Original Research

Treating Delusional Disorder: A Comparison of Cognitive-Behavioural Therapy and Attention Placebo Control

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Objective: Cognitive-behavioural therapy (CBT) has proved effective in treating delusions, both in schizophrenia and delusional disorder (DD). Clinical trials of DD have mostly compared CBT with either treatment as usual, no treatment, or a wait-list control. This current study aimed to assess patients with DD who received CBT, compared with an attention placebo control (APC) group.

Method: Twenty-four individuals with DD were randomly allocated into either CBT or APC groups for a 24-week treatment period. Patients were diagnosed on the basis of structured clinical interviews for mental disorders and the Maudsley Assessment of Delusion Schedule (MADS).

Results: Completers in both groups ($n = 11$ for CBT; $n = 6$ for APC) showed clinical improvement on the MADS dimensions of Strength of Conviction, Insight, Preoccupation, Systematization, Affect Relating to Belief, Belief Maintenance Factors, and Idiosyncrasy of Belief.

Conclusion: When compared with APC, CBT produced more impact on the MADS dimensions for Affect Relating to Belief, Strength of Conviction, and Positive Actions on Beliefs.

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Clinical implications

- Both APC and CBT significantly improved mood and belief parameters associated with delusions.
- CBT seemed to have a greater impact than APC on Strength of Conviction, Affect Relating to Belief, and Actions on Belief, but with weak to moderate effect sizes.
- The MADS items were differentially affected by therapy, which confirmed the dimensional structure of delusional beliefs.

Limitations

- Both groups had a small number of participants.
- There were incomplete measures for some participants.
- The study lacked long-term follow-up.

Key Words: *delusional disorder, cognitive-behavioural therapy, attention placebo control*

Delusional disorder, the contemporary conceptualization of paranoia, is characterized by the presence of one or more nonbizarre delusions and the relative absence of associated psychopathology. Delusions are currently subdivided by content and involve experiences that can conceivably appear in real life, such as being malevolently treated (persecutory type), having a physical disorder (somatic type), being loved at a distance (erotomanic type), having an unfaithful sexual partner (jealous type), and possessing inflated worth, power, identity, or knowledge (grandiose type). Although the exact relation between delusional belief and acting on delusions is unclear, antisocial behaviour is likely if the delusion invokes strong emotion and when it is associated with catastrophe, persecution, or paranoia.[1]

The onset of DD may range from age 18 to 80 years, but it typically presents at age 34 to 45 years.[2] Estimates of the incidence and prevalence of DD (0.7 to 3.0/100 000 and 24 to 30/100 000, respectively) support the clinical impression that delusional disorders are less common than mood disorders or schizophrenia. DD may affect either sex; the male-to-female ratio is 0.85. Once established, it is often a chronic and lifelong affliction.[3]

Clinical consensus continues to support the use of pimozide or risperidone for the treatment of DD. Manschrek and Khan[4] report no difference in effectiveness between first- and second-generation antipsychotics, but they note that the studies were mostly small and uncontrolled and that the absence of double-blind randomized trials might have undermined the positive results. In contrast, metaanalyses have concluded that CBT is an effective treatment, either as an adjunct to pharmacotherapy or as a main intervention. Terrier[5] reviewed 20 clinical trials evaluating the efficacy of CBT as an adjunct to antipsychotic treatment; most of these trials compared CBT with standard psychiatric care or treatment as usual. A few studies, however, have compared CBT with supportive counselling or "befriending," and here, the results are less convincing (except for hallucinations).[5] In a review, Dickerson notes that CBT is found to be more effective in comparison with routine care than when it is compared with other therapies matched for therapist attention.[6] Further, most CBT packages contain a mix of CBT with more general coping and social skills training coupled with self-regulation of emotional states.[7]

