Dementia

Stand up for dementia: Performance, improvisation and stand up comedy as therapy for people with dementia; a qualitative study John Stevens Dementia 2012 11: 61 originally published online 22 September 2011

DOI: 10.1177/1471301211418160

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Stand up for dementia: Performance, improvisation and stand up comedy as therapy for people with dementia; a qualitative study Dementia II(1) 61–73 © The Author(s) 2011 Reprints and permissions: sagepub.co.uk/journalsPermissions.nav DOI: 10.1177/1471301211418160 dem.sagepub.com



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Abstract

The aim of this qualitative study was to describe and investigate the effects of a programme of stand up comedy and improvisation workshops on people with early stage dementia. Interviews from participants (n = 6), their carers (n = 6), and the comedian facilitator were analysed using constant comparative analysis. The findings indicated that dementia did not prevent participants from laughing appropriately or successfully creating and performing comedy. The data suggest that the programme may have therapeutic benefits as improvements in memory, learning, sociability, communication and self esteem were demonstrated. The study also develops a set of hypotheses for further research which includes: that active participation by people with dementia (PWD) in performing to create laughter is more beneficial therapeutically than passively induced laughter.

Keywords

comedy, humour laughter, dementia, Alzheimer's Disease, respite care, therapy

Introduction

This study examined an innovative respite care programme designed for people with mild dementia living in the community. A course that taught people with mild dementia how to perform stand up comedy and improvisation was developed and delivered over eight two-hour weekly workshops. The main aim was to actively engage people with mild dementia in the creation of humor and laughter for themselves and others. However, the programme had the potential to provide therapeutic effects given the link to humor, laughter and health.

The link between humor, laughter and health has long been identified. A growing body of literature consistently supports the theory about the positive link between humor and health. In addition, a growing number of associations promoting therapeutic humor and clown

Corresponding author: John Stevens, Southern Cross University, NSW, Australia Email: jstevens@scu.edu.au doctoring have emerged in recent times based on the perceived positive health effects. Little is known, however, about the effect of humor and laughter on older people with dementia.

Literature review

An extensive search of the literature has identified more than 1500 articles focusing on the health effects of humor since the 1980s. In a meta analysis McCreadie and Wiggin (2008) identified a similar number; however, on a deeper analysis they could only find a small percentage that were of a peer review standard. The remainder were identified as opinion pieces or editorial type articles that do not add to the evidence that makes up the body of knowledge.

Nonetheless there is a growing body of evidence supporting various effects of humor and laughter. The literature shows evidence of physiological changes that include effects on:

- the immune system (Bennett and Lengacher, 2007; Berk, Felten, Tan, Bittman, & Westengard, 2001; Lefcourt, Davidson & Kuesman 1990; Rotton & Shats, 1996; Szabo et al., 2005; Taber, Redden, & Hurley, 2007);
- (2) heart disease and cardiac rehabilitation (Helgeson and Fritz, 1999; McCreadie and Wiggin, 2008; Tan et al., 1997);
- (3) the amelioration of pain and discomfort (Berk et al., 2001; Christie & Moore, 2004; Cogan et al., 1987; Mahony et al., 2001; Taber et al., 2007; Weisenberg, Raz, & Heier, 1998); and
- (4) stress caused by a variety of clinical scenarios (Litvack, 2006; Martin & Lefcourt, 1983, 2004; McCreadie and Wiggin 2008; Szabo, 2005).

Survival and resilience in specific groups such as carers, palliative care patients and cancer sufferers have also been investigated (Christie & Moore, 2004; Johnson, 2002; McCreadie & Wiggin, 2008; McDonald, 2004; Shillbeck & Payne, 2003; Taber et al., 2007). There is also literature showing positive effects of humor and laughter on emotional states like depression and psychosis (Berk, 2001; Capps, 2006; McMahon, 2008; Richmond, 2006; Walter et al., 2007).

A significant element in the literature demonstrates the use of humor in building interpersonal skills (McCreadie & Wiggin, 2008; Richmond, 2006, Scholl, 2007), confidence and self belief (Hugelshofer, Kivan, & Reff, 2006; McDonald, 2004; McMahon, 2008; Richmond 2006) and relationships with others in similar circumstances and their carers and clinicians (Christie & Moore, 2004; Litvack, 2006; Richmond, 2006; Scholl, 2007).

