Humour and acute psychiatry—a world-first randomised controlled trial

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Background
Humour is a common and universal part of life, but there is minimal research on its beneficial effects in those with psychiatric disorders.

Objective
This study aimed to understand the role of humour in therapeutic engagement in an acute psychiatric setting.

Method
Baseline data comprised a range of information from 60 patients on an acute psychiatric ward. This study had active and then passive exposure audio-taped components. In the active exposure arm, patients were blind and randomly assigned to a treatment and control group. The treatment consisted of 20 minutes of a nurse or case worker using themes, with a humorous focus, to encourage the patient to reminisce on their childhood experiences. The control condition was identical but without a humorous focus. During passive exposure, patients viewed two short humorous film clips.

Findings
Greater improvements in therapeutic engagement were demonstrated with a humour focus for short duration relationships on the ward, compared to the control group. Other findings included the preference of many patients for active humour over passive humour, and the minimal risks associated with using humour in an acute psychiatric setting. As well, listening to a range of recordings of the reminiscing discussions provides a rich experience of patient-staff interaction when there is a focus on humour with patients with acute psychiatric conditions.

Conclusion
A focus on the use of humour by staff on an acute psychiatric ward can improve therapeutic engagement with acutely unwell patients.

Introduction
The role of humour is far-reaching, extending into a vast realm of human life and social interaction. Particularly within the practice of psychiatry, humour has the potential to significantly influence not only general health and well-being but could more specifically play an important role in therapeutic engagement, assessment and diagnosis, as a prognostic indicator, and as part of a comprehensive and holistic psychiatric management plan.

Sadly, humour is rarely taken seriously in psychiatry. Undoubtedly, humour researchers have in the past been derided and criticised by colleagues for endeavouring to understand something that is thought not to be serious. Indeed, it is ironic that psychiatry, often stigmatised and maligned in society, could perhaps be found guilty of stigmatising fun. The teaching of the art of psychiatry rarely incorporates the uses (and abuses) of humour. Classic psychiatric texts are void of humour in their bibliographical listings and the Diagnostic and Statistics Manual IV (1) relegates humour to a glossary on specific defence mechanisms and coping styles. Within clinical practice, it is unlikely psychiatrists typically explore a patient’s sense of humour or ability to laugh when conducting an assessment or in initiating treatment.

It has been well established that humour is difficult to research. It is a complex phenomenon which weaves its way through social experience, self-identity and motivation. Some evolutionary theorists have even hypothesised humour as being the most complex cognitive function in the animal kingdom (2).
Indeed, our ancestor’s use of humour has been used to explore the evolution of humour and the reasons why it has survived as a key component to social discourse. Of note is the universality of humour across all cultures and generations and how laughter develops spontaneously in babies at four months of age, including those born blind or deaf (3).

Beyond definitions, theories and categories of humour (all interesting areas of discourse) lie a range of questions within the practice of psychiatry that if answered, could provide deep insights into the mind and the treatment of mental illness. How can humour be effectively used within a therapeutic frame by mental health professionals? What are humour’s benefits and dangers within a consultation and what role does a specific pathology, culture, gender, generation, personality and a range of other elements play in a humorous exchange. How can humour be researched and measured and outcomes be related to clinical practice? And how can psychiatrists utilise research already conducted by sociologists, ethnographers, behaviouralists, linguists and the like?

This paper, consisting of a novel randomised controlled trial, aims to help provide guidance in answering these questions and enhancing the knowledge of how humour can be effectively utilised in mental health interventions. The randomised controlled trial looks to explore the effects of shared humour on therapeutic engagement on an acute psychiatric ward.

**Trial design**

**Ethical considerations**

Ethical issues were explored with care being given to properly address the potential negative impact of humour on an acute psychiatric ward. Although there is no empirical research in this area, the potential did exist of worsening the symptoms of people suffering from mania, depression, psychosis, suicidality or acute distress with poorly judged or offensive humour. As well, for all patients on an acute psychiatric ward, humour (when generated by ward staff) could be interpreted by a patient who is very ill that their illness is not being taken seriously.