In comparison with studies evaluating CBT for psychosis, there have been very few clinical trials of CBT for patients with DD. This subgroup has been considered even more difficult to treat than schizophrenia patients because of DD patients' less evident negative symptoms, more monosymptomatic profile, and potentially high functioning. Sharp et al[8] suggest that changing convictions in DD may be particularly difficult because the delusion is the principal symptom, whereas in schizophrenia, the negative impact of other symptoms may emphasize the dysfunctional nature of the delusional component. The current consensus[9] is that CBT for delusions comprises 3 main stages: preparation of the patient for therapy, cognitive challenge to the conviction, and reality testing, at which point the patient actively seeks to disconfirm the conviction. Chadwick and Lowe[10] found that a combination of verbal challenge and reality testing effectively reduced the level of convictions in 10 out of 12 patients over a 6-month period. They suggested that, even though reality testing alone can have an effect on some participants, it was ineffective in 2 cases, and they also suggest that reality testing is more effective if preceded by verbal challenge. As part of a wider CBT management program in patients with psychosis, Garety et al[11] administered a CBT program to modify delusions over an average of 16 sessions during a 6-month period and found a significant reduction in delusional conviction, general symptomatology, and depression in 13 participants. Sharp et al[8] applied CBT techniques similar to those of Chadwick and Lowe[10] in a purely DD group (persecutory type) and found improvement in the conviction of only 3 patients. Currently, no standard treatment exists for DD, with most clinicians advocating an idiopathic case-formulation approach. So far, all treatment trials of CBT for DD have been small in scale or single case studies; in particular, no trials treating DD exclusively have compared CBT with an equivalent attention treatment rather than no treatment or routine care.

Abbreviations used in this article

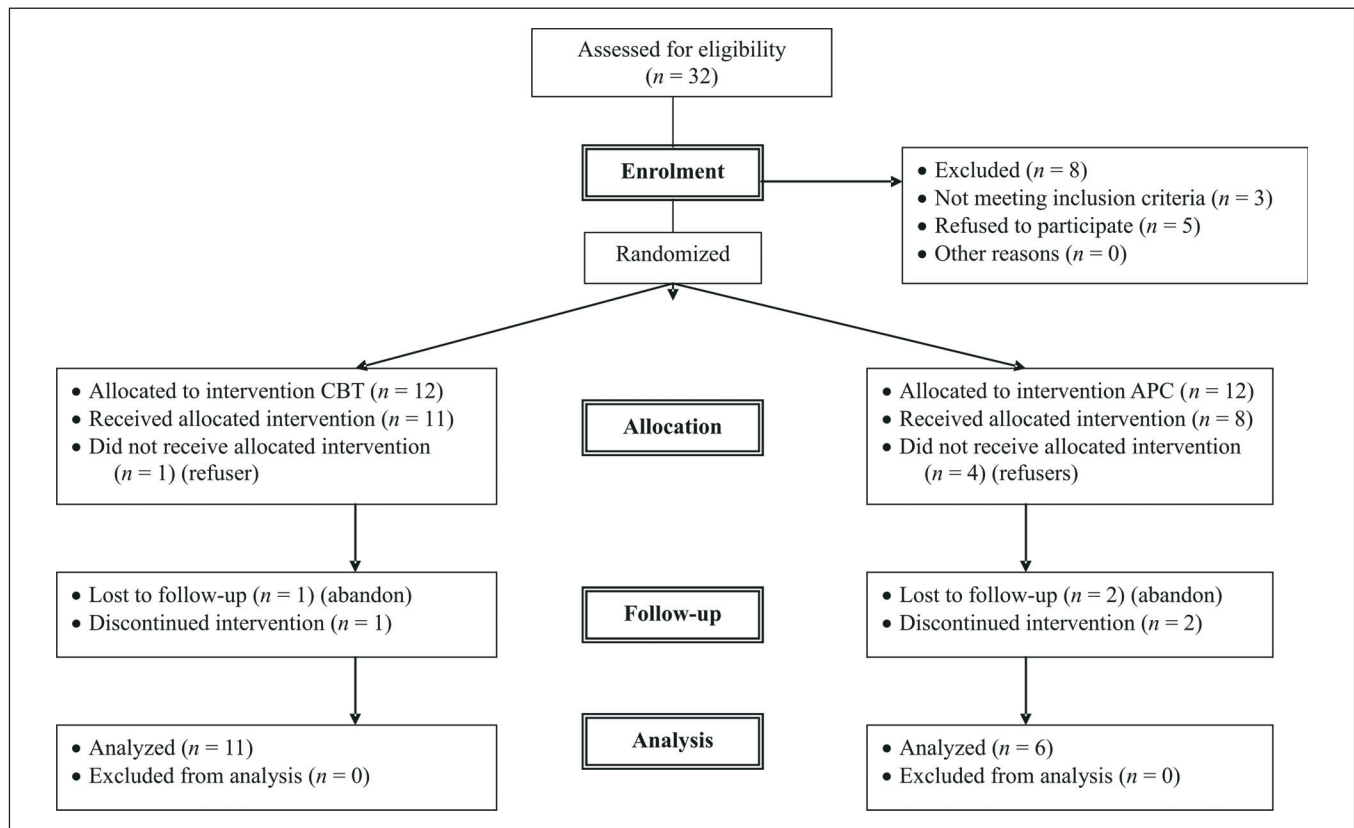|	
ANOVA	analysis of variance
APC	attention placebo control
BABS	Brown Assessment of Beliefs Scale
BAI	Beck Anxiety Inventory
BDI	Beck Depression Inventory
CBT	cognitive-behavioural therapy
DD	delusional disorder
MADS	Maudsley Assessment of Delusions Schedule
MANOVA	multivariate analysis of variance
SD	standard deviation

