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The Efficacy of Couples-Based Interventions for Panic Disorder with Agoraphobia

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ABSTRACT

From this systematic literature review it was concluded that panic disorder with agoraphobia (PDA) can sometimes occur in conjunction with marital problems. Couples-based treatments for PDA – partner-assisted exposure and marital therapy - can be an effective treatment for the condition. It is as effective as individually based cognitive behaviour therapy. Involving partners of people with PDA in therapy may be appropriate in some cases, particularly those in which there are marital difficulties. Couple-focused interventions may enhance the maintenance of treatment gains by facilitating interactions that positively reinforce and perpetuate attempts by people with PDA to enter feared situations and cope with these effectively. People with PDA who have good marital relationships show a better response to both individual and couples-based treatment programmes. In some instances effective couples-based treatment leads to improvement in marital adjustment as well as in PDA symptomatology.

INTRODUCTION

The primary aim of this paper is to review evidence for a link between panic disorder with agoraphobia (PDA) and marital problems and the efficacy of couple-based treatment programmes for people with PDA. Both partner-assisted interventions and marital-therapy interventions will be reviewed. Before considering the rationale for such programmes, the features and epidemiology of PDA deserve mention.

Panic disorder and agoraphobia

Diagnostic criteria for PDA are given in Table 1. Panic disorder is characterised by recurrent unexpected panic attacks and a marked fear of these acute episodes of anxiety, ruminations about the possible implications of repeated attacks and in some instances agoraphobia.

Agoraphobia entails a fear of leaving the safety of the home and entering situations that might trigger panic attacks. This commonly leads to the development of a restricted housebound lifestyle. The lifetime prevalence of PDA is between 1.5% and 3.5% (Kessler et al., 1994) with a one-year prevalence rate between 1% and 2% (American Psychiatric Association, 1994). Women are twice as likely as men to be diagnosed with panic disorder without agoraphobia and 3 times as likely to be diagnosed with PDA (Kessler et al., 1994).

Although DSM-IV (1994, American Psychiatric Association) distinguishes between panic disorder, agoraphobia, and panic disorder with or without agoraphobia, it was only with the advent of DSM-III (American Psychiatric Association, 1980) that both panic disorder and agoraphobia were differentiated from other anxiety presentations (Markowitz, Weissman, Queller, Lish, & Klerman, 1989). Prior to this, studies typically classified individuals who exhibited a marked degree of behavioural avoidance (due to fear of panic attacks) as agoraphobic. Available evidence suggests that agoraphobia is a secondary manifestation of

panic disorder and that many individuals with panic disorder may be pre-agoraphobic (Garvey & Tuason, 1984; Klein, 1981). Over 95% of individuals in clinical samples who have agoraphobia also have panic disorder (American Psychiatric Association, 1994).

Rationale for couples-based treatment for panic disorder and agoraphobia

Both empirical and theoretical factors have contributed to the development of couple-based approaches to the treatment of PDA. From an empirical perspective, it is now widely accepted that the more established psychological and pharmacological treatments for PDA are not effective in all cases. More than 25% of cases do not respond to cognitive behavioural interventions or antidepressant medication and both treatment approaches entail significant dropout and relapse rates (Fava, Zielezny, Savron, & Grandi, 1995; Gould, Otto, & Pollack, 1995; Mavissakalian & Perel, 1992; van Balkom, de Beurs, Keole, Lange, & van Dyck, 1997).

From a theoretical perspective, cognitive-behaviour therapists argue that spouses can make a significant contribution to treatment, by ceasing to inadvertently reinforce agoraphobia through excessive care-taking and actively reinforcing the development of anxiety management skills and the completion of exposure-based homework assignments (Oatley & Hodgson, 1984). This is the rationale for spouse-assisted therapy.

A variety of systemic formulations have inspired marital therapy approaches to the treatment of PDA (Chambless & Goldstein, 1981; Fry, 1962; Hafner, 1977a; Haley, 1963; Minuchin & Fishman, 1981; Skynner, 1976). From these disparate sources, an integrative systemic hypothesis may be derived. In PDA a circular homeostatic pattern develops in which the dependent role of the person with PDA is complemented by their partner's care-taking role.

