as getting responses from every member of healthcare staff across the UK would not have been possible, it must be noted that the findings and interpretations based upon this research are in relation only to the responses given through the questionnaire. It is also likely that sample responses were not fully representative of UK wide beliefs on the topic. As the questionnaire was voluntary, it was likely that participants may have had a prior interest in the research area, influencing their decision to complete the form and perhaps their responses also. The length of data for analysis was another hinderance for the research, as responses were relatively short to conduct a thematic analysis approach on. Although there were limitations within the work, the

findings and engagement with the topic were still able to reach definite conclusions and present new material for the project.

Implementations and recommendations

There are a variety of ways in which this research could be implemented into the routines of healthcare staff currently. Through the findings following questionnaire analysis and engagement with literature, this research offers an insight into different ways to use, outcomes that could follow and precautions to consider when using music in healthcare. It also provides basis for further research paths. These could include but are not limited to:

- Focusing specifically on the use of music in one area of the UK
- Focusing on the use of music in maternity services
- Researching specifically the implications a lack of engagement with published research has on the position of music in healthcare
- Linking the framework of person-centred practice directly to musical interventions in healthcare
- Researching the impact different musical features have on different patient groups (similar to the established research of rhythmic music with Parkinson's disease patients)

There are also research aspects that could be developed if a similar body of research was to be done again. Firstly, having a longer period of data collection time could perhaps lead to more varied responses obtained, possibly gaining information from Welsh healthcare staff, and increasing the number of male participants. Although the questionnaire format allowed for both descriptive statistical and thematic analysis, using semi-structured interviews would allow for longer responses to analyse. As this research area is relatively new, perhaps carrying out a similar research project when there is more published literature on the topic would allow for a fuller understanding of this research and its implications.

Conclusion

With the awareness that music can provide various health benefits, this project aimed to investigate how music is currently used in UK healthcare. Despite a presence of published literature demonstrating the positive outcomes of musical interventions in healthcare, there was a lack of research addressing how these benefits are currently accessed. To address this research gap, the question of ‘How is music currently used in UK healthcare?’ was formed.

The key research findings were as follows. Firstly, there are multiple health benefits music can enable. Secondly, despite its presence, there was an indicated lack of awareness amongst healthcare staff participating in the research of the published literature addressing these benefits. Regardless of this, the healthcare staff questioned appeared to frequently use music in their current practice despite the lack of acknowledgement for research in support of this initiative and trained professionals in this area such as music therapists and those working in social prescription.

Other findings demonstrated that the participants involved believed music could positively impact patient’s health. The analysis showed that musical interventions mentioned by participants were mostly carried out by healthcare staff themselves. The most common form of music intervention appeared to be the playing of pre-recorded music to patients by staff as a form of music medicine (Colwell 2015). Healthcare staff reasoned these interventions as having perceived positive impact on patients or the environment they were in through encouragement of positive emotions and feelings.

In relating this research to relevant publications, staff showed encouraging indicators in support of carrying out music interventions with a person-centred approach to practice. This was reflected in the motives and outcomes listed for using music in healthcare, with these supporting the re-humanisation of healthcare at the core of person-centred practice (McCormack et al. 2016).

Following this, the discussion of social prescription literature would often address questions posed by healthcare staff surrounding musical interventions. This could indicate that SP has the potential to bridge the gap between healthcare staff and awareness of musical interventions.

Looking at outcomes of music therapy in parallel to perceived outcomes of the participant's medical music examples demonstrated that there were successful musical interventions happening currently in healthcare following staff intervention.

In terms of research application, this project could provide helpful insight for other practitioners who are keen, but unsure of how, to introduce music into their work. Through descriptions of musical medium used, aims for intervention, and described outcomes of practical experience, the project could provide a useful framework for healthcare workers seeking to implement music into their practice. For future research, this project provides a starting point within an area that has room for further refinement, such as specifying further research for staff in certain healthcare areas or within a specific area of the UK.

In conclusion, this research project exemplified that there are currently healthcare workers within the UK who use music frequently within their practice. The participant responses indicated that there are also healthcare staff eager to use music more frequently within their workplace. This is due to their overarching beliefs in the ability of music to achieve a positive influence on different aspects of patient treatment and healthcare areas. To encourage this initiative, there must be a stronger relationship built between the published literature on the health benefits of music and healthcare staff themselves. This could, in turn, improve the quality, understanding and standard of musical interventions that the participants indicated were already occurring.

In closing remark, this research showed a need for increased awareness of literature relating to and specific professionals that directly address, the untapped beneficial potential that combining the worlds of music and healthcare may provide.