Objective

The present study aimed to evaluate the contribution of a CBT tailored to DD, compared with an APC. The principal hypothesis was that dimensions of delusional belief and associated distress would show greater improvement following CBT than following APC.

Figure 1 The Consort E flowchart

Method

Participants

A total of 32 participants were referred through specialists in the treatment of psychotic and delusional disorders as well as through other clinicians who had agreed to refer patients. The patients were subsequently diagnosed according to DSM-IV criteria by an experienced psychiatrist (or one of his residents) and by a trained, independent evaluator who used a semistructured interview. All participants signed a consent form approved by the hospital and research centre ethics committee.

Inclusion–Exclusion Criteria. Participants were recruited from the Quebec population and diagnosed with DD according to the DSM-IV's main diagnostic criterion for the disorder: nonbizarre delusions of at least 1 month's duration. Criteria for schizophrenia had never been met (tactile and olfactory hallucinations may be present in DD if they are related to the delusional theme). Apart from the impact or ramifications of the delusion(s), functioning was not markedly impaired and behaviour was not obviously odd or bizarre. If mood episodes occurred concurrently with delusions, their total duration was brief relative to the duration of the delusional periods. The disturbance was not due to a general medical condition or the direct physiological effects of a substance (for example, a medication or drug of abuse). We

included only those with DD who had no other psychotic or other major problems on Axes I and II. As medication is the current treatment of choice, 15 of the completers were stabilized on medication by the treating psychiatrist. The criterion of stabilization was no change in symptoms over the preceding 2-month period. All medication was kept constant over the treatment period. The participants were then asked to read and sign a consent form outlining the rationale of the study, the regularity of the therapist meetings, the implications for the participant in terms of homework and self-monitoring, and the right of the individual to withdraw at any time. The study was ethically approved by the local hospital ethics committee. All participants received or were offered a medical treatment of choice so that all willing participants received an intervention of accepted efficacy. The recruitment covered all subtypes of DD, but most participants were of the persecutory subtype, which was in accordance with this subtype's higher prevalence rate.

Diagnostic Instruments

To complete differential diagnosis, patients were also assessed with the Structured Clinical Interview for DSM Axis 1 disorders[12] by a trained, independent clinical rater. In addition, all participants were evaluated, pre- and posttreatment, with the MADS[1] as well as the BABS.[15] Participants also kept a daily diary measuring mood, conviction, and preoccupation.

Treatment Protocols

Patients who were stabilized on medication and met the inclusion criteria were randomly allocated to either a CBT program or an APC condition. The random allocation was made by consecutive referral at point of entry into the study. Both groups completed baseline clinical measures. The CBT and APC consisted of individualized weekly meetings with 1 of 3 licensed psychologists specialized in CBT for DD. The CBT program was based on programs reported in the literature[10,11] and followed the main stages of preparation, cognitive challenge, and reality testing. In the APC treatment, the therapist and patient discussed any immediate problems and recurrent themes in a nondirective and supportive manner, encapsulating the proper supportive psychotherapeutic approach to the paranoia patient of interested, attentive, relaxed, and unaffected attitude with an unfeigned air of detachment and suspended judgment, which has been shown to lead to some remission of symptoms.[13] Both programs were manualized for the therapist.

