A review of qualitative methodologies used to explore patient perceptions of arts and healthcare.

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ABSTRACT

Although the importance of the arts in healthcare is increasingly recognized, further research is needed to investigate the mechanisms by which arts and health programmes achieve their impact. An overview of the qualitative methods used to explore patients' perceptions of these interventions is lacking. We reviewed the literature to gain insights into the qualitative methods used to explore patients' perceptions of the role of arts in healthcare with a view to identifying the most common methodologies used and to guide researchers embarking on research regarding patients' perceptions of arts in healthcare.

Our results indicate a paucity of qualitative studies, a variety of methods used and variability of methodological rigour. Grounded theory and phenomenology were the most common approaches adopted, mixed methods approaches were relatively frequent, and versions of ‘thematic’ or ‘content’ analysis were commonly cited. Semi-structured interviews were the most popular data collection method. The emphasis of all of the studies was on active or participative arts engagement, with no focus on receptive engagement with the arts and aesthetics.

It was concluded that careful consideration of appropriate methodology is important when researching such an exploratory and sensitive area. Individual interviews were most popular and might be appropriate when exploring personal, sensitive experiences. Mixed method studies possibly provide a comprehensive approach which might satisfy both the arts and healthcare settings need for evidence. It seems important to pay attention to rigour in any methodology chosen and a greater focus on receptive engagement with the arts might be encouraged in future research.
Background to the study

The impact of arts in healthcare is increasingly recognized but the level of research is modest compared to other factors associated with health and well-being.[1-3] Current research on arts and health falls broadly into five areas - the role of aesthetics in design and the healthcare environment, the role of arts as a therapeutic intervention, medical humanities, treatments for medical issues arising from work as a performing musician and the role of cultural participation on health and well-being. Although we have some measures of the temporal and financial engagement of the general population in arts and cultural activities, much remains to be determined about the role of these activities in the lives of those who attend health services, the impact of illness on their access to, and participation in, arts and cultural activities, and on the possible impact of artistic and cultural enrichment of healthcare environments.[1,2,4-14]

Patients’ participation in arts in healthcare settings is a relatively under-researched area, with many studies indicating benefits such as boosting self esteem, sense of achievement and positivity at a time of ill-health.[15-16] However, much of the evidence available lacks rigour.[2,17-19] The arts attract a significant portion of government spend in many societies and with this funding comes a responsibility to evaluate the appropriateness of arts programmes within healthcare contexts.[13,14,20] An important aspect of health service delivery is consumer satisfaction and thus arts programmes in healthcare need to be based on patients’ preferences and their perception of arts programmes rather than curatorial notions of what is best for the patient.[7,21]

Qualitative research represents the best initial approach to such a complex and under-documented aspect of health and well-being, through exploring the relative priorities, needs and wishes of those attending health services, and setting the parameters for future research, including quantitative research. There is a growing interest in describing the range of qualitative methodologies used in health care research in general,[22] and such analyses can help to determine the strengths and weaknesses of current knowledge and approaches.

A review of 135 published qualitative studies (not just arts and health studies) in the Journal of Qualitative Health Research found that 106 studies used grounded theory and 67 used phenomenology. 95 of these studies did not credit any particular methodologist for the qualitative method utilized. Of the 67 phenomenological studies, 38% were identified as purely phenomenology, 31% interpretative phenomenology and 29% hermeneutic phenomenology and it was found that within any one type of qualitative methodology, there can be a variety of data analysis processes. The authors found key fundamental principles across studies to be constant comparison of data, cyclical analysis (i.e. returning to data to check coding as the analysis proceeds) and emphasis on early analysis. It was found that a certain detachment from the ‘rules’ will help qualitative researchers to maintain reflective insight into data.[22] Given the relatively undeveloped research field of arts and health, researchers might gain insight from other disciplines and more generic studies of methodology.

The aim of this review, therefore, was to identify studies that used qualitative methodology in arts and healthcare or health-related studies and to explore which qualitative methodology was used. Specifically,
this review aimed to identify research on patient perceptions of arts and health in order to inform debate on the optimum methodologies for research this area.

**Methodology**


Searches were carried out using the following key search terms and key words: experiences OR perceptions OR views OR perspectives OR attitudes AND qualitative methodology OR research OR qualitative studies AND art OR arts and health OR Performing arts OR Music OR Art therapy OR Visual art AND patient(s) OR Hospital OR Inpatient OR Clinical setting OR Clinical environment.

Due to the scarcity of relevant papers recovered, a decision was made to consider arts therapies research as well as arts and health literature as there appeared to be commonalities in terms of methodologies used to assess the role of arts in healthcare settings.

**Inclusion/exclusion search criteria**

The aim of the search was to identify studies that used qualitative methodology in arts and health studies, and to explore which qualitative methodology was used. The only criterion used to select papers was that they explored qualitative methodology used in arts and health studies. Papers were excluded if they were not relevant to arts and healthcare, were not studies using qualitative methodology or were not in English. Papers relating to other arts based topics in healthcare were not included. The authors agreed the search terms and words and all papers that met the criteria above were included.