In relation to the effects of humor with older people, and particularly those with dementia, there are few studies to review. Berk (2001) found that psycho-physiological effects of humor were similar to the effects of aerobic exercise in older people. Richmond (2006) found that during the course of practice as a psychotherapist that therapeutic humor was a valuable tool in relieving anxiety related to death and dying in older people.

Only one study was identified specifically examining the effect of humor and laughter on people with dementia. Walter et al. (2007) undertook a random control trial examining the effects of humor on people with late life depression and/or Alzheimer's Disease. The author indicated that humor appeared to have made positive effects on the experimental group in the areas of memory, self esteem and sociability even though they were not statistically measureable.

Performer vs. passive recipient

In all the studies reviewed where humor was used as an intervention the participants were passive receivers of humor. That is, participants were provided with humor through a Clown Doctor, or by being told jokes, watching humorous movies and/or reading funny anecdotes. This current study is examining an intervention (described in more detail below) where the participants are taught and develop the skills of stand up comedy and improvisation and that the humor and laughter are created and delivered by the participants themselves.

One study was found that placed the older participants in the active rather than passive recipient role. Noice et al. (1999) showed that work-shopping techniques used by professional actors leading to a performance has beneficial effects on the memory of older people. The workshops leading to performance not only provided skills and exercises that measurably improved the memory of older people but also the results strongly suggested that participants also developed increased self confidence and self esteem through the social interaction and empathy with their fellow participants.

A theatre company called Theatre to the Moon in the United Kingdom has used improvisational drama with residents of aged care homes who have dementia (Theatre to the Moon, 2009). The testimonial responses from staff and relatives indicate increased social interaction and cognition at various levels as result of professional actor facilitators engaging residents with dementia in the process of filming a drama. Residents dress in costume and take on acting roles within the play and also have a role in its production including filming and directing. This style of interaction that engages the resident with dementia to perform produces encouraging results but as yet has not produced a formal evaluation.

Methodology

Qualitative methodology was thought to be best suited for this study. It is especially effective when little is known about an issue under consideration and the issue could possibly be of a sensitive nature. The participant perspectives and experiences are all important. A qualitative methodology and its associated data collection methods are suited to obtain the intended data appropriately (Taylor, Kermode, & Roberts, 2006).

Methods of data collection. The literature strongly favors semi-structured interviews as the data collection method of choice for a qualitative study requiring the subjective perceptions of participants (Taylor, Kermode, & Roberts, 2006). In addition, according to the literature and previous experience semi-structured interviews are well suited for the intended exploration of perceptions of older people, and older people with mild to moderate dementia and their carers (Kelleher, 1990; Stevens & Killeen, 2006; Taylor, Kermode, & Roberts, 2006). The semi-structured interview appears to be the most suitable means to elicit the personal viewpoint of participants, to preserve flexibility required to find commonalities and to clear up inconsistencies arising from the data (Taylor, Kermode, & Roberts 2006).

Therefore, the interview schedule was based on questions and prompts to assist the conversation about the overall experiences and perceived outcomes. Such as: Please tell me about your experience with the stand up comedy workshops? Tell me about your performance. What did you observe of the person/people you were caring for while they were undertaking this programme?

Sample selection/participants. A purposeful selection of participants requires that interviewees were somehow involved in the stand up comedy programme. In this case the interviewees were to be people with dementia who were participants of the stand up comedy respite programme, principle carers of these participants, the respite care coordinator and the stand up comedy facilitator.

Following obtaining ethical clearance from an accredited ethics committee, informed consent was gathered from the intended participants. The people with dementia and their carers were invited by the respite coordinator to participate in the research. The people with dementia all had legal capacity in order to consent to participate in this study but as an added measure all primary carers were consulted to ensure that consent was indeed informed and voluntary.