These complementary roles entail benefits for both partners. The apparently healthy partner is permitted to avoid addressing anxiety provoking personal issues such as low self-esteem or fear of psychological and sexual intimacy. The person with PDA is protected from having to face the challenges of individuation. These difficulties with self-esteem, intimacy, and individuation are rooted in unresolved developmental difficulties in partners' families of origin. These complementary developmental difficulties may have initially been a significant factor in attracting members of the couple to each other. This systemic formulation provides a rationale for marital therapy in which partners develop alternatives to their complementary care-giving and agoraphobic roles and address unresolved issues such as low self-esteem, fear of intimacy, and individuation. This systemic formulation also entails the view that the apparently healthy partner may show deterioration in functioning if their agoraphobic partner receives effective individual therapy. This in turn may lead the apparently healthy partner to undermine their agoraphobic partner's recovery. This aspect of the systemic formulation of PDA provides a further rationale for including both members of the couple in marital therapy for the effective and lasting treatment of PDA.

Conclusions of previous reviews

From previous narrative reviews and meta-analyses of the literature on couples-based approaches to PDA a number of tentative conclusions may be drawn (Carter, Turovsky, & Barlow, 1994; Daiuto, Baucom, Epstein, & Dutton, 1998; Dewey & Hunsley, 1990; Emmelkamp & Gerlsma, 1994; Kleiner & Marshall, 1985; Vandereycken, 1983). First, PDA is sometimes, associated with marital problems. Second, both individually-oriented and couples-based treatments for PDA can be effective for a significant proportion of cases. All effective treatment programmes involve exposure to anxiety provoking situations that typically trigger panic attacks and remaining in such situations until the anxiety subsides.

Third, people with PDA who have good marital relationships show a better response to treatment. Fourth, involving partners of people with PDA in therapy may be appropriate in some cases, particularly those in which there are marital difficulties. Fifth, individual treatment involving exposure does not have a negative impact on the adjustment of non-agoraphobic partners or the quality of the marital relationship, as suggested by marital and family systems theory. The aim of the present review was to attempt to refine these tentative conclusions, by systematically evaluating (1) descriptive studies of PDA and marital problems; (2) evaluation studies of couple-based treatment programmes for PDA; (3) studies that evaluated the effect of couples' relationship quality on response to psychological treatment; and (4) evaluation studies of the effects of psychological treatment on relationship quality.

METHOD

A series of computer-based literature searches of the PsychInfo database were conducted. A variety of terms were used to define PDA including *anxiety, fears, phobias, panic attacks, panic disorder, and agoraphobia*. To identify studies of marital problems and PDA, these terms were combined with terms such as *marriage, relationship and interpersonal*. To identify studies that evaluated the efficacy of couple-based treatment programmes for PDA, terms that defined PDA (as listed above) were combined with terms that defined interventions such as *treatment, therapy, marriage, couple, relationship, marital therapy, couple therapy, family therapy, spouse-assisted therapy, spouse-assisted exposure, behaviour therapy, cognitive behaviour therapy, exposure and response prevention*. This search strategy was also used to find studies that evaluated the effect of couples' relationship quality on response to psychological treatment and evaluation studies of the effects psychological treatment on relationship quality. The searches, which were confined to English language

journals and some book chapters, covered the period 1950 to 2001. A manual search through the bibliographies of major recent review papers on PDA and marital adjustment and psychological interventions for PDA was also conducted. Descriptive studies that included at least 4 cases were selected for review. Both controlled and uncontrolled treatment outcome studies were selected for review provided they included reliable and valid pre- and post-treatment assessment instruments. Single-case designs and studies reported in dissertations or convention papers were not included in the review.

RESULTS

Twenty-four studies that investigated the relationship between marital problems and PDA were identified and the features and findings of these are presented in Table 2. Twelve studies that evaluated the efficacy or efficacy of couples-oriented interventions for PDA were identified and the features and findings of these are presented in Tables 3, 4, and 5.

Seventeen studies that evaluated the impact of the couples' relationship quality on response to treatment (both individually-based and couples-oriented) were identified and the features and findings from these studies are presented in Table 6. Thirteen studies that evaluated the impact of the treatment (both individually-based and couples-oriented) on the quality of the marital relationship were identified and the features and findings from these studies are presented in Table 7.

Couples' relationship quality and PDA

Of the twenty-four studies of marital problems and PDA summarised in Table 2, ten were retrospective reviews of case records and in 9 of these high rates of relationship problems in cases with PDA were found (Fry, 1962; Goldstein & Chambless, 1978; Goodstein & Swift, 1977; Holmes, 1982; Kleiner & Marshall, 1987; Quadrio, 1984; Roberts, 1964; Symonds,

1971; Webster, 1953). In both recording data in case files and coding these unstandardised data, clinicians' and coders' biases may have influenced the findings of these studies. Thus while these findings suggest that there is an association between relationship quality and PDA symptomatology, the reliability and validity of this conclusion is relatively weak.

