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GROUP COGNITIVE BEHAVIOUR THERAPY FOR ANGER: A PILOT STUDY

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Abstract. Patients referred with anger problems often do not attend for treatment. The aim of this study was to determine if group Cognitive Behaviour Therapy (CBT) was feasible. Patients referred for help with their anger were assessed, given 6 sessions of group CBT and re-assessed. Of 119 patients referred, 49 (41%) did not attend the initial appointment. Patients who attended for interview were invited to participate in the group CBT. Only 11 patients (9%) of those referred for therapy attended for the full course of CBT. Thirty-four patients (29%) were exposed to at least one session of CBT, while 66 patients (56%) did not attend for any therapy. Patients who attended for some or all of the CBT treatment reported reductions in the frequency and intensity of their anger outbursts. There was also a significant reduction in measures of their anger traits. It could be concluded that group CBT is an appropriate way to deliver this therapy to patients with anger problems, but it is clear that many of those referred are ambivalent about therapy and will not attend. Figures are given that will allow the planning of a randomized controlled trial to evaluate the difference between individual and group based CBT for patients with anger problems.

Keywords: Group, anger, cognitive behaviour therapy, psychological treatment, outpatients.

Introduction

Relationship problems, work problems, legal problems and property damage can be associated with anger (Deffenbacher, 1996). A number of studies suggest that cognitive-behavioural therapy (CBT) can be effective for anger control (e.g. Beck & Fernadez, 1998; Trafrate, 1995; Deffenbacher, Dahlen, Lynch, Morris, & Gowansmith, 2000), though many of these studies have not been conducted on patient populations. These studies, though valuable, often fail to reflect the reality of this difficult population because of their use of student samples. Other approaches to anger treatment have involved group work, though that has often been in institutional settings and typically involved forensic populations (Renwick, Black, Ramm, & Novaco, 1997).

Patients with problems relating to anger can be referred to clinical psychology and psychiatry departments. Patients with problems of anger include those meeting the diagnostic criteria of DSM-IV (APA, 1994) with Intermittent Explosive Disorder (IED); Antisocial personality disorder, Narcissistic personality disorder and a number of other personality disorders. Patients with axis 1 disorders may also present with problems of anger. The

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treatment of disorders of personality is often lengthy and since demand outstrips service provision in most cases, treatment may not be possible for large numbers of patients who are referred with such disorders. An alternative approach is to target specific problems such as suicidal behaviour or anger, such that quality of life is improved both for the patient and those who are in contact with him or her.

Traditional approaches for patients with anger problems have been based upon a ''stress inoculation approach'' developed by Novaco (1977a, b). This essentially involves the monitoring of anger outbursts, identifying the relationship between events and thoughts, and then controlling the anger when it arises. Though this approach would appear to be helpful and may be economical in the long term, a large number of sessions may be required to address more severe problems. A skills training approach has also been used without much success in attempting to address anger problems (Watt & Howells, 1999) though there were a number of methodological limitations in this particular study.

Aside from the considerations of effectiveness relating to group CBT in comparison with individual CBT (Morrison, 2001) there are issues relating to attendance. Often patients are coerced into treatment for their anger and do not perceive themselves as having anger problems (Renwick et al., 1997). In accord with the literature relating to stages of change (Prochaska & Di Clemente, 1982) as well as literature drawn from a solution focused approach to engagement in therapy (Sharry & Owens, 2000) patients referred for help with anger may be at various degrees of motivation about receiving therapy. Accordingly, the number of patients taking up offers of psychological therapy in this population is often lower than in other populations (Hird, Williams, & Markham, 1997). An approach being tried in one clinical psychology service (Munro & Macpherson, 2001) reported an initial attendance rate of 35% for session one and then further reductions for the second and subsequent sessions. If this figure were to apply to other situations then it is possible that up to 65% of appointments may be wasted.

It is recognized that where patients are not ready for change, they may not attend at all. CBT intervention, along with most other interventions, would fail to engage someone who does not attend at all. Although group (or individual) CBT would not address this particular motivation to change problem, it was considered that, where patients are more ready for change, group based CBT may be more efficient in minimizing the amount of wasted therapist time from missed individual appointments.