References

Books/ Book Chapters:

- Braun, Virginia and Victoria Clarke. 2022. *Thematic analysis: a practical guide*. Los Angeles: Sage Publications.
- Colwell, Cynthia M. 2015. 'Researching Music Therapy in Medical Settings.' In Jane Edwards (Eds.). *The Oxford Handbook of Music Therapy*, 827-844. Oxford: Oxford University Press.
- Edwards, Jane. 2017. 'Conceptualizing Music Therapy: Five Areas that Frame the Field.' In Jane Edwards (Eds.). *The Oxford Handbook of Music therapy*, 1-14. Oxford: Oxford University Press.
- Langdrige, Darren and Gareth Hagger- Johnson.2009. 'Part 1- Introducing research Methods: Section 5- Collecting data 2 Questionnaires and Psychometric tests.' *Introduction to Research Methods and Data Analysis in Psychology Second Edition*, 87-113. Harlow: Pearson.
- McCormack, Brendan and Tanya McCance. 2016. *Person-Centred Practice in Nursing and Health Care: Theory and Practice*. New Jersey: John Wiley & Sons.
- Moss, Hilary. 2021. *Music and Creativity in healthcare settings: Does music matter?* Oxford: Taylor & Francis Group.
- Pavlicevic, Mercédès. 1999. *Music Therapy: Intimate Notes*. London: Jessica Kingsley Publishers.

Online Journal articles:

- Canga, Bernardo, Cho Long Hahm, David Lucido, Michael L. Grossbard and Joanne V. Loewy. 2012. 'Environmental Music Therapy: A Pilot Study on the Effects of Music Therapy in a Chemotherapy Infusion Suite.' *Music and Medicine* 4(4): 221-230. Doi:10.1177/1943862112462037.
- D'Ambrosio Floriana, Antonio Giulio de Belvis, Alisha Morsella , Greta Castellini, Guendalina Graffigna and Patrizia Laurenti.2020. 'Life After COVID-19: Rethinking the Healthcare System and Valuing the Role of Citizens' Engagement in Health Prevention.' *Frontiers* 11 (589249):1-3. Doi: 10.3389/fpsyg.2020.589249
- Silverman, Michael J., Jennifer Bibb. 2018. 'Acute care mental health workers' assumptions and expectations of music therapy: A qualitative investigation.' *Science Direct - The Arts in Psychotherapy* 59: 94-100. <https://doi.org/10.1016/j.aip.2018.05.002>
- Skivington, Kathryn, Matthew Smith, Nai Rui Chng, Mhairi Mackenzie, Sally Wyke and Stewart W Mercer. 2018. 'Delivering a primary care-based social prescribing initiative: a qualitative study of the benefits and challenges.' *British Journal of General Practice* 68 (672): 487-494. <https://doi.org/10.3399/bjgp18X696617>

Online guides:

Chapman, Baz and Barbra Eifler for Making Music website. 2022. 'Social prescribing to music groups in the community a guide for leaders and committees of music groups.' Last modified April 2022.

<https://www.makingmusic.org.uk/sites/makingmusic.org.uk/files/Social%20Prescribing%20-%20Music%20Groups%20guide.pdf>

Health Education England (NHS). N.D. 'Person Centred Practice.'

<https://www.hee.nhs.uk/our-work/enhancing-generalist-skills/enhance-learning-resources/handbook/person-centred-practice>

NHS England. 2020. 'Social prescribing and community-based support, Summary guide.' Last modified June 2020.

<https://www.england.nhs.uk/wp-content/uploads/2020/06/social-prescribing-summary-guide-updated-june-20.pdf>

Websites/ Web pages:

Bhandari, Pritha and Kassani Nikolopoulou. 2022. 'What is a Likert Scale? Guide & Examples.' Last modified 16 January 2023. <https://www.scribbr.co.uk/research-methods/likert-scales/>

Cook, James for BBC News. 2023. 'Why is the NHS under so much pressure?'. Last modified 9 January 2023. <https://www.bbc.co.uk/news/uk-scotland-scotland-politics-64211810>

NHS England. 2018. 'Writing an effective questionnaire.' Last modified January 2018.

<https://www.england.nhs.uk/wp-content/uploads/2018/01/bitesize-guide-writing-an-effective-questionnaire.pdf>

World Health Organisation. 2022. 'COVID-19 has caused major disruptions and backlogs in healthcare, new WHO study finds.' Last modified 20 July 2022.

<https://www.who.int/europe/news/item/20-07-2022-covid-19-has-caused-major-disruptions-and-backlogs-in-health-care--new-who-study-finds>

Appendix

Figure 1: Recruitment protocol

How is music currently used in UK healthcare?

