

ORIGINAL RESEARCH

The use of humor and laughter in research about end-of-life discussions

Ian N. Olver¹, Jaklin A. Elliott^{1,2}

1. Cancer Council Australia, Sydney, Australia. 2. School of Population Health, University of Adelaide, Adelaide, Australia.

Correspondence: Ian N. Olver. Address: Cancer Council Australia, GPO Box 4708 Sydney, New South Wales 2001, Australia. Email: ian.olver@cancer.org.au

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Abstract

Humor is known to normalise sensitive issues and reduce stress and depression. By studying the spontaneous use of humor in research we aimed to discover its role and impact to inform future researchers and clinicians who engage with patients in discussions at the end-of-life. Semi-structured interviews with 51 patients with cancer who were being interviewed about end-of-life decision-making were taped and transcribed. Reading and rereading and a qualitative software package were employed to identify the sections of the interviews where speech was associated with laughter or humor. The interviewer typically used laughter at the beginning of the interview when issuing instructions to the relatives that the focus of the interview was on the patient's views, during the interview when clarifying issues that a patient was having difficulty understanding, and at the end when affirming the value of the patient's co-operation. Humor was also used as a personal response to the patient's humor or embarrassment. Patients used humor or laughter most commonly when they were uncertain about an answer, when embarrassed at discussing personal or family issues or physical symptoms, or when making broad generalisations. Patients told amusing anecdotes or used colloquialisms for sensitive concepts like death, as well as laughing in response to the humor of the interviewer. The topics most associated with patients' use of laughter were death, euthanasia, funerals (particularly their own), hope, religion, and when they described complementary and alternate therapies. Humor is appropriate for researchers, and thereby clinicians, to use to help humanise and enhance communication about sensitive issues at the end of life.

Key words

Humor, Laughter, Speech, Death, Cancer, Qualitative

1 Background

A key feature of humor; something that is actively or passively amusing is that it is interpersonal^[1]. It is so common that it is often taken for granted, but it is an enabler of communication^[2]. Laughter, the most common expression of the experience of humor, can be voluntary or involuntarily emotionally driven, reflecting different neural pathways, but most importantly, it is something that people enjoy^[3,4]. Psychologically, Freud characterised humor as a defence mechanism which avoided negative consequences of facing difficult issues^[5]. Humor and laughter have been recognised as part of coping mechanisms^[6,7].

Laughter has been used as a therapy by individual practitioners or in group therapy^[8-10]. It is associated with a range of emotions but is often used as a comforting strategy to reduce stress^[11-13]. Humor has proven useful in maintaining human connections and enhancing communication, including having a role in storytelling^[2, 14, 15]. Humor is useful in normalising sensitive issues and as a counter to existential ambivalence^[16].

A further potential benefit to patients is that humor has been linked with improved health. A commentary on the literature reported physiological links to reduced pain (possible due to distraction) and cardiovascular effects, particularly lowering of blood pressure^[17]. There have been suggestions of an impact on the immune system but the evidence for these physical effects is not overwhelming^[17-19]. McCreddie and Wiggins concluded that there is more evidence for indirect effects of humor through modulating stress^[17].

Humor in the palliative care setting can foster hope and a sense of connectedness and perspective^[18]. In the hospice setting one study noted that patients at the end of life initiated 70% of the humorous exchanges with the nursing staff^[20]. Likewise, although a diagnosis of cancer is not something that one would not usually associate with humor, a study of patients with ovarian cancer found that they used humor as a coping mechanism to relieve anxiety and believed that it was appropriate for the healthcare worker to use humor, although a prior relationship with the clinician was often thought necessary^[21].

Healthcare providers have been found to use humor and laughter to build rapport, calm anxiety, or reduce embarrassment in communications with patients^[22]. For example, in a study of humor in intensive care, humor added humanity to the interactions between staff and patients^[2]. Nurses can be circumspect about the professionalism of using humor, and they reflect upon its use to ensure that it has been used appropriately^[22].

Research into humor and laughter can be difficult because it can result in studying rehearsed humor as opposed to spontaneous humor. It is the latter which is more likely to inform clinical practice^[23]. A further limitation of some studies is that they only identify humor by laughter which precludes non-laughter related humor which may be part of a person's more regular use of humor to hide embarrassment or relieve stress, or used differently in the healthcare interaction^[23].