It was also expected that there might be additional benefits from the group dynamic effect. The therapy offered was CBT in which there was an explicit attempt to use guided discovery to challenge unhelpful thoughts and beliefs (Averill, 1983; Epps & Kendall, 1995; Berenbaum, Fujita, & Pfening, 1995). Although guided discovery may be difficult enough in one-to-one therapy, this process should not be significantly impaired by a group format, since there will inevitably be some overlap between the problems of the different group members. Even while the focus of the discussion is on other group members or on a more general topic, it was expected that patients would still consider their own answers to questions posed and would consider alternative ways to solve their own problems. It was also considered that the group format might offer additional advantages in the realization that the patient was not alone in his or her difficulties.

There were concerns. This approach had not been utilized before and there was a degree of uncertainty regarding how the patients would respond to the challenges. There was an expectation that patients might be reluctant to share their thoughts and feelings with others,

that there might be some embarrassment about ''seeking psychological help'' which would make some people reluctant to be seen in the same building as others with mental health problems. Other concerns included a fear of being attacked by other group members, and there was a concern as to how female patients might feel about being in a group composed mainly of males. In addition to these concerns, there were reservations regarding the efficacy and acceptability of the interventions. Despite these reservations, the problem of how best to efficiently treat the large numbers of patients referred (locally) was worthy of merit and steps were taken to minimize the risks. These steps included an individual risk assessment for all group members, clear identification of high-risk patients to other staff in the department (and the hospital security staff), open discussion with the group members about aggression within the group, and the use of frank feedback at the end of every session.

Aims

It is expected that large numbers of patients with anger problems will be unwilling to participate in therapy. It was considered worthwhile to establish the proportions of patients referred for therapy who were willing to participate in such interventions, for the benefit of any future investigations in this population. The main aim of the project, however, was to establish whether patients with anger problems would derive benefit from a group CBT approach, and to establish a workable treatment protocol that the patients found acceptable.

Hypotheses

1. Many patients would not be willing to engage in therapy, or would drop out of therapy.
2. It is possible to run a group with a number of people who have anger problems.
3. Those who persist in therapy will derive benefit in terms of their STAXI scores and other measures of severity.

Method

General

A quasi-experimental approach was incorporated involving the assessment of the participants before and after a course of group CBT.

Participants

Participants were patients routinely referred to the clinical psychology department of a general hospital for help with their anger. It was recognized that these participants would include patients with a number of axis 1 and axis 2 disorders. Inclusion criteria required that the patients agree that they have a problem with their anger and that they would be willing to change. Patients were to be between the ages of 16 and 65 years. Patients reporting that their consumption of alcohol was in excess of 50 units per week were excluded, as were patients who were considered to be dependent upon drugs. Those with an organic cause for their anger or with a psychotic illness were also excluded from the study, as were patients who could not speak English, or who refused to be included in a group.

Measures

In the present study, two main measurement tools were used to collect data. These were: the State-Trait Anger Expression Inventory (STAXI: Speilberger, 1979), which was distributed and collected and scored independently of the therapists.

The second tool was a semi-structured interview that served to collect severity and demographic data, but served also to determine suitability for inclusion in the study, engage the patient into therapy, conduct a risk assessment and deal with the patient's concerns and questions. This semi-structured interview was designed to elicit information such as the number of anger related incidents in the last 4 weeks, a rating of the severity of the problem, and data relating to demographics, forensic history, and childhood factors. It is recognized that this interview produced data that are potentially subject to bias, though patients were encouraged to be totally honest in their self-report measures. In cases of ambivalence or a range of responses being given, the highest scores were always used.

STAXI

The STAXI is a widely used anger scale. This self-report inventory consists of 44 items forming scales that measure the experience, expression, suppression and control of anger. Data are available regarding the reliability and validity of the STAXI. In particular, the STAXI has been shown to have good internal consistency (Kroner & Reddon, 1992; Speilberger, 1991), acceptable test re-test reliability (Jacobs, Latham, & Brown, 1988; Kroner & Reddon, 1992) and its factor structure has also been supported (Speilberger, 1991). A number of studies provide supportive evidence of the construct validity of the STAXI scales (Greene, Coles, & Johnson, 1994; Kroner & Reddon, 1992; Moreno, Fuhriman, & Selby, 1993; Speilberger et al., 1983; Deffenbacher et al., 1996; and Stuckless, Ford, & Vitelli, 1995).