Fourteen prospective studies on the quality of couples' relationships and the severity of PDA symptomatology are reported in Table 2. In these studies, data were collected using standardised assessment procedures and in some instances these were normed on the general population. Findings from these prospective studies on the relationship between couples problems and PDA symptoms were more varied than those from the retrospective studies mentioned above.

In 6 of these studies, relationship quality and PDA symptomatology were negatively correlated, with relationship difficulties being more common in couples where there was more severe PDA symptomatology. Four of these were uncontrolled studies (Hand & Lamontagne, 1976; Hafner, 1983; Kleiner, Marshall, & Spevack, 1987; Torpy & Measey, 1974) and a control group was included in the design of two of these (Markowitz et al., 1989; McLeod, 1994). In the four uncontrolled studies, 40-66% of couples in which one partner had PDA reported significant relationship problems. In one of the controlled studies, compared with normal controls, couples in which one partner had PDA were 7 times more likely to say that they did not get along with their partner (Markowitz et al., 1989). In the other controlled study, asymptomatic husbands but not symptomatic wives reported greater marital adjustment problems than normal controls (McLeod, 1994).

In 7 of the prospective studies, no association was found between PDA symptomatology and relationship quality or spouse's psychological adjustment (Arrindell & Emmelkamp, 1986a; Buglass, Clarke, Henderson, Kreitman, & Presley, 1977; Emmelkamp et al., 1992; Fisher & Wilson, 1985; Friedman, 1990; Hafner, 1977a; Lange & van Dyck, 1992). All of these studies included either a control group or normed measures of relationship adjustment or partner's psychological adjustment that permitted comparison with a normative sample. From a methodological perspective, these were particularly robust studies.

In both studies where couples in which one member had PDA were compared with couples in which one member had generalised anxiety disorder, those with PDA showed similar (Massion, Warshaw, & Keller, 1993) or better (Friedman, 1990) levels of marital adjustment.

Conclusions. From the foregoing it may be concluded that PDA is sometimes, but not always, associated with couple relationship problems. The rate of relationship problems is not always higher in couples where one person has PDA than in healthy couples and is probably no higher than in couples with other types of psychological problems such as generalised anxiety disorder. In couples where one member has PDA, it is unclear whether marital problems predispose people to developing PDA or arise as a result of the condition and then contribute to the maintenance of the PDA. However, it may be that couple relationship difficulties are both predisposing and maintaining factors for PDA.

Couples-based PDA treatment outcome studies

The 12 PDA treatment outcome studies of couples-based interventions summarised in Tables 3, 4, and 5 were published between 1977 and 1993.

General characteristics of couples-based PDA treatment outcome studies

From Table 3 it may be seen that of the 291 participants in these studies, approximately 95% were women. About 61% were married and the remainder were married, planning marriage, or cohabiting and/or involved in a stable relationship for longer than 6 months. Participants' ages ranged from 18- to 64-years, with the mean age of participants ranging from 32- to 44-years across studies. Referrals included routine referrals to a hospital clinic, those from self-help organisations and community agencies, and referrals received via advertisements. The duration of agoraphobic symptoms ranged from 6 months to 25 years and the mean duration of agoraphobic symptoms ranged from greater than 1-year to 18-years across studies. Two of these studies evaluated the efficacy of marital therapy (Chernen & Friedman, 1993; Cobb, McDonald, Marks, & Stern, 1980) and 10 evaluated the effects of partner-assisted exposure (Arnold, Taylor, Agras, & Telch, 1985; Barlow, Mavissakalian, & Hay, 1981; Barlow, O'Brien, & Last, 1984; Cerny, Barlow, Craske, & Himadi, 1987; Cobb, Mathews, Childs-Clarke, & Blowers, 1984; Craske, Burton, & Barlow, 1989; Emmelkamp et al., 1992; Himadi, Cerny, Barlow, Cohen, & O'Brien, 1986; Jannoun, Munby, Catalan, & Gelder, 1980; Mathews, Teasdale, Munby, Johnston, & Shaw, 1977; Oatley & Hodgson, 1987). Drop-out rates from the 12 studies ranged from 3% to 25%.

Conclusion. Overall these 12 studies focused on evaluating the effects of marital therapy and partner-assisted exposure for a large group of women with relatively debilitating levels of PDA in stable long-term relationships. The results of these studies may probably be generalised to this population with a fair degree of confidence.