We conducted consecutive studies interviewing patients to gain their views on how and when clinicians should present do-not-resuscitate (DNR) orders to patients diagnosed with cancer. The first study recruited patients diagnosed with cancer but not thought to be near to the end of their lives; the second, patients were thought to be closer to death. The studies yielded a rich data set which has been analysed for the patients' reflections on DNR, but we have also published the insights of these patients into other topics such as hope and the use of complementary therapies^[24-37].

Aims

In reading the transcripts of the interviews on do-not-resuscitate decision making, we noted that laughter and humor often punctuated them. In line with the original aim of exploring how to present do-not-resuscitate orders to patients we performed a secondary analysis to discover what role humor and laughter play in end-of-life discussions so that we may be able to make recommendations about how humor can improve communications in this area^[38]. We also aimed to provide new data on how researchers use humor when discussing sensitive issues, and to inform clinicians of the utility of humor and laughter in end-of-life discussions, in line with the overall aims of the initial project.

2 Methods

2.1 Study design

Fifty-one patients participated over the two groups of semi structured interviews to seek their views on do-not-resuscitate orders. Their speech was analysed to ascertain how and when this topic should be presented to patients by their clinicians. The details of these studies and topics covered by the interviews have been previously reported^[25, 34]. The patients were

recruited consecutively, as interview slots became available, from the cancer centre of a large city hospital where the first author, a male (IO) worked as a medical oncologist and therefore had a role in treating some of the patients, but not in interviewing them.

2.2 Sample

The patients all had cancer, with the main difference between the studies being that the second study consisted of 28 patients who were judged to have a prognosis of three months or less whereas the 23 patients in the first study had a longer anticipated lifespan. In addition, 14 of the interviews in the second study had family attending, who sometimes spoke. Otherwise both studies included men and women with various cancers at all stages of presentation, whose characteristics are reported in Table 1. The numbers of patients in each study were determined by when data saturation occurred, that is no new relevant information was coming from the interviews.

2.3 Ethical considerations

The patients were required to give written informed consent and both studies were approved by the ethics committees of the Royal Adelaide Hospital and the University of Adelaide. The interviewers had no other relationship to the patient that could be coercive and interviews were terminated if the patients became distressed. Patients were given pseudonyms to ensure confidentiality. A second researcher checked the rigour of the analysis to prevent subjective interpretations of the data.

2.4 Data collection

The interviews, conducted at the hospital, using inpatient and outpatient areas, consisted of open-ended questions on end-of-life issues focussing on DNR orders. The first set were conducted by a female clinical psychologist, the second by a female social scientist (JE), neither of whom had further involvement with the patients, and the interviews lasted between 20 and 70 minutes. The patients could choose to allow relatives to remain during the interview. The interviews were audio-recorded and the recordings transcribed verbatim using standard grammatical conventions, with all participants assigned pseudonyms.

2.5 Data analysis

The text was scrutinised several times and entered into a software package (N6) to facilitate Thematic Analysis of sections of speech associated with laughter or humor ^[39]. To ensure rigour of analysis the coding of the first author (IO) was reviewed by the second (JE) and differences resolved by discussion.

3 Results

The transcripts of interviews revealed that both the patients and the interviewer used humor or laughter during the interviews. The place of humor may offer a means of approaching and disarming otherwise difficult to express painful and overwhelming aspects of patients' lives. Hence comments, even when saturnine, may become signals of transcendence for some. The use of laughter or humor fell into five themes, namely: to cover uncertainty; to relieve embarrassment; when making broad generalisations which could be open to challenge; when discussing sensitive topics, such as death; or, when responding to the humor of others, in these cases, the interviewer.

3.1 Use of laughter or humor

When specifically speaking about humor, patients indicated its importance to 'lighten the atmosphere'. The patients also indicated that humor was a desirable attribute of their doctors.

Laughter was used most commonly when the patients were uncertain about an answer. We have previously reported the ambivalence in these interviews about end-of-life decision-making when participants were asked about the ideal timing of end-of-life discussions ^[24].