The STAXI differentiates between the experience of state and trait anger. State anger (S-Ang) is defined as a distinct episode of anger able to vary in both duration and intensity. Trait anger (T-Ang) refers to the disposition of an individual to perceive a wide range of situations as annoying and the tendency to respond such situations with aggressiveness. Trait anger can be assessed further into a tendency to being quick tempered and ready to express their anger to others (T-Ang/T). T-Ang/R is a dimension to a person's anger in which they are sensitive to criticism. STAXI also allows a measure of the experience of anger (Ax/Ex) and a number of measures relating to the expression of anger. These include the extent to which the individual attempts to control their anger (Ax/Con), a tendency to suppress angry feelings (Ax/In) and a tendency to express anger outwards (Ax/Out).

Procedure

Patients were invited to attend for a screening interview by letter. A STAXI questionnaire was sent out with the letter of invitation and patients were asked to complete this prior to attending the appointment. Participants who attended for their first interview were asked to complete the STAXI while waiting to be seen, if they had not completed the questionnaire earlier. Completed STAXI questionnaires were collected by admin staff or the research assistant. The research assistant (FA) then scored the STAXI questionnaires and entered the

scores onto the database. Therapists remained blind to the scores on the STAXI questionnaires until after the second rating was complete and letters to the referrers were being written.

A semi-structured interview was conducted by one of the two therapists (RS & FJ). After establishing that the inclusion criteria were met and that the patient met none of the exclusion criteria, the interview continued. Written consent to participate was not required. This interview involved the assessment of early childhood experiences, in which patients were asked whether they had been physically, sexually or emotionally abused. The criterion for defining abuse was the patient's own definition of the experiences. None of the patients required an ''expert'' definition or criteria for these experiences. Patients were asked if they had been brought up under conditions of poverty; again the patients own criteria were utilized.

A brief assessment of the patient's forensic history was determined using the patient's self report. This included the number and type of convictions, as well as the number of prison sentences and the duration of the sentences. There were no patients included in the study who were obligated to attend from a court or probation service.

Patient's report of number of incidents over the past 4 weeks and the patient's perception of the severity of their anger problem were assessed. The patients rated problem severity by use of a Likert type scale scored from 0 (hardly at all) through to 8 (very severely troublesome).

The therapist made an assessment of risk relating to the patient and then rated their own perception of the patient's suitability for a group and informed the patient of the dates for the group sessions. Patients were informed that they should try to attend every session since there would be new information given at each session. Nonetheless, it was also explained that attendance at every session was not a requirement for further participation.

Session content

Pre-therapy interviews. Patients were given an individual one-to-one session. The purpose of this session was primarily to establish suitability for group therapy and to collect data. Additionally, these sessions provided an opportunity to help the patient to identify an initial problem list, make a basic formulation and to begin to socialize participants into the cognitive model. One of the therapy tasks in this first pre-group session was to try and create the appropriate conditions for patients to become active in their therapy. With different types of motivation (Sharry & Owens, 2000) different approaches were required. These included: offering reinforcement to the patient for attending at all; trying to establish suitable goals in patients who appeared to be attending under pressure, and noticing and reflecting in patients who attributed their problem solely to the behaviour or actions of others. Information about the CBT group therapy programme was also provided in these interviews. These sessions lasted approximately 30 minutes.

Group therapy sessions. The group cognitive-behavioural therapy was delivered in six weekly one-hour sessions by two (BABCP) accredited CBT therapists. Group therapy was structured and delivered following the basic principles of CBT involving a focus on cognitions and an emphasis on guided discovery. The content of each session broadly followed the same main structure throughout the six-week course:

- An agenda was set
- Feedback from last week's session
- Review of homework from previous session
- Main topic for the session
- Homework for the next week
- Group feedback to therapists

Group participants completed a structured programme in which they systematically learned to identify, challenge and change negative cognitions and assumptions associated with their excessive anger. They also learned how to apply this knowledge to their individual problems. Using the process of guided discovery rather than direct confrontation facilitated patient collaboration in the discussion of recent events and outbursts. This approach was aimed at maximizing participant involvement and minimizing the possibility of participants believing that therapists might be imposing their own ideas on the group. This approach was also used to help participants learn a method for understanding and solving their own anger problems and to help other group members to find a way of solving future anger problems together. An outline of each session is reported below:

At the first session, the basic cognitive model of anger was presented (see Figure 1). This model was based on the model described by Deffenbacher (1996), adapted to include the impact of inhibitors and disinhibitors upon angry action. Anger was described largely as a result of unhelpful cognitions and a skill deficit. The aim of CBT for anger was explained as helping the patient to identify and alter these cognitions and thus be able to respond to real or perceived injustices using an assertive, rather than an aggressive response. Following some rather pointed feedback in the early groups, it was acknowledged that in many cases,

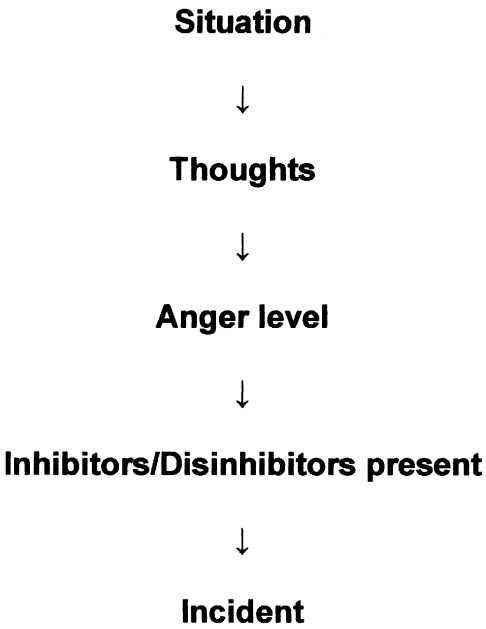

Figure 1. A cognitive model of anger

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life was hard, and that people genuinely did behave unreasonably towards one another at times. Therapy was described in terms of developing new cognitive and behavioural approaches for anger reduction and an emphasis was placed on anger management rather than a cure. The task of the therapist was explained as to help participants deal with unreasonable people in an often unfair world.

Recognizing that not all patients would be highly motivated towards change, the group was asked to describe the advantages and disadvantages of change, which were written on a flip chart. This was intended to increase the patient's motivation for being in the group and to allow therapists to describe the positive and negative functions of anger. Emphasis was placed on the individual's responsibility for their own behaviour and the introduction of ground rules for behaviour in the group was established. Self-monitoring was introduced as a way of helping participants increase their awareness of anger incidents and how they typically react in these situations. The homework involved self-monitoring of anger incidents and participants were shown how to monitor their experiences of anger using anger diaries. Reading material was aimed at basic education regarding typical anger situations and common inhibitors and disinhibitors. Information regarding typical thinking errors in anger-provoking situations was also provided.

Session two began with detailed homework reviews in which participants were encouraged to compare their diaries from the previous week. The possible emergence of anger themes in cognitions and behaviour were identified and discussed along with the recognition of any thinking errors. Therapists carried out a guided discovery exercise helping participants identify their own ''high-risk'' situations. The possible emergence of anger patterns at particular times of the day, in response to others, or particular situations, were reviewed in some detail. Guided discovery was used to help the patients determine how they might re-appraise some of their anger-provoking situations. Self-monitoring in anger diaries continued as a homework task for this session.

Session three was used to consolidate the learning from the earlier cognitive themes and high-risk situations. Emphasis was placed on the importance of changing cognitive processes in their own ''close-shave'' scenarios, an intervention that was aimed at encouraging individual participants to share their experiences and to identify common anger situations. Thoughts and behaviours were recorded on a flip chart and the group was encouraged to provide alternative less angry thoughts and actions. Throughout this, therapists encourage participants via Socratic questioning to come up with constructive ''self-talk'', which will enable them to manage potentially anger-producing situations in more adaptive ways. An exercise was introduced aimed at coping with high levels of arousal with the therapists role-playing a high-risk situation by demonstrating more relaxed body postures, discussing their own cognitions and facial expressions. Homework consisted of reading a handout describing constructive self-talk and the encouragement of potential behavioural experiments aimed at individual anger situations.

Session four typically began with homework review. Successes in identifying cognitions and considering alternatives were supported and difficulties experienced in considering alternative ways of thinking and behaving were discussed. The ''vertical arrow procedure'' (Padesky, 1996) was introduced with the aim of helping participants identify their own personal belief systems, which inevitably proved to be dysfunctional and would benefit from being moderated. Homework was based upon the vertical arrow procedure.