Methodological features of couples-based PDA treatment outcome studies

From Table 4 it may be seen that the 12 studies varied in methodological rigour. Eight studies included comparison groups and 4 were single group outcome studies. In 7 of the 8 comparative group studies, cases were randomly assigned to groups. None of the studies included a no-treatment control group, so it was not possible to calculate meaningful effect-sizes for this group of studies. In 11 of the 12 studies diagnostically homogeneous groups were used and in all 12 studies participants were evaluated before and after treatment with reliable and valid assessment instruments. Assessments based on self-report data were conducted in 12 studies. Partner self-report assessments were used in 8 studies, researcher ratings were made in 8 studies, and therapist evaluations were made in 2 studies. PDA symptomatology was assessed in all studies and the quality of the couple's relationship was assessed in 10 studies. The clinical significance of change was evaluated in only 3 studies. In 8 studies treatment was conducted by experienced therapists rather than graduate students in training and in 7 studies treatment was manualised. Therapist supervision was provided in only 2 studies. Medication was controlled for in only 2 studies. In 6 (or 50%) of the studies, participants were on medication, either antidepressants or anxiolytics, during the psychological treatment programmes. In the remaining 4 studies, there is no indication that medication was controlled for. Follow-up data were collected in 9 studies and from Table 5 it may be seen that follow-up periods ranged from 3 months to two years.

Conclusion. Using the checklist for methodological robustness in Table 4, scores of studies ranged from 6 to 14 out of 16, indicating that this was a fairly robust group of treatment outcome studies, so a fair degree of confidence may be placed in the reliability and validity of the results of these studies.

Key findings from couples-based PDA treatment outcome studies

From Table 5 it may be seen that the number of participants per treatment condition ranged from 4 to 30. The duration of treatment ranged from 5 to 35 hours over periods from a month to a year.

In the first of two studies of marital therapy in Table 5, Chernen and Friedman (1993) found that behavioural marital therapy led to significant improvements in relationship quality and PDA symptomatology for couples from discordant marriages, but had little impact on couples without significant relationship difficulties. Behavioural marital therapy in this study focused on coaching couples in communication, problem-solving, and behavioural exchange skills (Jacobson & Margolin, 1979). In the second marital therapy study in Table 5, Cobb et al. (1980) evaluated the efficacy of a systems approach to marital therapy where the focus was on helping couples understand how their patterns of interaction and belief systems maintained PDA symptomatology and how alternatives to these interaction patterns and beliefs might be developed. This form of marital therapy was particularly effective in enhancing the quality of couples' relationships but had little impact on PDA symptomatology. In contrast, cases in the comparison group who participated in partner-assisted exposure therapy showed significant symptomatic improvement post-treatment and at follow-up.

In the 6 studies that evaluated partner-assisted exposure therapy, this treatment programme was found to be effective. Using Mathews et al.'s (1977) data, it can be concluded that this treatment yielded a percentage improvement rate of 58% if an item ranked 8 or above (out of 15 on this fear hierarchy) is taken to indicate clinically significant improvement. In two studies partner-assisted exposure therapy and individual exposure therapy were compared

and in both studies, these two treatments were found to be equally effective (Cobb et al., 1984; Emmelkamp et al., 1992). In the single study where partner-assisted exposure therapy and female friend-assisted exposure therapy were compared, these two treatments were found to be equally effective (Oatley & Hodgson, 1987). In the single study where partner-assisted exposure therapy and partner-assisted problem-solving therapy were compared, partner-assisted exposure therapy was found to be more effective (Jannoun et al., 1980).

Cognitive therapy combined with partner-assisted exposure appears to have produced gains in all 6 of Barlow et al.'s (1981) couples and resulted in 54% of participants being rated as treatment responders based on a composite criterion in Craske et al. (1989). In two other studies group-based partner-assisted exposure therapy combined with cognitive therapy was found to be more effective in alleviating PDA symptoms than group-based individual exposure therapy combined with cognitive therapy (Barlow et al., 1984; Himadi et al., 1986; Cerny et al., 1987). In the Barlow et al. (1984) study, as many as 86% of the participants were rated as treatment responders to the partner-assisted exposure/cognitive therapy combination, whilst this figure was 82% at 24-month follow-up in the original Himadi et al. (1986) sample.

Arnow et al. (1985) found that group-based individual exposure therapy followed by partner-assisted exposure therapy combined with couples-based communication training was more effective than group-based individual exposure therapy followed by partner-assisted exposure therapy combined with couples-based relaxation training in alleviating PDA symptoms. These gains were maintained at 8-month follow-up. From Table 5 it may be seen that in five of the 11 studies that included partner-assisted exposure as a treatment component, a group therapy format was used. The size of these groups ranged from 3 to 9

individuals. Although data is limited, it appears that both couples-based and group-couples-based treatment formats for partner-assisted exposure therapy were comparable in their treatment effects.

