Impact of a Brief Worry Based Cognitive Therapy Group in Psychosis: A Study of Feasibility and Acceptability.

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Impact of a Brief Worry Based Cognitive Therapy Group in Psychosis: A Study of Feasibility and Acceptability.

Abstract

**Background:** Previous research suggests that CBT focusing on worry in those with persecutory delusions reduces paranoia, severity of delusions and associated distress.

**Aims:** This preliminary case series aimed to see whether it is feasible and acceptable to deliver worry focused CBT in a group setting to those with psychosis. A secondary aim was to examine possible clinical changes.

**Methods:** Two groups totalling 11 participants were run for 7 sessions using the WIT trial manual. Qualitative and quantitative data about the experience of being in the group was also collected via questionnaires as was data on number of sessions attended. Measures were delivered pre and post group and at 3 month follow up. These included a worry scale, a measure of delusional belief and associated distress and quality of life measures.

**Results:** Of the 11 participants who started the group, 9 completed the group. Qualitative and quantitative feedback indicated that most of the participants found it acceptable and helpful, and that discussing these issues in a group setting was not only tolerable but often beneficial. Reliable Change Index indicated that 6/7 of the group members showed reliable reductions in their levels of worry post group and 5/7 at follow up. There positive changes on other measures which appeared to be more pronounced at follow-up.

**Conclusions:** Delivering a worry intervention in a group format appears to be acceptable and feasible. Further research with a larger sample and control group is indicated to test the clinical effectiveness of this intervention.

**Keywords:** Psychosis, paranoia, CBT, worry, group, persecutory delusions.
Learning Objectives

- Understand the role of worry in psychosis.
- Learn about possible feasibility of working on worry in a group setting.
- Be aware of potential clinical changes from the group.
- Consider acceptability for participants of working on worries in a group setting.
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Introduction

Cognitive Behavioural Therapy (CBT) is recommended for psychosis as highlighted in the National Institute of Clinical Excellence guidelines (NICE, 2014). This usually takes the form of one-to-one sessions, the aims of which can be defined as “reducing distress, increasing confidence and reengaging in activity…initially the therapist and patient develop a shared understanding, with the focus on what is maintaining the current problems and what can immediately be changed…the clinician plays a collaborative role: drawing up a list of goals with the patient” (Freeman, 2013). Historically this intervention has used psychological models which inform and illustrate our understanding of the development of psychosis and the maintenance of its symptoms e.g. Morrison (2001). In more recent years research has begun to dismantle the umbrella term of ‘psychosis’ into specific problems: Freeman (2016) argues that experiences such as grandiosity, hearing voices and paranoia are different from one another, with different causes. Thus the focus has shifted to considering these as individual experiences rather than symptoms of psychosis, and as such more targeted models and interventions are beginning to be developed. Of note is the work of Freeman (2016) who has researched the maintenance factors involved in persecutory delusions, one of which is worry.

Research has shown that the majority of those with persecutory delusions have levels of worry which are similar to those with GAD (Startup, Freeman & Garety, 2007), and high worry predicts greater paranoia in both those with psychosis and the general population (Freeman et al., 2012; Startup, Freeman & Garety, 2007). Worry is believed to be linked to persecutory delusions as it “brings implausible fearful ideas to mind, keeps them there, and exacerbates the distress” (Freeman, 2016, p.687). The relationship is also likely to work both
ways with greater paranoia also increasing levels of worry (Freeman, 2016). In the Worry Intervention Trial (WIT), Freeman et al. (2015) investigated whether using CBT to reduce worry would also reduce persecutory delusions in patients with psychotic disorders. They conducted a parallel, single-blind, randomised controlled trial. They randomly assigned 150 eligible participants to either a six session, 1-1 worry-reduction CBT intervention completed over 8 weeks added to standard care, or standard care alone. They concluded that long-standing delusions were significantly reduced by a brief intervention targeting worry.

Evidence from the Hearing Voices Groups movement suggests that there is value to participants in the shared experience of attending a group and being in a safe context in which to share experiences (Ruddle, Mason and Wykes 2011). In a recent feasibility study, Isham et al (2018) assigned thirteen participants to an 8 week worry group or control. They adapted the manual from the WIT trial (Freeman et al., 2015) for a group format, and concluded that the group was feasible and showed positive outcomes in worry, however there were no changes in paranoia and outcomes in delusional beliefs were not maintained at follow-up. They suggest that the effects are perhaps not as strong as in one-to-one-interventions. However it is important to note that this was a feasibility study and was not statistically powered to detect changes.