Session five consisted of an extensive homework review on the vertical arrow procedure

with group participation for weakening old rules and beliefs being compared. During this session, new cognitions and behaviours were role-played with therapists who then coached individuals on anger-lowering ways to think or to behave.

In session six, the introduction of alternative cognitions and behaviours was encouraged and maintenance strategies were discussed. Participants were given the details of their follow-up one-to-one appointments. A review of the pros and cons of change (as discussed in session one) was carried out to help participants to set themselves some longer-term goals for continued behaviour change. An information leaflet summarizing all of the maintenance of change strategies produced by that group was written down and given to the patients at their follow-up interviews.

Post therapy interviews. All patients invited to the group were invited for a post therapy interview within 2 weeks of the sixth session. In practice, however, virtually no patients attended these interviews if they had not attended the group. The one-to-one follow-up session was carried out, not only to collect data, but also to try to personalize the patient's therapy gains.

Prior to being seen, patients were asked to complete a STAXI questionnaire. Patients were given a semi-structured interview, as before, though this interview did not involve the assessment of inclusion/exclusion criteria or the childhood history. Follow-up clinical data were collected. Any therapeutic gains were confirmed, with patients having an individual plan of action tailored around their own particular situations and typical cognitions. These sessions lasted approximately 30 minutes and the patient was encouraged to implement the strategies learned over the following months and years.

Attempts were made to encourage patients to attend these interviews, though because of the nature of the sample, patients were not contacted more than twice if they failed to attend. Where patients were sent a second letter inviting them to attend, a STAXI questionnaire and a self-report questionnaire were also included with a stamp addressed envelope.

Data management. Data were entered onto an SPSS (version 9.0) database. Variables were examined for normality of distribution. Where a variable was not normally distributed transformations were attempted to rectify this. Where such measures were unsuccessful, as in the case of the clinical data relating to number of incidents and the patient's perception of severity, non-parametric analyses were used. The data analysis therefore involved a mixture of parametric (*t*-tests) and non-parametric analyses (Wilcoxon signed ranks tests) as appropriate. All data were analysed using SPSS version 10.0.

Results

Characteristics of the participants

From an initial sample of $N = 119$ who were referred, 49 participants (41%) did not attend for the first assessment appointment. Seventy participants did attend this appointment. Of that number, 67 participants met our inclusion criteria and were invited to participate in the group therapy programme. Despite acknowledging that they had a difficulty and having stated that they were keen to change, 15 of these participants (22% of the initial total) did not attend for any of the group CBT sessions. Thus, 56% ($N = 66$) of patients referred did

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not receive any therapy at all. Only eleven patients (9% of the initial sample) received the six group CBT sessions, with the majority of patients who received any therapy attending for five of the sessions. Only 34 participants (29% of the initial sample) attended for both interviews and at least one session of therapy, although five of these participants were unable or unwilling to attend for follow-up interviews but returned their evaluation forms by post.

Of the 119 patients referred, 78% were male, with the mean age being 32 years. Further data on the whole sample are not available due to the number of non-attenders for the assessment interview. Due to this, data reported relate mainly to the 67 participants who were invited to participate and for whom we have adequate data.

The participants attending for interview were predominantly men (78%). All patients were considered by their referring GP or Mental Health Practitioner to have a clinically significant anger problem. All patients recognized that they had a problem with anger. The mean number of reported incidents per month was calculated as 26. Patients were asked to rate their perception of the severity of their anger problem on a Likert scale ranging from 0 (hardly at all) to 8 (very severely troublesome). The most common rating was 8, indicating that 37% ($N = 25$) of participants felt that their problem was as bad as it could possibly be, the mean score for severity using this scale was 6 (markedly troublesome). Over half of the sample (54%) reported that during an angry episode, people were usually harmed and 72% stated that they would damage objects. During the course of the interview, it was established that 66% of the sample met recognized criteria (APA, 1994) for Intermittent Explosive Disorder ($N = 44$), while 34% met criteria for Personality Disorder, the most common type being antisocial (19% of total sample reported).