To address all such potentially negative effects of using humour on an acute psychiatric ward, a general assumption was made that the risks and consequences of using humour was approximately equivalent to a range of other approaches on an acute psychiatric setting including limit setting, discussing topics the patient wants to avoid, and reality testing. Problems with engagement occur on a regular basis on an acute psychiatric ward, and appropriate options are offered to deal with these problems, including discussing with the treating doctor, the medical superintendent or a consumer advocate. Problems with the humour research were felt to be best addressed in the same way.

**Method**

An ethics application was submitted and approved by the local hospital ethics committee. Education was provided to ward staff and case managers regarding the nature of the trial, including the requirement of blinding the patient to any knowledge of the trial arm (humour versus control). A range of posters about humour in relation to mental illness were put in staff rooms to generate interest in the trial. Consensus was obtained in meetings with clinicians involved in the trial regarding which reminiscence topics were appropriate for the humour and control arms of the trial. An example of the list in each arm is provided in Figure 2. Also, 20 humorous clips were selected from a range of films, television shows and stand-up comedy acts.

**Figure 2** Standardised opening line to reminiscing and ideas for humour and control group

<table>
<thead>
<tr>
<th>Humour focus</th>
<th>Non-humour focus (control)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening—<em>This is a chat about your past when you were growing up, not about past problems or symptoms, but perhaps about things in your past you haven’t thought about for a while. Your age is …., so you were a teenager in the 60s, 70s, 80, 90s’</em></td>
<td></td>
</tr>
</tbody>
</table>
All patients admitted onto the acute psychiatric ward over a four month period were considered for the trial. When the initial psychiatric assessment was conducted by the treating psychiatrist, a determination was made of the patient’s ability to consent to the trial. Eight patients, though able to consent, declined to participate in the trial. A total of 60 patients participated in the study. Within the consent process, to ensure blinding of the utilisation of humour, and therefore reducing the potential for bias, the patient was not informed that the trial was specifically investigating the role of humour in the engagement process. What was described was a 20 minute conversation between the patient and a mental health clinician who knew the patient, around a theme of reminiscence of non-distressing childhood and adolescent events and stories, in the context of exploring how this conversation altered therapeutic engagement between mental health clinician and patient. They were also informed of watching two short film clips.

Baseline data about the patient was then collected. This included demographic information, a primary diagnosis (determined by the treating psychiatrist, of depression, mania, psychosis, personality disorder or other), the length of time the patient had known their mental health clinician, and the length of time on the ward.

The patient was then randomised to the exposure (humour) or control arm of the trial via a staff member on the ward drawing a chip out of a bag containing two different coloured chips, each colour representing the two arms of the trial. A mental health clinician who had had previous meaningful interaction with the patient was then selected. To reduce further bias, the selection process ensured that every clinician who participated conducted a total of one conversation in each arm of the trial. The mental health clinicians totalled 30 in number and included registered nurses, student nurses, social workers, and case managers trained as registered nurses, clinical psychologists and occupational therapists.

The design trial is outlined in Figure 3.
Figure 3  Randomised Controlled Trial—Humour and Therapeutic Engagement on an Acute Psychiatric Ward

Inclusion criteria (any patient able to consent)
Baseline data collection
Diagnosis, length of stay, length of time known clinician, rapport with nursing staff (WAI-S)

ACTIVE EXPOSURE
EXPOSURE
Blind Randomisation
20 minute discussion (reminiscing) between nurse and patient
with humorous focus (Use of humourous ideas at nurses discretion)

CONTROL
20 minute discussion (reminiscing) between nurse and patient
without humorous focus (Use of non-humourous ideas at nurses discretion)

End of discussion
Outcome: WAI-S

END OF RANDOMISED CONTROLLED TRIAL

PASSIVE EXPOSURE
SHORT CLIPS
Viewing two humorous short film clips:
One standard (the Goon Show)
One short film clip of patient’s choice

Outcome:
Comparison to above discussions (active vs passive)

The WAI-S was then completed by the patient with reference to the clinician who had been selected. The clinician was provided with one of 2 lists of prompting ideas, with one list containing ideas with potentially humorous themes around reminiscences from childhood and adolescent, and the other list containing ideas with neutral themes. If the humour arm was randomly selected, the clinician was encouraged to focus on sharing humour when reminiscing with the patient. If the control arm was selected, no such encouragement was given. In both humour and control arms, the clinician was encouraged to use self-disclosure if they felt it appropriate. The same uncluttered interview room was used for the 20 minute conversation. The opening line of the conversations were identical for both arms of the trial as per Figure 2.