The APC controlled for time, number of therapeutic encounters, and nonspecific supportive effects of therapy. The weekly APC encounters also permitted verification and collection of the daily diary and the administration of other weekly and monthly clinical assessment measures during the control period. All patients met with the therapist for 4 preliminary sessions in which the program was explained and the feasibility of the individual's participation was established. The 2 treatment conditions were presented in an identical manner that emphasized the nature of the research project and its study of beliefs, the opportunity to discuss distress or trouble related to beliefs, the psychological nature of the intervention, and the interchange and collaboration with the therapist.

Both groups received active treatment or control treatment for 24 weeks. This period was chosen to be consistent with the treatment period recommended in the literature and concurs with the treatment period needed for significant clinical change in our pilot series.[14]

Clinical Measures

The MADS is a 53-item, clinician-rated research instrument for the elicitation of the detailed phenomenology of a delusion. It is divided into 8 dimensions and explicitly provides for a multidimensional assessment. Dimensions assessed include Strength of Conviction, Belief Maintenance, Affect Related to Belief, Action on Beliefs, Idiosyncrasy of Belief, Preoccupation With Belief, Systematization of Belief, and Insight. The MADS authors emphasize the importance of retaining the distinct aspects of the dimension[1] to build a complete clinical picture. All items retained in the final version of the MADS achieved a kappa value that exceeded 0.6, with a mean value of 0.82. The test–retest reliability of the schedule was assessed

with ratings at Time 2 being completed 3 to 5 days after Time 1. The mean kappa value for the test items at test–retest was 0.63. These comparatively modest test–retest agreement levels were thought to most likely reflect true changes in patients' mental status from Time 1 to Time 2, as opposed to reflecting the unreliability of the measure.

The BABS was developed to rate the degree of conviction and insight patients have concerning their beliefs. It consists of 7 items; the first 6 items are added to obtain the total BABS score. Each item is rated from 0 to 4 (from least to most severe). The instrument is semistructured. Interrater and test–retest reliability for individual item scores and total score are excellent, with a high degree of internal consistency. The scale correctly classified 90% of 20 participants as delusional or nondelusional and had a sensitivity of 100% and specificity of 86%. The scale is sensitive to change.[15]

Strength of conviction for the principal delusional belief was rated from 0 to 100 by the participant on a daily basis in a specially prepared booklet.

The main outcome measure was the MADS rating; this test was administered by an evaluator independent of the study. The BABS administered by the therapist and the level of conviction recorded in the patients' daily diaries served only as checks on the reliability of delusional content and conviction level of the principal delusional belief.

Questionnaire Measures

Clients also completed a battery of pre- and posttherapy questionnaires, including the BDI,[16] BAI,[17] and the Social Self-Esteem Inventory.[18] These measures were administered pre- and posttreatment and served as additional information to support interpretation of the main outcome variables.

Treatment Refusers and Abandons

Any patient not completing pretreatment assessment was considered a refuser, and any patient desisting after the initial assessment but before treatment was also considered a refuser. Subsequent discontinuations were considered abandons. Of 32 individuals, 3 were excluded after assessment and 5 withdrew. After meeting the entry criteria, the remaining 24 patients were randomly allocated to either the APC or CBT groups at the initial assessment. Subsequently, 4 abandoned prior to the first therapy session and 4 during therapy. Reasons for abandon varied and included difficulty attending, other life stresses, worsening of condition, referral to another agency or health professional, or reversal of decision to participate. However, the clinical and demographic profile of refusers did not differ from the completer sample. During treatment, there were only 4 abandons (2 APC, 2 CBT, 17%), which is comparable to attrition rates for other CBT applications. Two participants abandoned after 5 sessions and a third