Most participants were unemployed at the time of pre-group assessment (66%), which may be linked to the fact that 48% reported having no qualifications. Most participants had a current partner ($N = 50$, 75%), and 66% were parents. Forty-five per cent of our sample perceived their family as being a major stressor, with shortage of money reported as the second largest cause of stress (25%).

Twenty-two participants (33%) reported using illegal drugs, with cannabis the most frequently cited drug abused. The sample reported an average of 15 units of alcohol consumed weekly. Twenty-eight participants (42%) denied any alcohol use, mostly citing this as a recognized risk factor for them. Almost half of the sample examined (49%) had at least one criminal conviction; however, only 18% ($N = 12$) had spent time in prison. Twenty-three of these participants (34%) admitted to crimes related to anger such as violence and public order offences.

The participants had experienced difficulties in childhood. Using the patient's own definitions of abusive experiences, 61% reported having been subject to physical, sexual or emotional abuse during childhood, 64% ($N = 43$) reported witnessing violence as children, with 77% of this number stating that this was a regular occurrence. Substance abuse was reported to have been witnessed in childhood by 36% and poverty was experienced by 39% of the sample.

Using the STAXI measure of anger, 92% of the sample scored above the 75th percentile for trait anger; this would be categorized as an atypically high score when compared with the normal population. On the other hand, most patients (92% of the sample) were classified as having atypically low levels of control over their anger (below the 25th percentile).

Attendance

The number of patients attending each of the sessions was calculated and can be seen in Figure 2.

This shows that the numbers attending for group CBT declined steadily throughout the study, with a slight increase at the final session.

Response to treatment

From 119 patients we have response data from up to 37 patients drawn from the participants of 6 groups. For some patients the data set is incomplete, so we have slight differences in the numbers of patients entered into different analyses. Tables 1 and 2 show clearly that this intervention has resulted in a statistically significant reduction in the patients' anger traits as measured by the STAXI (T-Ang) scores. Their expression of anger (Ax/Ex) was reduced, in particular as it related to expression outwards.

In percentile terms the scores remain abnormal in relation to the adult norms. However, the results show reductions in trait anger (T-Ang) that equate to a shift from the 97th percentile to the 91st percentile. The expression of anger (Ax/Ex) was also reduced from the 95th percentile to the 84th percentile. Control over anger (Ax/Con) shifted upwards from the 1st to the 2nd percentile. All other scores in Table 1 demonstrate similar percentile changes indicating that, relative to the adult norms, change in the participants' scores has occurred and their scores were less extreme than smaller proportions of the adult population than they were when first assessed.

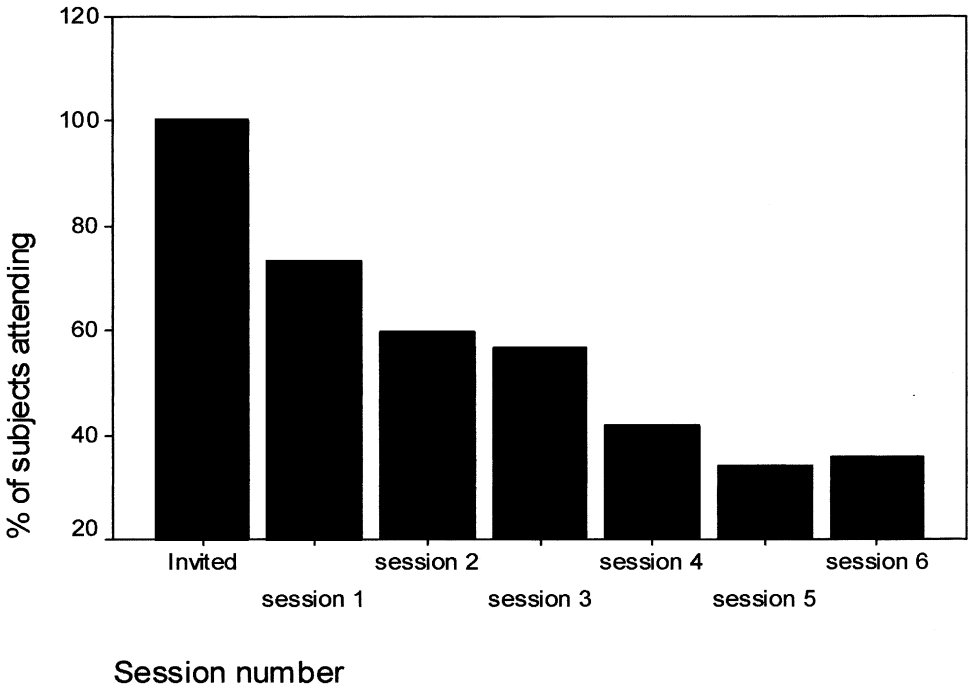

Figure 2. Number of patients attending each session

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Table 1. Main treatment effects