For this study, I am collecting online responses from healthcare workers across the UK. To recruit my intended participants, I will be sending out the questionnaire to a variety of healthcare practitioners within my personal network. These will include General Practitioners, midwives, and nurses. The questionnaire will be sent via email with a direct link to the Google form. Participants will also be invited to share the link to the questionnaire with their co-workers.

The link to the questionnaire will also be posted online (Facebook and Instagram) with a brief description (see below):

How is music used in UK healthcare?



'For my undergraduate dissertation in Music at The University of Edinburgh I am researching how music is currently used in UK healthcare. If you work in healthcare, please consider filling in the form, linked in this post. All responses will be fully anonymous and will only be discussed in my UG dissertation. Thank you.'

A combination of the social-media posts and emailing the link to healthcare workers will create an accumulation of responses from a variety of professionals.

Figure 2: Information sheet and consent form

Participant Information Sheet

(Name)

Dissertation in music

(email address)

You are being invited to take part in a questionnaire study carried out by (name), to be used in her dissertation entitled “The current use of music in UK healthcare”. The dissertation is part of an undergraduate degree in Music at The University of Edinburgh and the study is being supervised by Professor Katie Overy.

The aim of the study is to understand how music is currently used in a variety of healthcare settings within the UK.

This questionnaire is for academic purposes only and all responses will be kept anonymous. Your name will not be linked to or stored with your response. Your participation is entirely voluntary. If at any point you wish to withdraw from the study, please email (email address) and any answers you have submitted can be removed. As mentioned, all data will be kept anonymous and the information will be stored securely on an external hard drive and backed up on a university server, only viewed by the researcher and supervisor.

Thank you for considering participating in this research project. If you would like to go ahead with the questionnaire, please complete the consent form below before filling in any responses.

If you have any questions, please do not hesitate to email me at (email address).

Thank you,

(Name)

Consent form

I have read the Participant Information Sheet and I consent to my data being used anonymously in this research project:

Signature: _____

Date:

Figure 3: Questionnaire

Thank you for taking part in this questionnaire. Please answer the questions in the spaces provided. Please feel free to write as much or as little as you like. All responses will be kept anonymous – your answers will not be linked with your name. If you have any questions, please email me at (email address).

Section 1: Demographic and Context

- Q1. What is your age?
- Q2. What is your gender?
- Q3. What area of healthcare do you work in?
- Q4. Where is your job based? (Country and city/area)
- Q5. How long have you worked in healthcare?

Section 2: The understanding of music and health benefits

Q6. To what extent do you agree with the statement below:

'Music has the potential to have a positive impact on a patient's health.'

Strongly Disagree Disagree Undecided Agree Strongly Agree

Q7. How aware are you of any health benefits that music can provide? *Please select where appropriate.*

Not at all Somewhat Aware Very Extremely
aware aware aware aware aware

Section 3: The use of music in healthcare

Q.8 Have you ever used, or seen music being used in your current role at work? *Please select yes or no. If you answered no, please skip to question 9.*

Yes No

Q8a. For what purpose/s was the music used? Do you know if there were any aims or anticipated outcomes?

Q8b. What, if any, did you perceive to be the outcomes of the music's presence?

Q8c. With which patient group/s have you used, or seen music used with?

Q8d. Who facilitated the music's use? Was it yourself or another practitioner?

Q8e. What kind of music was typically used? (E.g. Genre/style, instrumental/vocal, recorded/live/radio)

Q8f. Who chose the music that was used?

Q8g. Do you know what the reasons were for this music being chosen?

Q9. Are you aware of any trained musicians conducting music sessions, projects, or interventions in your workplace or with patients/clients? (Examples may include Music Therapists or Community link workers) *Please select yes or no. If you answer no, please skip to question 10.*

Yes No

Q9a. With what patient group/s do the musicians work with?

Q9b. Do you know how this originated? (For example, was the service requested by staff or offered from another institution?)

Q9c. Do you know how the work is funded by your institution?

Q10. Would you be interested in using music in your workplace more frequently if the correct training and guidelines were provided?

Yes No

Q11. Do you have any other comments?

Thank you for your time!

Figure 4: Responses (Raw data)

If participants gave multiple answers, these were separated into correlating section.