The interviews. Following consultation with the respite care coordinator the interviews with the people with dementia and their carers were planned to be undertaken on the telephone within a week of the final performance. Telephone interviews were decided on as the method of choice for people with dementia and their carers because of the convenience of being able to choose appropriate times in a familiar non-threatening environment. Busy work schedules determined that the interviews with the respite care coordinator and the stand up comedy facilitator were also undertaken on the telephone. It was estimated that each interview would take 15–20 minutes. The interviews were audio taped and then transcribed.

Field notes

The researcher observed three of the workshops; the first, the second and the last prior to the performance and the final performance. Observations were recorded as field notes. It was anticipated that together with the interviews that the field notes would provide triangulation of data that would enhance the credibility of the findings.

Data analysis

The interview data were planned to be thematically analysed. Patterns and themes that remained constant among participants and occurred regularly eventually formed categories by which the data could be described. The analysis was undertaken independently by two researchers. The analyses were compared and those categories of themes agreed upon were then selected for description and discussion.

Background and the stand up comedy respite programme explained

In mid-2008 an Australian respite service began a series of respite programmes that engaged a stand up comedian to work with groups of older people with mild dementia. Anecdotal outcomes from previously run programmes suggested that participants had shown noticeable improvements in self esteem, confidence, social interaction and memory. The researcher works at the local university as an academic and was invited by the area respite coordinator to evaluate the programme.

The programme under study, like the others before it, ran over eight weeks and ended in a public performance. It was facilitated by a stand up comedian with over 20 years experience

in performance as well as in the teaching of stand up comedy and improvisation in the community.

The facilitator provided weekly two-hour workshops that engaged the participants to gradually develop skills in stand up comedy and improvisation. As well, the group aimed to develop enough material for a 15-20 minute group public performance by way of a graduation.

The facilitator's method explained

The facilitator was interviewed as part of this project. In the following extract the workshop objectives and method were explained:

Facilitator: Performance tasks needed to be repetitive and have the scope to grow week by week from a kernel of an idea to a more dynamic expression. They also needed to have a structure that instantly engaged and supported the participant therefore minimizing failure and difficulty by providing a series of cues that illicit immediate response rather than recall.

Every class started with a ball being thrown to each person who was then asked to share 'something you love' or 'something that irritates you'. Later we progressed from talking about emotional reactions, to acting them out. This echoed the underlying teaching technique of 'don't talk about it when you can show it'. This proved a successful strategy with this group. I would supply a sentence, for example: 'I can't believe you did that to me' and one at a time, each person would turn to their neighbor and deliver the statement with a prescribed emotion, i.e. anger. This was extremely successful, as participants were fairly uninhibited and were able to display a believable emotional range. It was instantly funny. Every person got a laugh and got to experience 'success'.

After a half hour of warm-up exercises we then progressed to an hour of role plays. These were simple scenarios that participants could be placed into and asked to respond. Every scenario had a skeleton costume that acted as a visual cue to their character and what was happening in the scene. For instance, the doctor had a jacket and stethoscope, the policeman had a hat and Zorro had a cape and foil. The costume proved a very successful component as participants enjoyed the social aspect of dressing up for each other.

Every week we re-cast the group into the ten role plays that had been devised. Participants would be costumed and then placed *in situ* and given a scenario to respond to. For instance: 'Jack: You haven't been feeling very well and are at the doctor's waiting for your test results. Harold, you are the doctor and you have to assess your patient and then give them their results'. The two participants would then greet each other in character and the role play progressed from there.

The respite group

The respite group was made up of 15 people with mild dementia who lived with their carers at home in the community. Eight men and six women formed the group from which the interviewees were invited. Their ages ranged from 78 to 86years. The causes of their dementia and the symptoms varied but all had been formerly diagnosed and scored less than 22 on their most recent MMSE. The group had been meeting regularly for three to four hours each Wednesday, undertaking a range of respite programmes and activities including singing, bingo, painting and now stand up comedy and improvisation.

The carers

Of the 15 respite participants all but one lived with a carer. Eleven of the carers were spouses, three were children and one was a friend. The one participant not living with a carer lived close to a child who provided many hours of supervision and care.