This current study aimed to build on the evidence of the effectiveness of targeting worry in paranoia from the WIT trial, and see whether it is feasible and acceptable for this to be delivered in a group format. A secondary aim is to look at potential impact on symptoms, functioning and quality of life.

**Method**

**Design**
WORRY GROUP FOR PSYCHOSIS

This study was a feasibility and acceptability study, as part of this a preliminary case series was used. NHS ethics approval was not needed as this was evaluating routine clinical practice, approval was granted by the trust service evaluation and audit team. Measures were completed as part of routine clinical practice for the group being evaluated and all participants gave written consent for their data to be used anonymously for this service evaluation and were deemed by their clinician to have capacity to give informed consent.

Setting

The group was delivered within a National Health Service (NHS) community mental health team (CMHT) for adults with severe and enduring mental health problems and the Early Intervention in Psychosis (EIP) team. The psychosis treatment pathway offers evidence based interventions in a 1-1 and family setting. The group was developed and facilitated by a CBT Therapist (L.W.) and Clinical Psychologist (H.C.) both of whom have specialist CBT training and experience in working with people with psychosis, including training on the delivery of a worry intervention for paranoia.

Intervention

A 7-week programme was developed following the components and structure reported in the WIT trial (e.g. understanding, overcoming and staying ahead of worry). The main core element of the original WIT manual which was not included was Emotional Processing and Metacognitive Awareness as it was not included in the pilot by Isham et al (2018) and was felt by the current facilitators that it would take too long and not work well in a group format. The WIT manual was given to each group member. Each session lasted two hours, with a short break half way through. It followed the following format: homework, check –in from last week, main topic of the session, homework setting and considering barriers to practise/homework. A brief telephone call was made to each participant every week between group sessions to check in with homework and address any arising issues.
**Procedure**

Participants were referred by the CMHT and EIP teams. The inclusion criteria were: a primary diagnosis of psychosis with evidence of persecutory beliefs and significant worry. Specific examples of worry and the impact on function were given in the assessment; however no standardised measure was used for screening.

Exclusion criteria were: a primary diagnosis of personality disorder, current alcohol or substance dependency. Each suitable participant was seen by one of the facilitators for a pre-group assessment to discuss practicalities and assess their ability to attend and participate in the group. Eligible participants met one of the researchers who were separate from the facilitators to complete consent forms and pre-group, post and follow-up questionnaires.

Participants were asked to complete an evaluation feedback form at the end of the group. This was anonymous: participants did not have to put their name on and they gave the form back to a researcher who did not facilitate the group. This consisted of two likert scales to rate how helpful they found the worry group and how easy it was to follow what was being discussed (see Appendix 1). Free text boxes were presented for the following questions:

- What was the most helpful part about the group?
- What could we improve about the group?
- How did you find talking about worry and paranoia in a group with other people?
- Is there anything else you want to say?

Participants were offered £10 per time point to cover their expenses. The following data is from the first two of these groups which were run.

**Measures**
The following measures were administered pre, post and at 3- month follow up. (Cronbach’s alpha for current sample pre group given below).

**Psychotic-Symptoms Rating Scale (PSYRATS) - delusion scale.** (Haddock, McCarron, Tarrier, Fargher and Tarrier, 1999): a 6-item clinician-rated measure of severity of delusional beliefs via categories such as ‘Disruption to life caused by beliefs’; $\alpha=.74$.

**Penn State Worry Questionnaire (PSWQ)** (Meye, Miller, Metzger, and Borkovec, 1990): a 16-item self-report measure of intensity, duration and distress associated with worry such as ‘My worries overwhelm me’; $\alpha=.90$.

**Green et al paranoid thoughts scale (GPTS)** (Green, Freeman, Kuipers and Bebbington, 2008): A 32-item self-report measure of two dimensions of paranoid thinking; social reference and social persecution. An example item is ‘People have been checking up on me’; $\alpha=.95$

**Choice of outcome in CBT for psychoses – short form (CHOICE)** (Greenwood, Sweeney, Williams, Garety, Kuipers and Scott, 2010): A 11-item self-report measure developed to ask people what they want to address in CBT for psychosis. For example ‘Positive ways of relating to people’; $\alpha=.92$.

**Work and Social Adjustment Scale (WSAS)** (Mund, Marks, Shear and Greist, 2002): A 5-item self-report asking people how their problems affect their daily functioning such as work and leisure etc. Example questions include ‘Because of my problem my home management is impaired’; $\alpha=.57$.