1. What is your age?

21 x3
 22
 24 x2
 25
 27
 36
 40 x2
 42
 46
 50
 53 x2
 54
 55
 56
 62

2. What is your gender?

Female x 19
 Male x 1

3. What area of healthcare do you work in?

Midwifery x 3
 Maternity x 4
 Nursing x 2
 Adolescent inpatient
 Gastroenterology/Medicine
 Learning Disability
 Children's nursing X2
 Operating theatres
 ICU staff nurse
 Organ donation NHS
 Intensive care
 Neonatal nurse
 GP (General practitioner)

4. Where is your job based? (Country and city/area)

Northern Ireland:

- Belfast x 8
- County Antrim (Northern Health and Social Care Trust) x2
- Dundonald (South-Eastern Trust)
- Newtownabbey
- Antrim x2

Scotland:

- Greater Glasgow and Clyde
- Glasgow Royal Hospital for children
- Glasgow x2
- Edinburgh

England:

- Middlesborough

5. How long have you worked in healthcare?

Ordered from least to most years:

3 years as student
 4 months
 3 ½ years (employed 4 months)
 1 year qualified, 4 years as student
 2 years
 3 years
 4 years
 10 years
 12 years
 17 years x2
 20 years
 23 years
 25 years
 32 years
 33 years
 34 years
 35 years x2
 43 years

6. To what extent do you agree with the statement below:

'Music has the potential to have a positive impact on a patient's health.'

Agree x12

Strongly agree x8

7. How aware are you of any health benefits that music can provide?

Extremely aware x1

Very Aware x6

Aware x7

Somewhat aware x5

Not at all aware x1

8. Have you ever used, or seen music being used in your current role at work?

Yes x18

No x2

8A. For what purpose/s was the music used? Do you know if there were any aims or anticipated outcomes?

Labour/Maternity:

- To calm patients and encourage parent/baby bonding
- Throughout labour for hypnobirthing

- Music played with a woman in labour

Patient Diversion/Distracton:

- Relaxation/diversion
- Distraction therapy
- Distraction, calming mood

Relaxation/Settlement:

- Relaxation x3
- Calming agitated patients to try and relax them
- Relaxation and to help patient focus
- Put on to settle an unsettled patient in ward
- To relax patients having local surgery or to help the surgeon as well

Other:

- Lullabies to help babies sleep - live music in the wards to create a distraction for the children - background music for staff to boost mood
- Putting on music for intubated/sedated patients to stimulate brain activity and provide comfort if they're able to hear music they enjoy
- Music therapy sessions - aims to do with attention, interaction, and persons sense of self
- For patient comfort, to lessen boredom and at family request during last offices
- Used to stimulate awareness, reaction in traumatic head injury patient

Q8B. What, if any, did you perceive to be the outcomes of the music's presence?

Calming/Relaxation:

- It calmed the patient down and he gave a more focused eye contact with nurse
- Calming patient mood, distraction from experiencing distressing emotions
- Helped keep the woman calm and motivated her to keep in control
- Relaxation
- Relaxes patients having music on that they like
- Aided relaxation in labour
- Lullabies or piano music is a great help in soothing babies and helping them sleep x2

Providing normality:

- Patients can become less agitated as they have something they can associate with even in an unfamiliar environment
- Created calm, familiar environment for client and partner
- Provided familiarity and calm in an unfamiliar situation
- Provided normality

Effect on the environment/people within:

- Helps parents more than patient in my opinion
- Brighten the patient's day and as a comfort to families
- Music makes the environment feel less stressful and more inviting for children
- Music also boosts staff morale x3

Effect on the patient:

- Patient anxiety decreased
- Patient satisfaction
- Allowing clients who are "locked in" by their severe learning disability to connect with the world and people around them

- Positive impact
- Focus the mind

Q8C. With what patient group/s have you used, or seen music used with?

Labour and maternity:

- Maternity service users x4
- Pregnant and intra parturition mothers
- Pregnant and postnatal mothers
- Babies

Children:

- Adolescents aged 13-18
- Children predominantly ages 3-10 years
- Children
- Mostly babies and young children but have seen it used right up to 18 years of age (I don't work out with this age category so can't comment further)

Elderly:

- Elderly/confused
- Elderly care
- Dementia patients x2

Condition/Ward specific:

- Intensive care patient
- Intensive care patient, non-acute stage
- Learning disabilities
- Brain injury
- Patients suffering low mood as result of illness
- Physical disabilities
- Mental health
- Palliative care
- Renal patients
- Neurosurgery procedures
- MRI scans
- Patient on wards
- Intubated patients
- End of life patients

Q8D. Who facilitated the music's use? Was it yourself or another practitioner?