Findings

Observational data from field notes about the participants

The main findings from observations about the participants recorded as field notes by the researcher are summarized and presented as follows.

It was observed by the researcher (and later confirmed by the comedian facilitator) that between the first workshop and the performance that all participants grew in confidence to actively engage their group and the workshop at some level. From the start some were enthusiastic to perform and take on roles set by the facilitator and others at first were happy to sit and watch. All participants laughed appropriately and often depending on the activity being undertaken. By the last workshop and during the performance all participants appeared to have grown in confidence and skill and took on some form of performance role with great enthusiasm as directed by the facilitator.

The laughter among the group grew in frequency and volume throughout the duration of the programme. The audience for the performance was made up of carers, relatives, friends and staff. The hour-long performance created ongoing and appropriate laughter among the performers and the audience. It was really entertaining and extremely funny

Between the first workshop and the performance it was observed that some of the participants had learned and remembered routines and lines. Though most of the performance was based on improvisation routines some performed lengthy and soliloquies based on memorized material and script.

Interview data

In all, six participants with dementia, six carers, the respite care coordinator and the stand up comedian facilitator were interviewed. The data gathered from interviews with respite participants were limited by their absence of memory about the programme. The carers therefore, provided the majority of the interview data. The main findings from these two groups are as follows.

Participants' interview data

Each of the participants was able to converse articulately on the telephone and engage in icebreaking conversation about the weather and how they felt. All participants volunteered the information that they knew they had dementia, though some could not remember the word for it.

When asked to recall the workshops and the performance none could remember having attended or performed. None recalled that they had attended respite care at all.

Interviews failed to progress in all cases because of a total absence of memory about the respite programme.

Carers' interview data

On average the carers had been using the dementia respite service for more than a year. Four major themes emerged from the data analysis and are presented below.

Effects on memory and communication. Until the stand up comedy and improvisation workshops all carers reported a standard pattern of behaviour for the person with dementia they care for. None of their charges could ever remember where they had been or what they had done by the time they came home from their respite session. With regard to the stand up comedy and improvisation respite programme four of the six carers reported that they had been surprised that the person they care for was able to indicate they had been doing 'something funny' on their return from the comedy workshops. The following extract is indicative of these carers' observations:

Carer 1: 'Yes H has been going for over 18 months now and I get so frustrated because he gets home and he is so tired. He can't remember anything he has done normally. He does not say anything. He just goes to bed straight away. The last few weeks he has been saying: 'funny, funny'. I did not know what he was talking about until I saw the performance last week. It was hysterical. That was the first time he ever said anything about what he had been doing at respite.

Remembering and anticipating the sessions. Three of the six carers noted that there were differences in the anticipation of the respite session. Mostly the participants did not remember that they were going or, if they did, were worried that it was somewhere 'not pleasant'. However, after a few sessions of the stand up and improvisation workshops there was a shift to positive anticipation.

Carer 3: 'She grumbled when ever it was time to go to respite thinking she was going to get preached at by priests, because the programme was held in a church hall I suppose. After a few weeks of doing the comedy workshops she would get excited about going. I'd ask her why and she would say 'dress up', 'we dress up'.

Surprised by the high level of performance. All carers who were interviewed attended the final performance. They where unanimous in their surprise at seeing their person interacting with their group and the audience in ways they had not thought possible given their day-to-day experiences. To use their words, the carers were 'astounded' that the 'unhappy', 'frustrated' person with 'no' or 'failing' short-term memory for whom they were caring could, within the moment of the performance:

- 'socialize and interact successfully with others';
- 'be so confident and articulate in their communications';
- 'role-play a range of characters appropriately and improvise comedy routines with ease';
- 'have learned and remembered some lines and routines for the performance';
- 'laugh joyfully and make others laugh'; and
- 'talk and joke about sex with gay abandon'.

The following extract was typical of the carers' surprise at the level of performance:

Carer 2: Mum has not spoken or communicated effectively for years and there she was in this performance role playing to perfection some princess being adored by many lovers. She talked

and joked and was even appropriately rude. It was incredibly funny and moving at the same time. She did not remember anything by the time we got home.