In addition to these searches, papers were included that were discovered by other forms of search, specifically reference lists from the papers selected, recommendations from colleagues, previous literature reviews of government documents from UK and Ireland and references from the library of the Society for the Arts in Healthcare, (USA).

In order to extract relevant data from each of the selected articles the papers were analysed by extracting a database with the following key pieces of information from each paper:

- Methodology used - Grounded Theory, Phenomenology, Ethnography and Other (with detailed description here of methodology used)
- Whether study was mixed methodology or single
- Brief description of study (clinical group, health setting, art form)
- Sample size - number of patients involved in study
- Data collection method - Interviews (Semi-structured or open), Focus group, Observation, Documentary Analysis, Other
- Brief description of key findings
The researchers then reviewed each paper to determine whether adequate details of methodology were given. This was determined by whether the study gave enough information on methodology to be considered replicable and if the above list of information was available. If there was incomplete methodology or unclear definitions or descriptions of methodology then the paper was considered to lack rigour. For example, in some studies no recognised qualitative methodology was described, or inadequate details were given regarding methods of analysis and processes to ensure authenticity and credibility.

The studies represented a wide variety of patient groups, clinical settings, diagnoses and art forms. This study did not aim to distinguish between any differences in age, gender, clinical issues or art forms but rather to study which qualitative methodologies were chosen for any study of any of the arts in any healthcare setting. The small number of studies found made limiting these criteria unnecessary.

**Results**

The search resulted in n=680 citations included journal articles, government documents and published books. The number of citations for specific arts and health studies using qualitative methodology was modest (n=54). Thirty one of these (n=31) citations were arts and health studies, n=13 were arts therapies research (n=7 music therapy, n=5 art therapy, n=1 combination of arts therapies), n=6 were theatre or arts based projects and n=3 were concerned with patients’ perception of the aesthetic environment. One (n=1) combined music therapy and digital art. By art form, the most popular art form reported was visual art (including art classes and art therapy) (n=22), music (n=9), combination of art forms (n=11), drama (n=5) and environmental aesthetics (n=3). There was only one study found each for creative writing (n=1) and sculpture (n=1) and two using digital art (n=2). Most of the literature in this area was exploratory or descriptive based on art therapies or arts in health work in various contexts (n=165) or other arts related research, for example the role of medicine and rehabilitation for performing musicians (n=53). The 54 papers selected were those that specifically explored patients’ perceptions of arts in healthcare settings through qualitative research.

A variety of methodological approaches were used to shed light on the experiences of patients of the arts. The most common were phenomenology (n=9) and grounded theory (n=11). Twenty studies (n=21) described the qualitative methodology as ‘thematic analysis’ or ‘content analysis’ and n=4 studies gave no details about the methodology. Five studies (n=5) employed ‘arts based action research methods’ in their study, again there was less detail given here of replicable methodology. There were n=3 ethnographic studies and n=1 narrative. Nine (n=9) of the qualitative studies were part of larger mixed methods research projects.

The most common qualitative approach to collecting data was semi structured, in-depth interviews (n=39), with twenty nine (n=29) using purely interviews as data collection method and ten (n=10) combining this with another qualitative data collection approach. These included focus groups, data from group therapy sessions, observations, questionnaires and data from art processes. Of the remaining 15 studies, data
collection methods included observation techniques (n=5), theatre and other arts based research approaches (n=6), focus groups (n=1), written responses to open ended questions and qualitative questionnaires (n=4) and analysis of song lyrics (n=1).

Of note, the emphasis of all of the studies was on active or participative arts engagement (such as making art, writing poetry, creating drama productions or playing instruments) (54), with no focus on receptive engagement with the arts and aesthetics (such as reading or listening to music) (0).

The number of patients consulted for the studies ranged from 264 to 1 with a median of 18. Seven studies referred to children’s arts and health services, the remaining 47 were adults in a range of health services, including cancer care, mental health, older age and physical disability. In total 2036 patient perspectives were recorded when all the studies are put together.

Table 1 Details of 54 arts and health studies using qualitative methodology

<table>
<thead>
<tr>
<th>Art form</th>
<th>Number of studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual Art</td>
<td>22</td>
</tr>
<tr>
<td>Music</td>
<td>9</td>
</tr>
<tr>
<td>Combination of art forms</td>
<td>11</td>
</tr>
<tr>
<td>Drama</td>
<td>5</td>
</tr>
<tr>
<td>Environmental aesthetics</td>
<td>3</td>
</tr>
<tr>
<td>Creative writing</td>
<td>1</td>
</tr>
<tr>
<td>Sculpture</td>
<td>1</td>
</tr>
<tr>
<td>Digital art</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>54</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of study</th>
<th>Number of studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts and health studies</td>
<td>31</td>
</tr>
<tr>
<td>Arts therapies</td>
<td>13</td>
</tr>
<tr>
<td>Theatre based</td>
<td>6</td>
</tr>
<tr>
<td>Environmental aesthetics</td>
<td>3</td>
</tr>
<tr>
<td>Combined arts and health and arts therapies</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>54</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Methodology</th>
<th>Number of studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grounded Theory</td>
<td>11</td>
</tr>
<tr>
<td>Phenomenology</td>
<td>9</td>
</tr>
<tr>
<td>Thematic analysis or content analysis (various approaches)</td>
<td>21</td>
</tr>
<tr>
<td>No details of methodology</td>
<td>4</td>
</tr>
<tr>
<td>Arts based action research</td>
<td>5</td>
</tr>
<tr>
<td>Ethnography</td>
<td>3</td>
</tr>
<tr>
<td>Narrative</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>54</strong></td>
</tr>
</tbody>
</table>
Discussion