STAXI scales	Pre treatment	Post treatment	Number of participants	Test result
S-Ang	Mean 21.7 (*SD*=8.72)	Mean 16.2 (*SD*=7.37)	22	*t*=2.84[21],*p*=.01
T-Ang	Mean 29.6 (*SD*=6.35)	Mean 25.9 (*SD*=7.73)	25	*t*=2.87[24],*p*=.008
T-Ang/T	Mean 12.5 (*SD*=3.11)	Mean 10.4 (*SD*=3.47)	25	*t*=4.28[24],*p*=.000
T-Ang/R	Mean 10.7 (*SD*=3.52)	Mean 10.04 (*SD*=3.61)	25	*t*=1.03[24],*p*=.31
AX/In	Mean 20.7 (*SD*=3.94)	Mean 18.9 (*SD*=4.26)	25	*t*=1.88[24],*p*=.07
AX/Out	Mean 22.6 (*SD*=5.21)	Mean 20.3 (*SD*=5.09)	24	*t*=2.16[23],*p*=.04
AX/Con	Mean 14.8 (*SD*=3.12)	Mean 16.2 (*SD*=3.43)	25	*t*=–1.6[24],*p*=.12
AX/Ex	Mean 31.7 (*SD*=9.74)	Mean 26.0 (*SD*=11.18)	24	*t*=2.59[23],*p*=.01

Table 2. Treatment effects derived from clinical data

Clinical measures	Pre treatment	Post treatment	Number of participants	Test result
Number of incidents	Median 20.5 (IQR=4–28)	Median 3 (IQR=2–12)	30	Z=–3.406, p=.001
Perceived severity	Median 7 (IQR=4–8)	Median 5 (IQR=3–6)	34	Z=–3.139, p=.002

The reported number of aggressive incidents each month was also statistically significantly reduced. In terms of the numbers of incidents the difference is likely to have made a difference to the lives of the participants and their contacts. Patients' perception of their difficulties altered from a severity score of 7 (between Markedly Troublesome and Very Severely Troublesome) to a score of 5 (between Definitely Troublesome and Markedly Troublesome).

Spearman's rho was calculated between the number of sessions attended and the treatment effect size using the STAXI trait score. There was a significant correlation (rho = .39, $p = .04$) between these variables. In terms of attendance, a highly significant negative correlation was discovered between the number of sessions that the patient failed to attend and their response in terms of their perception of problem (rho = .48, $p = .004$). When other interval variables such as cancelled sessions were examined in this way there was no association found between the variables. Therapist predictions of who would derive benefit from the intervention were correlated with the treatment effect outcome measures, and the attendance variables. There were no associations found between the therapist predictions and subsequent attendance, or therapist predictions and subsequent benefit obtained from the intervention.

Discussion

This pilot study was an attempt to investigate the feasibility of group CBT for patients suffering anger problems and to establish a workable treatment protocol. The treatment was administered in real clinical practice. From the 119 patients referred only a minority accepted and attended for treatment. Follow-up data were collected on 37 of these patients.

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The data showed statistically significant changes in trait anger, control of anger, and the expression of anger. These differences relate to mean scores and within the sample were a number of patients who were ambivalent about change as well as those enthusiastically accepting the treatment. The clinical impact of these results is more difficult to evaluate. The sample mean STAXI trait scores before intervention places their responses as higher than 97% of the population, while after these sessions of CBT, the mean response indicated that the sample trait anger was still abnormally high, though was now only greater than 94% of the population.

In addition to the differences in the STAXI scores, patients reported a reduction in the number of anger incidents each month and the patients' perception of the severity of their anger problems was also reduced. It is also probable that the reduction in number of incidents is clinically meaningful in that it is unlikely that a reduction in the number of incidents of this magnitude would not have made a difference to the lives of the patients and their families. Though there are limitations to the importance given to these self-report data, this treatment effect was supported by the STAXI data relating to the patient's outward expression of anger, which was also significantly reduced.