Skepticism giving way to bitter- sweet delight. The carers and the respite care coordinator were skeptical about the programme at the start. The idea of workshops teaching their charges how to be comedians risked demeaning their charges. Also, most did not believe their charge had the capacity to participate because of their disabilities related to dementia. A theme of bitter-sweet delight emerged as they could see how effective the workshops were.

One carer summed up an emerging theme in the following extract

Carer 5: I had wrapped her in cotton wool trying to protect her from being made a fool of. When I saw her interacting with her peers, laughing and joking I realized that was not the right thing. It was the best she had been for years. She was my wife again. I can't speak highly enough about what I saw. This programme should be everywhere and run all the time. I would want her to do this again and I know she would too. It was bitter-sweet experience seeing my wife being and doing normal things. She was so happy but it made me realize how bad her dementia was and showed me for a moment the person I had lost.

The respite care coordinator interview data

The respite care coordinator admitted to being skeptical of the programme when it was first introduced to her as an idea by a colleague. For want of something novel to do with her respite participants she decided to run the programme anyway.

The coordinator spoke of her and her staff's joy at seeing the quality of interaction, high levels of cognitive ability and communication demonstrated by the participants. A number of the participants were known for not having interacted or spoken in the entire time they had been involved with the respite programme until the stand up comedy and improvisation workshops.

The coordinator had also observed what she perceived as a high level of learning among the group. This was not expected given their levels of dementia and their usual behaviors as she explains in the following extract:

Coordinator: There were definitely differences between the first meeting and the last in terms of ease of engagement and the level of laughter and enjoyment. It became obvious that most seemed to remember what to expect from week to week which is something not previously observed in other programmes. Many in the group appeared to remember routines, gags and lines and were able to deliver the most amazing final performance.

The stand up comedian facilitator interview data

The facilitator reported observations that indicate individual and group changes throughout the duration of the programme. The changes observed included: increased concentration; improved memory and communication from week to week; a growing cohesion of the group; and increased levels of appropriate laughter. The following is an extract from the interview with the facilitator that summarizes these findings:

Facilitator: Initially the participants found it difficult to sustain a role play for longer than 30 seconds. They became self conscious after the first couple of responses. In just a few

weeks, participants had a familiarity with the format and the scenarios and role plays were lasting up to five minutes. Some even lasted almost ten minutes. Considering this is all guided improvisation, this is an impressive length of time for any novice performer, with or without dementia.

Having dementia appeared to make the participants more suited to improvisation and actually gave them the edge on a non-dementia participant. The usual reaction for a performer is to over-think and try and direct their performance rather than surrendering to the immediacy of a more response based interaction. The participants with dementia listened to each other for verbal cues and responded in the moment. This created constant humor and surprise. This was entertaining to watch, enjoyable and low-risk for the performers. It was virtually impossible for them to fail, even though the tasks appeared complex.

We continued focusing on the role plays each week and eventually cast performers who regularly performed the same scenario. Scenarios were simple but afforded the flexibility to expand into something more creative. Some were more obscure: for example, Zorro turns up for a job interview in a busy restaurant as head chef. He's been down on his luck crime fighting and now needs a real job. Other role plays were based in a more naturalistic setting: e.g. you are on a date. You've only just met. Your colleague is going to ask you to marry him.

By the eighth week, participants were engaging in role plays, often repeating and adding to their improvisations from previous performances. Their performance, which initially ran for ten minutes in the first week, ran in the last week for an audience of friends, family and carers, at just under an hour.

Discussion

Findings from this study indicate that the stand up comedy and improvisation workshops provide an activity for people with mild dementia that is enjoyable, age and dementia appropriate and potentially therapeutic.

The data from interviews and observations suggests that the workshops produced a lot of laughter and it seems mild dementia did not prevent participants from laughing a lot. The physiological and psychological effects of laughter as discussed above in the literature were not able to be rigorously measured in this small study. However, as discussed in the literature above many studies have found laughter to have varying positive effects on people. Walter et al. (2007) even found the effects of laughter on people with dementia to have a positive effect. In all the studies examined in the literature it was found that all participants, with or without dementia, were passive recipients of humor. In this study the participants performed, role played and created the humor at which they laughed.