Grounded theory and phenomenology are the most popular qualitative methods used in arts and health studies. Semi structured interviews are the most popular method of data collection. Following the analysis of the studies presented here, three key points stand out regarding choice of qualitative methodology for arts and health research. Firstly, whilst the majority of the 54 papers chosen were rigorous and detailed studies, five papers in this sector appear to lack detail about methodology, twenty allude to ‘content analysis’ or ‘thematic analysis’ and most of the studies conclude that their sample provides only preliminary evidence and recommend further research in this area.[2,19, 23-26] Whilst the smaller studies give reliable evidence in themselves, there is a scarcity of larger sample groups in arts and health research and much of the research tends to be qualitative. It may be useful to carry out some larger studies, perhaps mixed methodology, to gather both intense individual accounts and research with a larger sample group.

Secondly, the most frequent approach to collecting data was the semi-structured interview. An individual approach (as opposed to focus groups or observation, for example) has been found by the majority of researchers in our study as appropriate in this context, perhaps because this allows the personal nature of hospital experience and creative activity to be explored in a confidential setting and to explore in-depth an unfamiliar phenomenon. However, each context would need to be considered separately when conducting further qualitative studies.

Thirdly, arts and health research into patient perception is a broad topic and relatively unexplored. It is impossible to recommend one qualitative approach over another as context will determine choice but the need for rigour and attention to methodological detail is important. It is interesting to note, however, that a large number of the thematic analysis methods used gave a rigorous account of how they carried out the analysis and raises the question as to the added benefit of following a method such as phenomenology or grounded theory which might be more cumbersome and time consuming.

A further interesting insight is the almost complete neglect of receptive engagement with the arts. This is puzzling given clear evidence of not only the universality of this aspect of the arts, but also its importance in terms of quantitative and qualitative measures such as government and consumer spending, as well as surveys of the general public.[13,14,20] Further urgency to pursue this aspect of research has been fuelled by a recent large study in Norway which showed a positive association between well-being and receptive engagement with the arts.[8]

Our study confirms the finding by Daykin et al[2] that there is a need for further research that addresses the methodological challenges of evaluating complex interventions and a need for more qualitative research in this field that pays attention to procedures and reporting of data collection and analysis. Arts and health studies have a variety of aims and goals and whichever methodology is used, there is a need for rigour within the arts and health research sector. It also finds evidence to support the view that qualitative studies are needed to more accurately focus the target for possible further experimental studies.[27]
There was a diversity of approach to methodology and client groups in the 54 studies found; hence it is difficult to draw strong findings from the data. The individual lived experience is at the heart of qualitative research and replicability of these studies is not of paramount concern. No single methodology was seen in these studies to offer adequate solutions to the question of providing evidence of benefit of arts in health settings.[24- 25, 28 - 30] It may be important for some studies to focus on larger sample sizes and to combine quantitative and qualitative methodologies.

It is interesting to note that while many of the studies were small, as a total all the studies together gave rich data from 2036 patients who gave their perspective on arts and health interventions. A common theme throughout all the studies was the perceived benefit for participants of arts and health, particularly in areas such as boosting self esteem, self confidence, sense of achievement, positivity at a difficult time of life and promoting a sense of hope.[23, 31 - 36]

A number of studies found in the literature review used arts based research to more accurately reflect the story and experience of participants in health and social services. For example, theatre and drawing were used as research tools. Lind et al report that arts-based research and participatory action research offer new ways of accessing marginalized populations’ strengths and challenging harmful societal assumptions. Broadbent et al used visual art to assess how 65 students who experienced persistent headaches were affected.[35 - 39] Rapport et al report on specific issues in qualitative methodology in health care research and argue for new methods (such as those described above) which might broaden out the scope of qualitative inquiry in health and social care. These are argued to address the crossing of boundaries from one discipline to another and to aid collaboration between distinct disciplines such as arts and medicine. ‘Arts based methodologies' might offer a new way to research arts and health projects but to date the new methods are experimental and the studies using these methods do not offer detailed replicable methodology.[40]

We also concur with Daykin that there is unlikely to be a single qualitative methodology that serves as the ‘gold standard’ in qualitative research.[19] However, qualitative research needs to produce solid and rigorous evaluations and too many studies have either limited information or a lack of depth to the data analysis. There is a need identified in the current literature for larger samples, rigorous methodology and further research in this area and it is important that this is considered whichever methodology is chosen for an exploratory study of patients’ perception of arts in healthcare settings. In addition, a focus on receptive engagement with the arts needs to be developed.

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COMPETING INTERESTS
There are no competing interests.
REFERENCES


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