**The Recovering Quality of Life (REQOL)- 10 item version.** (Keetharuth et al, 2018): this self-report measure assesses the quality of life for people with a range of mental health problems. Questions include ‘I felt hopeful about my future’; $\alpha=.89$

**Participant characteristics**
Figure 1 displays a flow diagram of the recruitment of participants into the study. Fourteen people were initially screened for the group of whom eleven started the group and completed pre questionnaires. Of these, eight then completed the group and post measures and six completed follow-up measures. Two of the participants (both of whom completed the group) were also undergoing one-to-one CBT for psychosis at the same time as attending the group. A further one completer started the assessment/formulation stage of therapy in between post-group and follow-up measures being completed.

Of the 11 participants who took part in the group and service evaluation, two participants were under the EIP service. The group was 73% (n=8) female, ages ranged from 17 to 60 years, with a mean age of 46 years. The sample was 90% White Ethnicity (n=10) and 9.1% (n=1) Asian ethnicity. In terms of diagnosis, four had a diagnosis of schizophrenia, two psychotic depression, two first episode psychosis, one delusional disorder, one schizoaffective disorder and one with a current diagnosis of post psychotic personality changes and a past diagnosis of schizophrenia. Three of the 11 participants had co-morbid diagnosis of personality disorder traits or substance use. Pre scores on the PSWQ ranged from 41 to 77 out of 80, 5/8 participants scored above the cut-off of 65 recommended for detecting Generalized Anxiety Disorder (GAD) (Douglas, Mennin, Heimberg & Turk, 2003).

Statistical Analysis

The only missing data was for the CHOICE where two questions were missing for one individual each. For these the mode response for that measure for that client was used and the total scale score was calculated as normal. The sample size was too small for statistics such as t-tests or a Multiple analysis of Variance to detect changes in measures from pre therapy to post therapy. The Reliable Change Index (RCI) (Jacobson & Truax, 1991) is useful with small sample sizes as it looks at individual changes in scores (Zahra & Hedge,
2010). The RCI is calculated by dividing the changes in scores by the standardised difference (in this case calculated using the standard deviation and cronbach's alpha in the current sample pre group), this then gives a change score needed to reach corresponding to a standardised z-score of less than -1.96 or above 1.96 of which would less than 5% likely to occur by chance and therefore likely represents a reliable change rather than error (de Souza Costa & De Paula, 2015). An online calculator was used for the current study (https://www.psychoutcomes.org/OutcomesMeasurement/ReliableChangeIndex).

Results

Group Attendance

Of the 11 participants who took part in the service evaluation and started the group, 2 dropped out of the group. One of these attended two of the first three sessions and then no further sessions. The group facilitators reported that they were highly anxious in the first session and said they felt daunted by the homework and being called in between sessions. In another session they appeared distracted, and they then went abroad for several weeks. The second participant who dropped out attended the first two sessions and then no further sessions. The facilitators reported they were highly anxious in the first session and were not able to take in the content, they also reported being physically ill one week.

For the nine participants who completed the group, two attended all 7 sessions, five attended 6/7 sessions, one attended 5/7 sessions and one participant attended 4/7 sessions. Thus the mean number of sessions attended for completers was 5.1/7.

Participant Feedback

Participants were asked to complete a feedback questionnaire, figure 3 shows that most participants rated the group as easy to follow and helpful.
Table 1 displays qualitative feedback from 9 participants about what most helpful about the group, what could be done to improve the group, how they found talking about worry and paranoia with other people in a group and any other comments. The comments were largely positive with most saying that learning skills to reduce worry and learning from other people’s experiences was helpful.

Facilitator Feedback on Running the Group

Informal feedback from the group facilitators was that worry periods were established and worries were able to be postponed for all participants who completed the group. This was done in week 3 (introducing worry periods) and then followed up in week 4 (boosting worry periods). The group used problem solving discussions to overcome barriers to the worry periods. Between-session phone calls were received well by participants and the facilitators believe they helped keep participants on track and helped with therapeutic relationship and therefore engagement, they were also used to help check in about worry periods. The facilitators also felt that normalising the universality of experiences was important, in line with the participant feedback.

Reliable Change in Scores

Figure 2 displays the results for the reliable change index, these compare changes in scores from pre group to post group and pre group to follow-up. This shows there was a reliable change in worry scores (PSWQ) for the majority of completers and just over half of those who started the group and this was largely maintained at follow-up. Severity of
delusional beliefs measured by PSYRATS reduced for only one individual by the end of the group, however the more had improved at follow up. Overall scores on the Green Paranoia Scale reveal improving gains from end of group to three month follow up. On the social persecution cognitions scale two individuals initially deteriorated before an improvement at follow-up. In terms of quality of life and daily functioning, there were reliable improvements as measured by the CHOICE, REQOL and WSAS at both post treatment and follow-up.