Looks can be deceiving (LAUGHING) because you can feel awful sometimes, but uh, that's it, it's just one of those things and I say, well I've been living 65 years, well [...] hit the jackpot, so (Study 1 "Keith")

So as I say you know it's, terribly difficult for [...] the way that the individual patients react under the problem I suppose. I guess it's difficult (LAUGHS) I don't know what else to say, I'm not quite sure what [...] but probably later I guess rather than earlier (Study 1 "Ben")(Transcription protocol: [...] indicates omitted speech; {Interviewer: text} indicates interviewer speech; = indicates overlapping speech; (...) indicates inaudible speech; [text] indicates clarification of meaning)

Some patients laughed to cover embarrassment when talking about personal or family issues or physical symptoms.

Exaggeration can be used as a form of humor which some patients used, but laughter was used by patients and the interviewer when making over-generalisations or very bold statements which they may have felt would engender disapproval.

Better to save my energy and they're not going to change their mind anyway (LAUGHS) {Interviewer: They're a stubborn breed doctors.} Yeah. (Study 2 "Lois")

When speaking of very sensitive topics such as death, patients used humor, expressed as telling amusing stories as illustrations of their point or using colloquialisms to soften the language used to discuss such topics.

I wouldn't want nobody jumping around, and pumping and giving me 240 volts, and the jumper leads out of the car, like in Dr Bean, or Mr. Bean.' [a comedy program shown on television] {Interviewer: Yeah, I remember that one}= Did you see that one? {Interviewer: =Yeah, I did} (LAUGHTER) = He's great. (Study 2 "Otis")

Sometimes the interviewer made a humorous comment that elicited laughter.

I have a (sewing) machine at home that's worth ten thousand dollars' = {Interviewer: Woah, I have a car that's worth less than that (LAUGHS) It must be some machine.} Husband: It is (LAUGHS) (Study 2 "Nina")

The analysis of the patients' speech revealed that there were topics most associated with laughter and humor. As reported above, death was one such topic.

Yes, when you're dying and you wanted to extend your expiry date (LAUGHTER). It doesn't work like that though. (Study 2 "Una")

Euthanasia was spontaneously raised by patients in both interview sets but was specifically addressed as an additional interview topic in the second study where patients were judged as within three months of death.

She's not too good that one. I say you'd go, you'd liken it to an abortion in the back streets, would it, if it was a doctor that wasn't supposed to be doing it (LAUGHTER). Never mind, you've gotta laugh not cry don't you. (Study 2 "Maud")

Funerals were associated with the use of laughter and given its association with sensitive issues, not surprisingly it was particularly common when patients were referring to their own funerals.

We've talked about it, the funeral arrangements (LAUGHS) and, and what we want. We haven't finished the discussion yet, but, I haven't ever talked about that with doctors. (Study 2 "Kate")

Other topics particularly associated with the use of laughter were discussions of hope and discussions of religion.

I think probably my faith would probably be the thing that would colour my attitude to the fact that I believe in a life hereafter, and I know a lot of people don't, and as it's, curtains (LAUGHS) your life is finished, but for me, the Christian hope is the all important thing. (Study 1 "Cathy")

Laughter was also common when patients described their use of complementary and alternative medicines, suggesting that patients may recognise this as a controversial topic.

Because, this other stuff, diet and meditation, I tried with an attitude, oh what the hell have I got to lose, and found that I felt better for them. {Interviewer: Oh right.} And there's no better way to convince a sceptic (LAUGHTER). And so yes, I looked into it a bit more. (Study 2 "Ruth")

3.2 Use of humor by the interviewer

We also analysed the use of humor and laughter by the interviewers. Again, this was associated with times of discomfort. For example, at the beginning of interviews for the second study, when issuing instructions to relatives who accompanied patients, specifically, that the focus of the interviews was the views of the patients (to try to discourage the relatives answering for the patients), laughter softened the demand. Similarly, laughter was often expressed by the interviewer when she had to clarify a question where the patient was having difficulty understanding what he or she was being asked to comment upon. There is always a balance to be struck between ensuring clarity and not oversimplifying and appearing patronising. Laughter also often occurred at the end of an interview when the interviewer was affirming the value of a patient's co-operation. Finally, as has been recorded in examples above, the interviewer responded by humor or laughter to a patient's humor, or indeed to their embarrassment.