Table 1 Demographic, clinical, and medication data for completers in CBT and APC groups		
	CBT (*n* = 11)	APC (*n* = 6)
Age, years: mean (SD)	40 (9.39)	36.83 (13.48)
Education, years: mean (SD)	12.73 (3.58)	12 (1.26)
Sex		
Women, %	55	33.3
Men, %	45	66.7
Civil status		
Divorced, %	9	16.7
Married, %	27	16.7
Single, %	55	66.7
Widow, %	9	—
Medication		
Citalopram, %	9	16.7
Venlafaxine, %	9	—
Amitriptyline, %	9	—
Risperidone, %	27	33.3
Clonazepam, %	9	33.3
Quetiapine, %	9	16.7
Diazepam, %	9	—
Olanzapine, %	27	16.7
Sertraline, %	—	16.7
Diagnostic subtype		
Persecutory, %	9	4
Other, %	2	2

participant abandoned after 9 sessions. No further data were recovered. A fourth participant abandoned after 4 months, and here, available endpoint evaluations were carried forward to posttreatment. Clinical and demographic data on a maximum of 17 completers (*n* = 11 for CBT; *n* = 6 for APC) are given in Table 1.

Treatment Integrity

Therapists were trained by the principal author and followed through a series of pilot cases to ensure consistent treatment delivery. All weekly therapy meetings were audio-recorded, and 30% were randomly selected for monitoring of treatment integrity by 2 experienced CBT clinicians who were independent of the study. Overall, 83% of sessions were categorized accurately as APC or CBT, with a mean confidence level of 87% and interrater agreement of 79%.

Main Outcome Analysis

The 8 dimensions of the MADS are typically separated to respect their distinction.[1] The MADS items were initially

grouped into 6 coherent groupings that represented, respectively, the dimensions of Belief Maintenance (all 8 items in MADS Section 2), Affect Relating to Belief (MADS Section 3 and "idiosyncratic emotion"), Positive Actions on Beliefs (first 12 items in MADS Section 4), Negative Actions on Beliefs (last 8 items in MADS Section 4), Idiosyncrasy of Belief (all 3 items in MADS Section 5), and Insight (first 2 items in MADS Section 8 [8.01, "accepting uniqueness of belief," and 8.02, "able to think of evidence disproving belief"]).

To establish an overall treatment effect, the average of all items within each of these 6 groupings was subjected to MANOVA. Subsequent to a significant effect, ANOVAs were independently conducted on the items within each category. Analyses used SPSS version 14.02 software (SPSS Inc, Chicago [IL]; 2006). Responses of "unapplicable" and "don't know" (coded 9) were eliminated.

For those participants where this was completed, the daily diary and the BABS gave supplementary information on the reliability of MADS belief parameters. Separate ANOVAs were calculated for the questionnaire measures. Effect sizes (partial eta-squared: weak = 0.17, medium = 0.24, strong = 0.51, very strong = +0.70) and power estimates are given for principal significant results.

Results

Five dimensions showed a significant ($P < 0.05$) overall main treatment or group-by-treatment effect: Dimension 2, group-by-treatment effect $F_{1,12} = 3.15$, $P < 0.05$, effect size 0.21, power 0.37; Dimension 3, group-by-treatment effect $F_{1,12} = 3.54$, $P < 0.04$, effect size 0.23, power 0.41; Dimension 4, treatment effect ($F_{1,13} = 3.27$, $P < 0.04$, effect size 0.20, power 0.39); Dimension 5, treatment effect $F_{1,13} = 9.20$, $P < 0.005$, effect size 0.41, power 0.80; Dimension 8, treatment effect $F_{1,12} = 3.52$, $P < 0.04$, effect size 0.23, power 0.41. Negative Actions on Beliefs was not significant and therefore was not further explored. Dimensions and key items showing significant treatment effects are listed in Table 2. The 2 measures of Strength of Conviction (MADS Section 1) were analyzed independently, as were the single items in Dimension 6 (Preoccupation with Belief) and Dimension 7 (Systematization of Belief).

As shown in Table 2, the MADS pre- and posttreatment score for each dimension were considered separately for group differences. Numbers in parentheses refer to the MADS dimension item numbers. There were no significant departures from equality of covariance (Box's test). There were no baseline differences in patient characteristics between groups. Intercorrelations at baseline between the BABS (Item 1) and the MADS clinician-rated "strength of belief" (Item 1.01), made by the therapist and the independent evaluator,

Table 2 MADS dimensions and items showing significant pre- and posttreatment effects for CBT and APC groups