**Insert Figure 2 here**

**Discussion**

This study aimed to see whether a worry intervention for paranoia is feasible and acceptable when delivered in a group format, a secondary objective was a preliminary test of potential clinical changes via a case series. The findings support the evidence generated by Freeman et al (2015) in their large scale RCT using the worry intervention in individual therapy, and tentatively suggest that this intervention is feasible to run in a group setting as evidenced by informal facilitator feedback, positive participant feedback and a relatively low dropout rate.

There was reliable change in worry scores for the majority of participants and this was largely maintained at follow up, in line with the findings of the group intervention of Isham et al (2018). Severity of delusional beliefs reduced for only one individual at post-treatment however the majority improved at follow up. In contrast, Isham et al (2018) found that delusional beliefs changes were not maintained at follow-up. This difference may be due to the control group in the Isham et al. study compared to a case series here. However it is important to note that due to the design and small sample size, as well as some participants having one-to-one therapy at the same time, the clinical effectiveness of the group cannot be determined from the current study.
WORRY GROUP FOR PSYCHOSIS

This trend for maintaining or improving on gains from end of group to three month follow up is echoed in the Green Paranoia scale where reliable change increased to follow up, and indeed for persecution cognitions there was an initial deteriorating for two individuals before an improvement at follow up. This indicates that the gains from the group are perhaps on-going and that processing and consolidation of skills learnt continues after the group has finished. It might also be that the nature of the group is essentially exposure which for some might lead to an initial increase of paranoid cognitions before they start to reduce. There was also reliable change for the CHOICE and REQOL post-treatment follow-up suggesting that reduction in worry may have led to a wider improvement in quality of life for some. The WSAS also showed improvements suggesting a positive impact on functioning, however the internal reliability of this measure appeared to be low in the current sample so the results should be interpreted with caution. Also as previously stated the clinical effectiveness is uncertain in the current study.

The drop-out rate was 18% (n=2) is slightly higher than that reported by Freeman et al. (2015) of 9/73 for individual therapy (12%) The current number of sessions attended of 5/7 is comparable to Isham et al (2018) who reported an average of 5.7 out of 8 sessions. However a larger sample size is required fully ascertain levels of drop-out.

Offering the intervention in a group format was considered to be the most helpful aspects of the group by a many participants in terms of reducing isolation, learning from others and sharing experiences with others. Four out of the nine also identified that a greater number of participants would have improved the group. The feedback indicated that although several were initially anxious about talking about worry and paranoia in the group, this was not sustained and they became comfortable in the group environment. In fact seven out of the nine respondents did not report any difficulty with this beyond the first session. This may seem counterintuitive given the nature of the client group however it suggests the group
environment might be more than just a non-specific effect: it might act as exposure, and a valuable opportunity for members to test out their fears and predictions about being around others.

It is important to note that one participant reported not understanding why the facilitators thought a group would help with paranoia. The group format may have been a factor for those who did not initially engage but there is no data available for this. It is also worth considering that though some participants asked for a larger group at the end of the seven sessions, this may have increased anxiety in the first session and led to higher levels of initial disengagement: the two participants who dropped out appeared to be highly anxious in the first couple of sessions. Thus a group setting may be challenging for some and lead to dropout. Being able to identify those who are likely to find the group setting hard and help prepare them may improve engagement.

This study is limited by a small sample size and no control group, with mostly white ethnicity. There was also no standardised measure of worry used for screening and thus what constituted a significant worry might have been somewhat subjective and open to the clinicians’ interpretation, however scores on the PSQ were relatively high with many scoring above the cut-off for GAD. The feedback may be impacted by being paid for participation; however this feedback was collected independently and anonymously of the group facilitators. Two participants were also undergoing individual CBT whilst attending the group, so the potential clinical improvements for these individuals cannot be attributed solely to the group.

There is also the possibility of non-specific factors such as the effect of peer support here. Further research could compare the effectiveness of a group to an individual worry intervention, and compare individual worry work to group worry work to a non-CBT group intervention to determine the relative contribution of non-specific factors such as social
support to outcomes. A randomised controlled trial is needed to fully assess clinical effectiveness compare outcomes to treatment as usual. It is also possible that those who did not finish the group or were lost at follow-up might not have benefited so much from the group, thus in future a intent to treat analysis would be necessary. However this preliminary case series has indicated that delivering worry based CBT for psychosis as a group is both feasible and acceptable. This may be useful in services as part of a ‘stepped care’ pathway for those with psychosis or as a preliminary intervention for those waiting for one-to-one CBT.
Main Points

- CBT targeting worry may reduce distress in psychosis. Previous research has suggested this may be feasible in a group format.
- The current case series examined feasibility and acceptability and outcomes for 11 participants who attended a worry group.
- Dropout rates were acceptable (2/11).
- Qualitative feedback suggested that the group was helpful and that discussing worry about others in a group was beneficial.
- The majority of those who completed the group, and just over half of those who started the group showed reliable improvements in worry which were maintained in follow-up.
- There appeared to be improvements in distress and quality of life.