Just with my pain it's, excuse me (coughs), it's a bit hard to even sit, for any, 15, 20 minutes in a chair, you know. I might take that one [chair] home, that's a good one you're sitting in (LAUGHS). {Interviewer: Yeah it's a good one to sit on. I could do with a chair in my office so just watch it. (LAUGHS).} Yeah all right (...) (Study 2 "June")

{Interviewer: Do you think patients understand about the difference between those two terms?} I don't (LAUGHS). {Interviewer: Is one term clearer?} No. {Interviewer: Easier to understand than the other?} No (LAUGHING).

4 Discussion

While recognising that humor may help alleviate the stress of patients and show the human side of the healthcare team Penson *et al.* in 2005 indicated that, as a means of communication in cancer, more research was needed. They recognised that, used appropriately and skilfully, humor may strengthen connections between staff and patients, but insensitive use and variable acceptance make its use a high risk strategy^[3].

The current study examined communication in a research setting and showed that patients used laughter or humor to help discuss issues that they found stressful or embarrassing. The major topics where this occurred were death, euthanasia, and funerals, particularly their own. The uses of humor about such topics have been suggested as being associated with acceptance of death^[40]. Talking about hope and religion were also sensitive topics where stress or embarrassment was abrogated by laughter. Another common situation was in discussing complementary and alternate medicine, where much has been written about patients' reluctance to discuss this with their practitioners, possibly because they are uncertain how the use of unconventional therapies will be viewed by their clinicians who are trained in traditional Western medicine^[41].

The interviewers in this study similarly used humor or laughter to enhance communication on the sensitive issues around end-of life-discussions. It was noteworthy that one interviewer used humor more frequently than the other, which may reflect a difference in the coping styles applied in the research setting to discussing sensitive issues around the end of life.

Although this report is novel in reporting on the use of humor between patients and researchers trying to understand end-of-life issues, there are some reports of the use of humor in the clinical setting at the end of life. Borod^[18] has suggested that laughter and humor can be beneficial to clinicians engaged in palliative care. However, as Bain^[42] has indicated, the ability to either apply or understand humor is part of the coping skills of patients with chronic or terminal illnesses and the nature of the communication will determine whether the use of humor is therapeutic. Moreover, it has been reported in studies of patients with head injuries that laughter was an indicator of engagement in communication^[43]. Olsson et al. in studying humor, concluded that empathy is a prerequisite for the use of humor in the healthcare setting and the interviewers in their study appeared to employ humor to establish empathy with the patients^[44].

Certainly the inappropriate use of humor may detract from the relationship between carers and their patients^[45]. In our study we did not have instances of inappropriate humor as judged by the reactions of the patients. This may reflect the skills of the interviewers and how they established a relationship with the patients, perhaps creating a non-threatening context. However, we may have seen instances of misplaced humor with a larger sample size.

Strengths and limitations

A potential weakness is that our study was a secondary analysis where often there is insufficient information to answer a question because the study was not primarily focussed on the secondary question. However, in this case the enquiry into the use of humor in a research setting when discussing sensitive end-of-life issues was triggered by immersion in the data and added new information. A strength of the study is that it addressed the use of unrehearsed spontaneous humor rather than rehearsed humor. The latter often occurs in studies primarily established to evaluate the impact of humor^[46]. The study also was able to analyse humor in speech that was not associated with laughter as well as that which was, which can be missed in studies relying on laughter as a marker of humor.

5 Conclusion

Our study shows that humor is used by patients in discussions of end-of-life issues and can be successfully used by researchers to enhance the communication when eliciting information from patients on such a sensitive issue. This may be extrapolated to improving the communication of doctors and nurses with patients nearing the end-of-life; here the use of humor is more likely to be helpful than in appropriate.

Further research is required into the use of humor and laughter in both the research and clinical communication settings, as it may facilitate the ability of those present to cope with discussing sensitive and emotive personal issues such as those arising as the end of life approaches. There is also the desirability of establishing if there are subgroups of patients in larger patient populations who may respond adversely to some uses of humor.

Conflict of interest

The authors have no conflicts of interest to declare.

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