Healthcare workers (Participant or other):

- Myself and other staff x7
- Myself x 5
- Surgeon
- Music therapist

Patient:

- Patient x5
- Sometimes the patient brings their own
- Played on cd player or Bluetooth speakers brought in by women themselves

Family of patient:

- Encouraged by occupational therapists, done by parents
- Family members x3
- Mother or her partner

Musicians:

- We also have someone who comes in and plays live music on guitar with the children across the hospital

Q8E. What kind of music was typically used? (E.g. genre/style, instrumental/vocal, recorded/live/radio)

Genre/Style:

- Varied from classical to country
- Country music for my intubated patient (we were told by his family he liked country)
- Shania Twain (for my dementia patient, he was a big fan)
- Different religious stations requested by Muslim family for their relative in hospital
- 50's and 60's music for the elderly patients
- Nursery rhymes for children
- For the labouring women, that could be anything from relaxing instrumentals to heavy rock
- In this patient, classical but usually whatever the relatives said the patients like
- Mostly commonly lullabies and piano covers of Disney music. Lullabies cover all genres from classics to hymns etc.
- Old fashioned dance songs and hymns
- Mostly music liked by patient, wedding song, favourite song
- Alternative indie
- Pop
- Worship music
- Country
- Personal choice
- Improvised

Instrumental/vocal:

- Instrumental and vocal
- Instrumental x5

Recorded/live/radio:

- Dependent on age range and patient preferences, e.g I have used dancing fruit with music for babies for visual stimulation
- Different Radio stations
- Recorded x2
- Downloads onto phone x2
- Parents singing to babies
- Play list
- Radio x2
- Patient with low mood encourage to bring guitar in to play as use to be part of a band

Q8F. Who chose the music that was used?

The Patient:

- Patient x2
- Patient chooses radio station or brings their own music
- Patient themselves
- The patient/client
- Patient play list
- The patient themselves sometimes

Family:

- The family members helped to provide a genre of songs which the patient liked
- Patient relatives
- Family mostly
- Parents
- Mother
- Family

Collaboration:

- Both therapist and client - client contributed their own music

Healthcare worker/s:

- Myself and other nurses on the ward
- Sometimes surgeon
- Practitioner
- Me x2

8G. Do you know what the reasons were for this music being chosen?

Preference:

- Persons preference - they got excited by music, able to say it was their preferred music
- Patients colleague told me what was patients favourite music
- As patient enjoys and family have expressed so
- Very often a chosen playlist
- Own personal preferences
- Patients Favourite music
- Personal preference

Personal/cultural significance:

- They enjoyed that music or it was something important to their culture / religion
- Favourite song, represented some significance with the patient/ family

Relaxation/Focus:

- To encourage focus and calm feelings throughout labour to aid breathing
- Relaxation x3
- Provide a familiar environment in new surroundings
- Creating calm and familiar surroundings
- To aid babies sleeping and help keep them calm
- Mother had previously used this for relaxation
- Brought comfort and motivation
- To try and reduce agitation

Unknown reasons:

- No

9. Are you aware of any trained musicians conducting music sessions, projects, or interventions in your workplace or with patients/clients? (Examples may include Music Therapists or Community Link Workers)

No x 15

Yes x 5

9A. What patient group/s do the musicians work with?

- The man who plays guitar holds sessions in the playrooms on wards and is open to any patients or siblings who want to come, to covers most ages. He also goes around patient rooms of those who wish. So all ages from babies to 18years
- I have seen a lot of work done within the RHC hospital with musicians coming round bedside to perform to patients
- Learning disability day care
- Care of elderly in nursing homes
- Severe learning disabilities
- Children

Q9B. Do you know how this originated? (For example, was the service requested by staff or offered from another institution?)

- Unsure if it is a charity because I think it is organised at organisational level
- Set up by organisation on behalf of residents
- Requested by healthcare staff
- Unsure x2
- No response x15

Q9C. Do you know how the work is funded by your institution?

- No response x 15
- No x 2
- By the children's hospital charity, I presume
- Self-funded by residents of home
- NHS

Q10. Would you be interested in using music in your workplace more frequently if the correct training and guidelines were provided?

- Yes x 14
- Yes definitely, although I think there is a lack of education and knowledge surrounding benefits and implementation of doing so
- Use for this in ward setting...more difficult in outpatient settings
- Yes, if training wasn't extensive or long
- Unlikely
- Tricky
- No

Q11. Do you have any other comments?

- No (x 15)
- Very worthwhile...sing in hospital choir and has provided a super outlet for staff after busy and long days...Good luck with your project
- No, thank you so much for doing this research I am very keen to learn the outcomes and hopefully can influence future practice!
- I feel everyone likes some sort of music so any patient/ client would benefit from some
- Music can create sense of comfort, familiar surroundings and increase wellbeing
- Music promotes wellbeing so can only be a positive influence in healthcare