Further Reading


WORRY GROUP FOR PSYCHOSIS

References


Appendix 1: Feedback Form

**Evaluation of Worry Group**

You do not need to give your name on this form

1) Overall, how helpful did you find the worry group? (Please circle)

0 1 2 3 4 5 6

(0 = not at all helpful 6 = extremely helpful)

2) Overall, how easy was it to follow what was being discussed? (Please circle)

0 1 2 3 4 5 6

(0 = not at all helpful 6 = extremely helpful)

3) What was the most helpful part about the group?


4) What could we improve about the group?


5) How did you find talking about worry and paranoia in a group with other people?


6) Is there anything else you want to say?


Thank you for taking the time to complete this form
Figure 1

Flow diagram of participation in group

- Screened for group $n=14$
- Invited to group and to complete measures for service evaluation $n=13$
- Started group and completed service evaluation measures $n=11$
  - Completed group and post measures $n=8$ (plus incomplete measures for $n=1$)
  - Completed post-group feedback questionnaire $n=9$
- Completed 3-month follow-up measures $n=6$
- Could not attend group due to work $n=1$
- Opted out of service evaluation $n=1$
  - Had advised on study design as a patient representative so not appropriate to take part $n=1$
- Dropped out of group $n=2$
  - Did not wish to complete post measures $n=1$
Figure 2

Reliable Change Index results post and follow-up for completers
Figure 3

Quantitative post-group feedback

Overall how helpful did you find the worry group?  ■ Overall, how easy was it to follow what was being discussed?
Table 1

Qualitative post-group feedback (exact quotes from the 9 participants, each bullet points represents a different participant)

<table>
<thead>
<tr>
<th>What was most helpful about the group?</th>
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<tr>
<td>• Understanding why we worry and learning the tools to tackle worry and make it more manageable.</td>
</tr>
<tr>
<td>• Hearing other people’s experiences and what helped them.</td>
</tr>
<tr>
<td>• That we grew to understand why we worry and were then given the tools to help us stop worrying.</td>
</tr>
<tr>
<td>• The skills taught on what to do when worrying.</td>
</tr>
<tr>
<td>• The ideas of how to cope with worrying</td>
</tr>
<tr>
<td>• Worry periods, Imagery.</td>
</tr>
<tr>
<td>• Sharing the experiences and hearing other people's experiences, learning about techniques to postpone the worries.</td>
</tr>
<tr>
<td>• Meeting every week with other group members, it felt less isolated.</td>
</tr>
<tr>
<td>• Considered practitioners who fully covered all aspects of worry. Being part of a group instead of being alone, feeling like you’re not the only one.</td>
</tr>
<tr>
<td>• Having handouts to work through. Being called and discussing the therapy. Learning about worry before trying to tackle it.</td>
</tr>
</tbody>
</table>

What could we improve about the group?
• More people be present.
• Only thing it would have been nice if more people were involved.
• More attendance from other people.
• Perhaps a longer course and a shorter, more condensed session would be helpful.
• The information seemed a bit robotic(sic) and I often found my mind wondering off maybe add some fire into the group.
• Nothing, everything was perfect.
• Makiung(sic) the questions easier to understand.
• To have more time to look at different aspects of (illegible) in detail. Having more people in the group.

How did you find talking about worry and paranoia in a group with other people?

• I was made to feel at east(sic) with people and found that I wasn’t so anxious and that at times it was relatively easy.
• Difficult at first session than not so bad!
• I was made to feel at lease therefore found talking about the above relatively easy!
• Nerve wracking to start, but easier as the weeks went on and we got to know the group.
• Fine, wasn’t to bothered by it.
• Difficult.
• Comfortable.

• OK, I held back on personal stuff.

• I found it easier than I thought I would. Felt completed safe in the group and not judged.

Is there anything else you want to say?

• Thankyou for organising it!

• I am grateful to have been given the chance to do this and course and feel that I have benefitted emensely\((sic)\).

• Being around new people makes me worry and you’re attempted\((sic)\) to help me deal wit this is by putting me in a room with 9 people I have never met before.

• Very helpful.

• The group was very helpful. Thanks.

• Thankyou for the help I received by being in the group.

• A huge thankyou all I have learnt has been a massive change for me. It has opened my eyes to worry.