At the completion of the reminiscence conversation, the clinician left the room, and the WAI-S was again completed by the patient. Following completion of the WAI-S, the patient then selected one 10 minute humorous film clips on a laptop. The selection of clips available consisted of a range of cultures, styles of humour and eras. The other film clip was a brief skit from the Goon show. At the completion of watching the clips, the patient was asked to rate between 1 and 10, the therapeutic benefit of the active component of the trial (the reminiscence, with or without humour focus) and the passive component (viewing the clips). Finally, the extent of the blinding of the active component of the humour was checked with each patient.
Outcome measures consisted of a change in WAI-S score and the difference in ratings (or preference) of therapeutic benefit between the active and passive component of the trial. Adverse events were sought in a brief exit interview following completion of the trial.

**Results**

Statistical analysis was conducted using one of the most simple statistical tests in the independent sample t test. The purpose of the analysis was to explore broad trends, as analysing data pertaining to the very complex concepts of humour and therapeutic engagement on patients with acute psychiatric symptoms using more sophisticated statistical methods was felt to be at risk of producing inaccurate conclusions.

Looking at baseline data, the control group and humour group showed no statistically significant difference in WAI-S scores before the intervention (see figure 4). Both groups also showed no statistical difference between genders, the major diagnoses, the length of time on the ward or length of time the patient had known the clinician.

![Figure 4 Baseline WAI-S comparison](image)

<table>
<thead>
<tr>
<th>Group Statistics</th>
<th>Arm</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Std. error mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>WAI-Pre</td>
<td>Humour</td>
<td>30</td>
<td>3.5333</td>
<td>1.61316</td>
<td>.29452</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>30</td>
<td>3.6000</td>
<td>1.24845</td>
<td>.22793</td>
</tr>
<tr>
<td>WAI-Post</td>
<td>Humour</td>
<td>30</td>
<td>6.0667</td>
<td>1.65952</td>
<td>.30299</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>30</td>
<td>4.9667</td>
<td>1.56433</td>
<td>.28561</td>
</tr>
</tbody>
</table>

The difference in increases in WAI-S scores between the treatment group and control group was statistically significant of 2.6 (t(58) = 2.64, p<0.05). However, when only comparing WAI-S scores between treatment and control for clinicians who had known the patient for greater than 2 weeks (for instance, a case manager), no statistically significant difference was found. This supports the possibility that therapeutic engagement on an acute psychiatric ward is most critical in the first few days of admission compared to points of time later in the admission, and that the use of humour could play a role in the development of therapeutic engagement at this early stage. Of note, no statistical significance was found between humour and control group where personality disorder was the primary diagnosis, though the numbers are small.

Importantly, no patient in either group expressed difficulties or concerns with the active or passive components of the trial. No patient finished the trial early and there were no known adverse events.

In exploring patient preference between active and passive humour (the reminiscing versus watching the two short films), there was a statistically significant difference in ratings of 4.5 (t(21) = 12.3, p<0.001) in favour of the active humour-focused or neutral reminiscence component compared to watching the short humorous films. Again, there was no statistical difference in ratings between active and passive components for those with a primary diagnosis of a personality disorder.

**Discussion**

Results obtained demonstrate the potential of humour in therapeutic engagement on an acute psychiatric ward. Due to the unique qualities of the environment and the subjects, extrapolations to other environments or patient types should be done with high levels of caution. Any conclusion is tentative due to the vast number of potential confounding factors that may exist. Although a blind Randomised Controlled Trial ought to reduce the effect of this problem, differences may exist that produce confounding factors and bias that affects any conclusions made. Of note, a focus on generating
humour, as opposed to actual humour, was explored and in this trial, demonstrated that if a clinician tried to generate humour, engagement often markedly increased. Although the numbers in the trial totalled 60, resulting in reasonable power, any subset analysis (comparisons between diagnoses, for instance) lacked such power, with conclusions more speculative.