MADS dimensions and key items		CBT		APC	
		Pre Mean (SD)	Post Mean (SD)	Pre Mean (SD)	Post Mean (SD)
Dimension 1	Strength of Conviction (0–100)[a]	94.1 (8.0)	54.6 (33.0)	82.0 (24.9)	66.0 (34.4)
Item 1.01	"Strength of belief" (0–4)[b]	3.5 (0.5)	2.0 (1.5)	3.4 (0.9)	2.6 (1.3)
Dimension 2	Belief Maintenance (0–1)[a]	0.7 (0.2)	0.6 (0.2)	0.6 (0.3)	0.7 (0.3)
Item 2.08	"Reaction to hypothetical contradiction" (0–3)	2.2 (0.9)	1.4 (1.1)	1.6 (0.9)	2.0 (1.2)
Dimension 3	Affect Relating to Belief (0–1)[a]	0.8 (0.2)	0.5 (0.2)	0.6 (0.1)	0.6 (0.2)
Dimension 4	Positive Actions on Belief (0–2)[b]	0.7 (0.2)	0.4 (0.2)	0.7 (0.3)	0.5 (0.2)
Dimension 5	Idiosyncrasy of Belief (0–4)[b]	1.4 (0.5)	0. 9 (0.6)	1.5 (0.8)	1.1 (0.6)
Dimension 6	Preoccupation With Belief (0–4)[b]	2.6 (0.5)	1.7 (1.0)	2.4 (0.9)	2.2 (0.8)
Dimension 7	Systematization of Belief (0–3)[b]	2.6 (0.5)	1.5 (1.2)	2.4 (0.9)	2.0 (1.0)
Dimension 8	Insight (0–2)[b]	1.4 (0.6)	0.9 (0.8)	1.2 (0.8)	0.9 (0.7)

[a]Significant group-by-treatment effect indicating greater change in CBT group

[b]Significant overall posttreatment change regardless of treatment modality

respectively, were positive ($r = 0.50$, $P < 0.08$). Intercorrelations between the subjective rating of strength of belief in the daily diary and the MADS subjective rating of "strength of belief" were also positive ($r = 0.65$, $P < 0.04$). The concordance between measures of delusional conviction supported the validity of the MADS measure of conviction.

Subsequent to a significant overall MANOVA, measures were subjected separately to ANOVA repeated measures. Significant effects are reported 1-tailed, at $P < 0.05$, where hypotheses predicted the direction of significant difference.

Strength of conviction in the principal delusional belief was measured by a subjective rating of strength of conviction, rated as a percentage (0 to 100) by the individual, and by the clinician-rated MADS item (1.01) "certainty of conviction" (0 to 4). Subjective strength of conviction showed a treatment effect ($F_{1,14} = 15.01$, $P < 0.001$, effect size 0.52, power 0.95) and an interaction effect ($F_{1,14} = 2.70$, $P < 0.03$, effect size 0.16, power 0.33). Both groups showed a decrease in subjective strength of conviction but the CBT group showed a marginally greater decrease. The MADS clinician-rated item "certainty of conviction" showed a large treatment effect ($F_{1,13} = 11.88$, $P < 0.002$, effect size 0.48, power 0.89) but no interaction effect, indicating a decrease in conviction in both groups over time.

Results for the Belief Maintenance Factors dimension were affected posttreatment. Both groups reported an equal posttreatment decrease in "number of recent events in the last week confirming the belief" (Item 2.02) ($F_{1,13} = 6.43$, $P <$

0.02, effect size 0.33, power 0.65) and "events confirming the belief since formation" (Item 2.01) ($F_{1,13} = 2.89$, $P < 0.05$, effect size 0.18, power 0.35). However, both item 207 ("the possibility of being mistaken") and item 208 ("reaction to hypothetical contradiction"), separately rated 0 to 3 (see Table 2), showed a group interaction trend ($P < 0.08$), with only the CBT group showing positive change.

Mood change varied between groups. Both groups reported a tendency to feel less depressed (Item 3.02) ($F_{1,13} = 2.89$, $P < 0.05$, effect size 0.18, power 0.35), but the CBT group only showed a decrease in idiosyncratic emotion (Item 3.06) ($F_{1,12} = 4.12$, $P < 0.03$, effect size 0.26, power 0.46).

