Arts and Dementia
Using Participatory Music Making to Improve Acute Dementia Care Hospital Environments: An Exploratory Study
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Using Participatory Music Making to Improve Acute Dementia Care Hospital Environments: Findings from Evaluation Research.

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EXECUTIVE SUMMARY

Background

Music making and music therapy have been shown to be beneficial for people with dementia (PWD) and their carers. Research has examined the effects of music participation on cognitive functioning of PWD as well as its impact on wellbeing: supporting reminiscence, expression, connection, communication and relationships. However, research to date has concentrated on people with mild to moderate dementia in community settings. Few studies have examined music making with PWD in acute hospital settings.

This study investigated the effects of a ten week music programme in an NHS hospital in the South East of England, including its impacts on the wellbeing of patients, carers and staff, and on the ward environment. From June 15th 2015 a male musician, a professional viola player, visited the hospital most Tuesday afternoons until 26th January 2016. During these visits the musician ran group music sessions for patients, staff and occasional visitors in a side room connected to the two wards. For up to two hours, participants listened to a variety of pieces performed on the viola and sang simple songs using each others’ names as well as traditional, familiar repertoire. They played light hand percussion instruments, conducted the musician’s performance using a baton and occasionally composed new songs. They also took part in social activities, chatting to the musician, staff and each other.
over tea and biscuits. After each session, the musician went on to the wards to perform at the bedsides of patients who requested it.

**Research design**

Quantitative ward level data were collected during two equivalent ten week time periods: 1st September to the 3rd November 2014 (time frame A – usual care/no music) and the 1st September to the 3rd November 2015 (time frame B – weekly music sessions of up to two hours duration). Data were available for 85 patients: 38 out of 59 dementia patients at time A (64.41%) and 47 out of 84 at time B (55.95%).

As well as routine data collected directly at ward level, quantitative data were collated from the Hampshire Hospitals Foundation Trust Business Intelligence Team (BIT). All data were anonymised prior to being passed to researchers for analysis.

The BIT data include:

- The number of falls recorded during the time frames
- The number of falls recorded on an average Tuesday during the time frames
- The average length of stay during each of the time frames.
- Staff absences during the time frames.

The ward level data include:

- The number of prescriptions of anti-psychotic/anti-agitation drugs during stay
- The number of prescription of anti-psychotic/anti-agitation drugs on an average Tuesday
- The number of in-patients recorded as requiring one-to-one attention on a Tuesday.

The research was approved by the NHS NRES (South Central Hampshire A) Committee and by the University of Winchester Research Ethics Committee. Consent or assent by consultee was obtained for all participants by the Clinical Nurse Specialist (CNS) for dementia care.
Qualitative methods included participant observation, semi-structured interviews and focus groups with patients, visitors and staff. Participant observation was undertaken unobtrusively by one of two researchers who attended sessions between November 2015 and January 2016. The Arts Observational Scale (ArtsObs), a structured assessment tool designed by Chelsea and Westminster Hospital NHS Foundation Trust (http://www.cwplus.org.uk/research/arts-research/artsobservational/), was used to record researcher observations of the effects of the music project on patients’ mood, relaxation and agitation as well as its effects on the ward environment.

Interviews were undertaken with participants (patients, carers and staff). These followed a topic guide and explored participants’ accounts of the music project. Interviews were one to one, where CNS identified patients with capacity to participate, or in pairs or small groups of participants, including carers. They were held in a side room, off the ward, and took the form of brief, relaxed conversations.

The research included an action research component in which care staff worked together in a small learning group to review the project. Staff also took part in a final focus group to discuss the impact of the project on patients and on themselves, the working environment and work organisation.

Results

Although the two time periods were equivalent in terms of time of year, it is recognised that many factors could have contributed to differences in the ward environment between the two time periods. The average age of patients during time period A was 80 years old and 91 years old for time period B. The average length of stay during time period A was 36.90 days compared to 34.68 days in time period B. This equates to a 6.2% decrease in length of stay between the two time periods. The discharge figure from the two wards was 110 in time period A, compared to 122 in time period B; this is a 9.84% increase in the number of
discharges. Missing data may have influenced the results. Nevertheless, key differences in the ward environment between the two time periods were noted, including:

- A reduction in falls: during time period A there were 47 falls recorded compared to 31 in time period B.
- A reduction in staff absences overall: there were 22 staff absences recorded during time period A and 16 recorded during time period B. However, the number of staff absences on a Tuesday in time period A was 6 compared to 8 in time period B.
- During time period A, one patient (2.63%) required one to one attention compared to two patients (4.26%) in time period B.
- A 4.26% reduction the number of patients prescribed anti-agitation drugs in time period B compared with time period A.
- A 27.72% decrease in the number of prescribed anti-agitation drugs on a Tuesday (the day of the music activity) in time period B, compared to time period A. This is despite an overall increase in the number of patients who took anti-agitation drugs during their stay but not on a Tuesday: one (2.63%) in time period A and 15 (31.91%) in time period B.

**Observation Findings**

ArtsObs data are available for 20 patients (13 female and 7 male), observed over the final five sessions (weeks 5 to 10). Key observations are:

- Increased mood scores for all patients at the end of each session when compared with the beginning.
- The data show that the observed effects of the music session on relaxation, distraction, engagement and agitation were consistently positive, often very much so.
- The observer rated the overall effect of the project on the ward environment consistently as being very positive.
Feedback from patients, relatives and ward staff suggests that most participants enjoyed the sessions. Participants were observed to be in high spirits during the sessions, singing, smiling and laughing. They often seemed to be fully engaged with the music and the instruments, frequently requesting particular songs from the musician. Participants often commented that they enjoyed the music, the singing and playing as well as the social element of the project and the opportunity to attend a music session away from their beds. They also enjoyed having tea and biscuits served during the group. Some participants reacted strongly to certain pieces of music, for example closing their eyes, leaning back and appearing absorbed in a favourite piece. There were sometimes poignant instances when participants reminisced about their younger years.

The ArtsObs tool also invites the observer to record negative feedback if this is given. These records show that on occasion some participants were confused and distracted and therefore unable to fully participate or enjoy the session. It is possible that changes in medication could sometimes negatively affect participants’ concentration and mood. These findings are confirmed in the open ended observational data, which generated a rich description of the project activities. The success of the sessions depended on a number of factors, the main one being the skills and qualities of the professional musician. Without a lead musician, it was likely that the music sessions would be replaced by passive listening to CDs or watching TV. Variations in group size and composition also affected the delivery of the music session and its impact. Participants’ responses to the sessions were strongly affected by underlying health conditions, which included hearing, sight and mobility impairments as well as dementia. It is possible that participants’ responses were affected both positively and negatively by medication changes.

**Interview and focus group data**

Interviews were brief conversations: participants often found it difficult to participate in interviews because of memory problems and confusion as well as other difficulties such as
hearing problems. Nevertheless, the themes suggested by the interview data confirm the observational findings. In general, the patients who attended the music group often told staff that they enjoyed hearing the music, singing songs, socialising, having tea and biscuits and cake. Not all of the activities were enjoyed by everyone. However, participants often reported being ‘cheered up’ by the music.

Staff generally agreed that the project was effective in meeting particular needs, reducing aggression, wandering and agitation. They also frequently commented on the positive effects of the sessions on participants’ moods. There was some frustration on occasion when hospital routines got in the way of the project. However, staff were generally very keen to take part and the project could not have been delivered without their support.

Conclusions

The quantitative results show some interesting trends, especially given that the sample in 2015 were on average eleven years older than the patient sample in 2014. Data from markers of behaviour show a trend for a decrease in the number of patients requiring anti-agitation drugs on an average Tuesday following the musical intervention. A trend was identified with less falls recorded as occurring on a Tuesday when the musical intervention was taking place. The results suggest that the length of stay was reduced during the 2015 time period compared to 2014. However, without more specific data on patients it is not possible to know whether this was because admissions were less severe or complicated. Given the study limitations, these trends should be interpreted with care. However the results do warrant further exploration into the possible impact that the musical intervention may be having on patients with dementia in the acute care environment. The full report includes recommendations in order to optimise the research for a more rigorous quantitative analysis in the future.

The observational and qualitative data suggest that the music project was very positively received by patients and staff, who played an essential role in facilitating the music project.
as well as the research. The success of the sessions in part depended on the skills and qualities of the musician. It seems unlikely that sessions run by volunteers or care staff would engage participants as effectively. Other factors affected delivery and need to be considered in programme planning. These include group size and composition, facilities and resources, funding, and hospital routines and organisation.

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