Problems with design of the project included insufficient data collection, in that mood and anxiety levels were not obtained as the pilot study highlighted inconsistencies in involuntary patients or patients with minimal insight, and the concentration required to complete any questionnaire that was lengthy was at times absent. Externally rated humour would provide the potential for more objective data, and interesting comparisons between subjective and objective measurements. A research question around humour, as opposed to a focus on humour, could then have been explored. Greater numbers could have been used to generate more power for subset analysis. As well, some practice in generating humour, including potential professional training, may have added greater benefits of using humour. No specific therapeutic engagement measure exists for detecting important unique elements of therapeutic engagement on an acute psychiatric ward. Finally, qualitative analysis of the recordings would likely have provided a deeper understanding of the use of humour with patients with acute psychiatric conditions. An example of using qualitative analysis in humour is a simple study conducted around a set of interviews with the research question: ‘what does humour mean to you?’ (4).

Insights gained from this research and literature review are predominantly around where breadth, depth and accuracy could be enhanced in regard to humour research. Data analysis and research design needs to move beyond surveys and descriptions and the use of scales that struggle to capture the complexities of humour. Integrating qualitative and quantitative data is one area where this can occur. Although currently most integration of qualitative and quantitative data occurs after data from each is analysed and individual conclusions drawn from the separate sets of data, Bazely argues that more powerful data analysis could be conducted within a trial. One reason for the current deficiency in real integrative analyses is due to the rarity of one researcher being well experienced in both qualitative and quantitative analysis. Also, software has only recently been developed to conduct this integration but is slowly gaining wider acceptance in the research community. Complex abstract concepts such as humour would be better explored through the combination of qualitative and quantitative data and integration using computer programs. Many authors have rejected the assumption that the integration of results from different research methodologies can be concluded as increasing validity. They argue that both research methods may have different inaccuracies and combining such methods simply combines inaccuracies, in either a summative or multiplicative manner. Mixed methods, as argued by Lockyer, should involve the use of mixed data analysis (not just mixed data collection methods), including linguistic discourse analysis, qualitative compositional analysis and quantitative content analysis (5).

Potential contributions of humour in therapy for people with mental illness is vast. The expression of depression, anxiety, aggression, sexual impulses, shame and guilt could occur through spontaneous humour. Patient jokes could be explored to assess unconscious conflicts. Appreciation or expression of humour might be used as a prognostic indicator or as a response to treatment. Any numbness of emotion, in a disorder such as Post Traumatic Stress Disorder, could be improved through humour. Distorted cognitions and ruminations could be modified by using humour to create a distance between self and cognitive processes, as well as provide an alternative perspective. Well constructed humour could be used to highlight the absurdities of some cognitive distortions. The potential space for play could be enhanced with humour for those with Borderline Personality Disorder or as a remover of rigid defences in generally disordered personalities. Humour in group therapy might be utilised to improve cohesion, and in Obsessive Compulsive Disorder, patients laughing at their fears could be seen as an important step in recovery. And finally, as explored in the randomised controlled trial, humour could be used as a way to improve the important element of therapeutic engagement, particularly in the early stages of treatment.

Qualitative analysis clearly has a role in exploring the various complexities of humour. Other areas of health research have explored this capacity in relation to humour and therapeutic engagement. For
instance, in the field of testicular cancer, a qualitative study involving the interviews of 45 men with a
diagnosis of testicular cancer, found humour beneficial to manage feelings, hide embarrassment, share a
sense of solidarity with others, and to be reassured that they were human and being treated as normal
(6).

Empirical research demonstrating the benefits of humour generally and specifically in mental health
interventions is currently commonly deficient in quality and accuracy. Scientific analysis struggles to
capture the complexities of humour, a universal part of life that is interesting and potentially powerful.
The study of mental illness also provides a range of insights into the understanding of the mind.
Combining humour research with mental illness is a difficult task, but one where a deep level of
knowledge and insights could be obtained. This literature review and novel randomised controlled trial
has attempted to undertake this difficult task, and has highlighted the vast potential for further
discoveries and exploration.

Recommendations
1. For health workers to consider utilizing humour when interacting with service users, as a way to
improve therapeutic engagement.
2. For mental health workers to consider humour as a powerful tool to improve therapeutic
engagement with those with mental illness, including those with acute psychiatric symptoms.
3. For researchers to consider humour when looking at ways to improve engagement of health
services with the community.

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Edition), Washington, DC.
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