Results for the Positive Action on Beliefs dimension differed between groups. Both groups felt able to speak less about the belief (Item 4.01, "have you told anyone about your belief") ($F_{1,13} = 12.00$, $P < 0.004$, effect size 0.48, power 0.89). The CBT group showed a significant increase in "acting against the belief" (Item 4.03), whereas the APC group showed a decrease, thus yielding an interaction ($F_{1,10} = 3.83$, $P < 0.04$, effect size 0.28, power 0.42). The CBT group also reacted less strongly to the belief and lost their temper less often (Item 4.05) ($F_{1,13} = 2.91$, $P = 0.05$, effect size 0.18, power 0.54). The CBT group showed significantly greater reduction in "harm attempted due to belief" (Item 4.10) than the APC group ($F_{1,13} = 4.95$, $P < 0.02$, effect size 0.28, power 0.54). Similarly, for the Idiosyncrasy of Beliefs dimension, both groups reported having fewer disputes about their beliefs (Item 5.03

Table 3 Pre- and posttreatment questionnaire data for CBT and APC groups				
	CBT		APC	
	Pre	Post	Pre	Post
Questionnaires	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
BAI[a]	23.9 (11.7)	16.1 (14.6)	20.7 (5.1)	14.0 (14.2)
BDI[b]	25.0 (15.0)	12.0 (14.4)	17.3 (3.8)	18.3 (7.8)
Social Self-Esteem Inventory[b]	123.2 (21.3)	132.5 (24.2)	113.3 (28.9)	102.0 (22.5)

[a]Significant overall change posttreatment regardless of treatment modality

[b]Significant group-by-treatment effect indicating greater change in CBT group

"do you have arguments about your beliefs") ($F_{1,13} = 15.72$, $P < 0.002$, effect size 0.55, power 0.96).

Both groups reported a posttreatment decrease in "preoccupation with belief" (Item 6.01) ($F_{1,13} = 6.77$, $P < 0.01$, effect size 0.34, power 0.67) and a decrease in "systematization of delusional beliefs" (Item 7.01) ($F_{1,12} = 5.73$, $P < 0.02$, effect size 0.32, power 0.60).

Questionnaires (Table 3)

BAI scores decreased significantly in both groups ($F_{1,8} = 4.96$, $P < 0.03$, effect size 0.38, power 0.50). The BDI showed a treatment effect ($F_{1,4} = 8.31$, $P < 0.03$, effect size 0.68, power 0.59) and a group-by-treatment effect ($F_{1,4} = 11.31$, $P < 0.02$, effect size 0.74, power 0.71), indicating greater post-CBT decrease. Social self-esteem increased in the CBT group but decreased in the APC group, yielding a group-by-treatment trend ($F_{1,7} = 3.53$, $P < 0.05$, effect size 0.33, power 0.37).

Discussion

There was a significant posttreatment change in several belief dimensions for both the APC and CBT groups, including Strength of Belief, Preoccupation With Belief, Systematization of Belief, Affect Relating to the Belief, and Idiosyncrasy of Belief. The most significant change in both groups lay in an increased ability to control actions and communications related to the belief. However, in accordance with expectations, the benefit of CBT was supported by significant group-by-treatment interaction effects for the following items: "subjective strength of conviction," "idiosyncratic distress," "reactions to beliefs," and "stopping acting on beliefs." Available questionnaire data supported the clinical outcome findings (see Table 3), with CBT showing improved outcomes on depression and self-esteem.

Previous studies have reported on improvements unique to CBT but also have stated that these benefits are sometimes minimal when compared with other active psychological treatments.[12] Clinical outcome status in the present study was categorized according to degree and type of improvement on the MADS subscales, and the current results also support a low (0.16) to medium (0.28) effect size between APC and CBT (depending on the measure). These results provided posterior power ($\alpha = .05$) of between 0.30 and 0.60 for the main hypothesized (between-treatment) effect, whereas the much stronger main treatment effect size of 0.3 to 0.6 yielded power estimates between 0.4 and 0.95, regardless of intervention modality. Since the clinical outcome measures are concordant, the results are clearly robust. The posttreatment decrease in the "strength of belief" parameters was 40% in CBT and 28% in APC. Neither therapy succeeded overall in reducing the Strength of Conviction score to zero. However, in one patient treated with CBT, the item "strength of belief" dropped to zero, and in 2 others, Preoccupation With Belief score dropped to zero. The changes in questionnaire results showed robust effect sizes, particularly for those measuring depression and self-esteem, even though data were only available on a smaller number of completers. The low-to-moderate effect sizes for comparisons between the CBT and APC may be due to large individual variation in response to treatment among participants. Alternatively, establishing a strong positive rapport can affect scores on Insight, Preoccupation With Belief, and Affect Relating to Belief.[1] In contrast to hallucinations, a minimum of directive intervention in the form of befriending, social support or supportive counselling, and unstructured treatments may influence delusions.[5]