The data suggests that mild dementia does not have to be an impediment to developing skills in and performing stand up comedy and, especially, improvisation. It also suggests that being active participants in the creation and performance of humor and laughter yields an overall outcome worthy of further investigation as even a more powerful therapy than just passive laughter alone.

The study by Noice et al. (1999) and the work of the Ladder to the Moon Theatre Company (2009) discussed above, found that engaging older people (with and without dementia) in acting workshops leading to performance positively affected memory confidence and self esteem. The data from observations and interviews with the carers and the facilitator in this study indicate that they observed unexpected outcomes with perceived improvements in memory, learning, sociability and communication.

Improvisation, memory and learning

The interview data suggest that the participants were able to perform well in certain roles that relied more on improvisation than memory. Their improvisation skills were not necessarily diminished by their dementia. Improvisation appears to allow the participants to respond in the moment to cues from their colleagues or the facilitator and thus they did not have to rely on memory to recall lines or scenes in order to perform and create humor and laughter.

Yet it would appear that memory for some was affected as well. Rather than completely forgetting that they had attended a respite session by the time they arrived home, as was usual, four of the six carers reported that participants communicated a description about the comedy workshop. In addition, data from observation, the respite care coordinator and the comedian facilitator indicated that week to week improvements were made over the duration of the programme. Participants came to remember parts of routines, roles and even some lines. This was unexpected given their level of dementia and normal memory loss behaviour. They were able to build their skills in improvisation and performance as the programme developed.

Sociability and communication

The data suggested that the programme stimulated high levels of sociability and communication. The majority of the carers, the respite care coordinator and the comedian facilitator suggested that they observed differences in these traits in the majority of participants:

- (1) when compared to other respite care programmes; and/or
- (2) between the start and completion of the programme.

Critical reflections and limitations of the study

A major limitation of this study was the lack of inclusion of perceptions of the programme by the people with dementia who undertook the programme. On reflection a retrospective telephone survey was not the most appropriate data collection method for these research participants. As the findings indicate that 'in the moment' of performance many of the capabilities of the people with dementia are seemingly restored or revealed, so too it would have been more appropriate to have interviewed the PWD 'in the moment' to try and capture their perceptions.

Another limitation of the study was that the researcher should have embedded himself in more of the workshops. As a result of only attending two workshops and observing the performance the field notes written by the researcher provided only limited triangulation of the interview data.

The most obvious limitation was the small number of participants. However, the study was not meant to produce generalizable results but to explore an innovative programme in the care of people with dementia. Even so a larger participant base would likely have improved the credibility of the findings.

Hypotheses from the data

Notwithstanding the limitations of the study identified above, the findings do generate a number of hypotheses that could form the genesis of more rigorous testing in future studies. They include (and are not limited to):

- that stand up comedy and improvisation workshops have a positive effect on memory, learning, sociability, communication and thus potentially self-esteem for people with mild dementia;
- (2) Mild dementia does not prevent people from laughing or creating humor;
- (3) People with dementia are suited to performing improvisation comedy because it does not require a reliance on memory to produce successful results;
- (4) Having to actively perform to create laughter has a greater therapeutic effect than passively induced laughter on memory, learning, sociability, communication and self esteem;
- (5) The performance of comedy and improvisation provides participants who have dementia with a window of opportunity to potentiate their cognition and personality; or
- (6) It is possible that comedy and improvisation programme, rather than potentiate capacity, revealed abilities and capacities that existed but for the label of dementia. This label of having dementia negatively shapes interactions and therefore biases previously perceived outcomes and behaviour.

Conclusion

This small study was not meant to produce generalizable or statistically significant results. It was to examine, using a qualitative methodology, an innovative respite care programme designed for people with mild dementia living in the community. What was found was that the programme provided the participants the opportunity to create their own laughter and plenty of it. The data from carers, the respite care coordinator and the comedian facilitator suggested that there were effects generated by these workshops on memory, learning, sociability, communication and thus potentially self-esteem. This study, therefore, provides a starting place for future research to assess the therapeutic potential of this novel intervention with people who have dementia.

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