The correlational data between the number of sessions attended and the changes in STAXI trait effect would suggest that a proportion of the variance in response to the intervention is dose related and the short total duration of the intervention may be a relevant factor. There are, however, likely to be other factors involved. One factor, which may have helped reduce the number of aggressive incidents, is the potentially inhibiting effects of being involved in the group. This effect would decrease the likelihood that a patient would become aggressive (or at least report aggression) because of concerns about admitting to incidents when they were being assessed for the second time. A longer-term evaluation of this sample would help to clarify this issue.

The patient's motivation for change is another potential factor affecting benefit gained from the intervention. There are a large number of patients who consulted their GPs about their anger, and were referred for some help. When they were offered an appointment, however, many of these patients were not willing to be interviewed. Sharry and Owens (2000) describe the motivation of patients in such programmes as this, as ''customers, complainers or visitors'' (Berg, 1991). ''Visitors'' are people who come into therapy because they were pressurized or cajoled. They often do not think that they have a problem. Accordingly, it is unlikely that any intervention offered by the CBT therapist will be able to address the needs of those ''visitors'', many of whom chose not to even attend for the first appointment. The nature of this investigation does not allow us to explain further why these people might have had a different degree of motivation to those who did attend. Other categories of motivation described by Sharry and Owens (2000) is ''Complainants or browsers'' who do recognize that there is a problem. These patients are motivated to do something about their problem, though they think that the problem is outside their control and is more to do with how other people behave and think. Very few of those who attended for their pre therapy appointment subsequently attended for the full course of CBT and might clearly have been in this category of patients. More than half of the patients referred initially (56%) did not attend for any appointment or therapy and could also be categorized as ''visitors or complainers''. Although the results show that the therapists were unable to predict benefit, great care was taken to try and offer each category of patient the most appropriate intervention to engage them in therapy. Aside from relaxing the formality of

therapy by offering refreshments, therapists focused upon summarizing and feeding back information to help the patients develop some insight into situations when they were able to make changes. The aim of this intervention was to try to ensure that ''visitors'' browsing to see what therapy could offer them would be more likely to become more active ''customers'' in therapy. In dealing with the ''complainers'' who attended for therapy, there was an often-repeated tendency for patients to be keen to persuade the therapists of the injustices of their own situation. Had it been possible to overcome this tendency a little earlier, then it is feasible that even more therapy time might have been fruitfully utilized by altering cognitions relating to the stressors rather than focusing upon engagement in therapy. With the ''visitors'' there was an explicit attempt to focus upon their own motivations for change, while recognizing that there was inevitably a difference between their world view and those of the therapists. It is clear that, despite these endeavours, patients did still opt out of therapy at various points and the explanation for this is outside the scope of this study.

One of the most prevalent comments offered in feedback was that the patients would have preferred a longer course of therapy than the six group sessions offered, and there may be valid reasons for providing additional input. These might allow therapists to try and tackle the troublesome cognitions underlying the anger, once the patient had been successfully engaged in therapy. The graph of attendance, however, shows that attendance declined over sessions, reaching the point where the numbers of attendees may diminish the cost effectiveness of this method of delivering CBT and the potential group dynamic effects. Pre-therapy interventions such as those advocated by Munro and Macpherson (2001) could possibly be of use in reducing this tendency across a large number of people prior to group CBT and helping therapists to select groups of patients who have a similar degree of motivation for change.

Criticisms of the study will lie in the fact that the two therapists who carried out treatment also acted as raters and could therefore provide a bias response. The potential for this has been minimized because the important measures used for the study were the patients' responses on STAXI, which were scored by an independent research assistant and the therapists remained blind to the scores until after the second assessment interview. This study is not designed to answer questions about the health economics or costs of intervening, the reasons for non-take up of therapy, or the duration of treatment. Nonetheless, we consider the approach utiized in this study likely to be a cost effective and time-effective intervention for patients suffering anger problems and who include many who were ambivalent about their difficulties and who will not attend for therapy.

Our recommendations for further research would be to evaluate the difference between individual and group-based CBT for patients suffering anger problems, exploring the pre-therapy interventions mentioned earlier and establishing more clearly the characteristics of patients most likely to attend for treatment.

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