The relations among low mood, preoccupation, and strength of belief remains in debate, but it is clear that some beliefs may be triggered or accentuated by low mood or higher levels of anxiety.[19] Hence alleviating distress may diminish preoccupation of belief. However, there were greater benefits to both mood and cognitive factors with CBT; further, the CBT group showed a greater change in the cognitive components that are active in maintenance of DD (that is, ability to challenge belief, modify strength of belief, and act against the belief).

The low dropout rate for patients, once they were in the program, suggests that the clinical challenge in DD is to overcome treatment refusal rather than to ensure treatment compliance. The low abandon rate also confirms and highlights the important role of initial preparation and the establishment of rapport. However, this necessity amplifies the role of what might be considered nonspecific factors for any more targeted treatment.

By definition, patients with DD do not usually think that their delusions are in error. Individuals with DD, however, are usually willing to discuss their delusional beliefs if they feel they have found a confidential and sympathetic ear.[20] It seems crucial to initially adopt an accommodating and non-confrontational approach. Alford and Beck[21] suggest that, in allowing the patient free rein to talk, the therapist can gradually make the link between external stressors, emotion, and beliefs, leading to a joint exploration of alternative explanations for certain beliefs. A study by Chadwick and Lowe,[10] preparatory interviews lasting from 6 to 12 sessions were spent with each individual before the delusions were challenged. This long listening period allowed the relationship to grow before intervention began, which possibly limited psychological resistance and reduced dropout rates. Bentall and collaborators[22] suggest initially trying to modify the valence of beliefs (that is, the emotion attached to the beliefs) rather than their content. Garety and collaborators[11] suggest initial use of general cognitive-behavioural strategies to equip the individual to cope with immediate stresses and thus initiate the individual into adaptive ways of managing distress.

The high refusal rate and low completer rate of the current study evidently impose a limitation on its external validity, except that such limitations seem unavoidably characteristic of this study population. The current findings clearly require replication and extension, but given the paucity of randomized controlled trials in this area, these findings do provide insights into the impact of interventions on separate belief parameters in DD. In particular, the difference between the strong main effect of treatment, regardless of modality, in comparison with the weak-to-moderate effect of CBT, compared with APC, suggests the importance of comparing CBT with other active conditions in future studies that explore the efficacy of cognitive-behavioural intervention for treating delusions.

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Résumé : Traiter le trouble délirant : une comparaison de la thérapie cognitivo-comportementale avec un groupe témoin attention placebo

Objectif : La thérapie cognitivo-comportementale (TCC) s'est révélée efficace pour traiter les délires, tant dans la schizophrénie que dans le trouble délirant (TD). Les essais cliniques sur le TD ont pour la plupart comparé la TCC avec soit un traitement habituel, soit aucun traitement, soit un groupe témoin de liste d'attente. La présente étude vise à évaluer les patients souffrant de TD qui ont reçu une TCC comparativement à un groupe témoin attention placebo (TAP).

Méthode : Vingt-quatre personnes souffrant de TD ont été réparties au hasard en groupes de TCC ou TAP pour un traitement d'une durée de 24 semaines. Les patients ont été diagnostiqués d'après des entrevues cliniques structurées pour les troubles mentaux et l'échelle d'évaluation du délire de Maudsley (MADS).

Résultats : Les finissants des deux groupes (11 TCC, 6 TAP) ont démontré une amélioration clinique aux dimensions suivantes de la MADS : Force de conviction, Intuition, Préoccupation, Systématisation, Affect relié aux croyances, Facteurs de maintien des croyances et Idiosyncrasie des croyances.

Conclusion : Comparée avec le TAP, la TCC a produit plus d'effet aux dimensions Affect relié aux croyances, Force de conviction et Actions positives de la MADS.