Conclusions. In couples in which one partner has PDA, marital therapy is effective in improving the quality of marital relationships and in ameliorating PDA symptoms in distressed couples. Partner-assisted exposure therapy, whether conducted with couples on their own or in groups, leads to symptomatic improvement for 23% to 45% of cases. It is as effective as individual exposure therapy and female friend-assisted exposure therapy and is more effective than partner-assisted problem-solving therapy and marital therapy. Combining it with cognitive therapy that addresses problematic belief systems underlying avoidant behaviour may enhance the efficacy of partner-assisted exposure therapy. When group-based individual and partner-assisted exposure therapy are combined with cognitive therapy, the latter is more effective than the former. Combining it with couples-based communication training but not couples-based relaxation training may enhance the efficacy of a combined programme involving group-based individual and partner-assisted exposure therapy.

The effect of relationship quality on the psychological treatment of PDA

From Table 6 it may be seen that in 6 of 17 studies the quality of couples relationship at the outset of therapy was associated with symptomatic improvement after treatment or during the follow-up periods of up to 5 years (Bland & Hallam, 1981; Hafner, 1976; Hudson, 1974; Mathews et al., 1977; Milton & Hafner, 1979; Monteiro, Marks, & Ramm, 1985; Lelliott, Marks, Monteiro, Tsakiris, & Noshirvani, 1987). In five of these studies, individual treatments such as individual exposure therapy were evaluated and in only one study, was a

couples-based intervention evaluated. This was Mathews et al.'s (1977) study of partner-assisted exposure.

In the remaining 11 studies, no association was found between the initial quality of couples' relationships and their immediate response to treatment or the severity of PDA symptoms during the follow-up periods of up to 16 months (Arrindell, Emmelkamp, & Sanderman, 1986b; Barlow et al., 1981; Chambless & Gracely, 1988a; Chambless & Gracely, 1988b; Cobb et al., 1984; Craske et al., 1989; Emmelkamp, 1980; Emmelkamp et al., 1992; Himadi et al., 1986; Peter & Hand, 1983; Thomas, Jones, Sinnott, & Fordham, 1983). In 8 of these studies individually-based treatment conditions such as individual exposure therapy were evaluated and in 5 studies couples-based treatment conditions such as partner-assisted exposure were evaluated. While some studies included a placebo versus medication feature in their designs, it appears that only 2 studies involving individual exposure (Arrindell et al., 1986b; Emmelkamp, 1980) and only 1 partner-assisted exposure therapy study (Cerny et al., 1987; Himadi et al., 1986) controlled for medication.

Conclusion. In some instances the initial quality of couples' relationship at the outset of individually- or couples-based treatment programmes for PDA affects their response to treatment, with better relationship quality being associated with a better response to treatment.

The effect of psychological treatment of PDA on relationship quality

From Table 7 it may be seen that in 6 of 13 studies, psychological treatment of PDA had a positive effect on the quality of couples' relationships (Bland & Hallam, 1981; Cobb et al., 1980; Cobb et al., 1984; Himadi et al., 1986; Cerny et al., 1987; Kleiner, Marshall, et al.,

1987; Monteiro et al., 1985; Lelliott et al., 1987). Again, it appears that only 3 studies (Arrindell et al., 1986b; Cerny et al., 1987; Emmelkamp, 1980; Himadi et al., 1986) controlled for medication. In 4 of 13 studies, psychological treatment of PDA had no effect on the quality of couples' relationships (Emmelkamp, 1980; Emmelkamp et al., 1992; Hafner, 1976, 1977a, 1977b; Milton & Hafner, 1979). In the remaining 3 studies, psychological treatment of PDA yielded a partial positive effect on the quality of couples' relationships (Arrindell et al., 1986b; Barlow et al., 1981; Hand & Lamontagne, 1976).

In these 13 studies, whether treatment was couples-based or individually-based had no deleterious effect on the quality of couples' relationships. From Table 7 it may be seen that in 3 of 7 (43%) studies where treatment had a positive effect on relationship quality, couples-based treatment conditions such as partner-assisted exposure or marital therapy were evaluated. Only 2 (or 33%) of the remaining 6 studies found no treatment effect or only a partial effect on relationship quality involving partner-assisted exposure. This figure could be even smaller considering that 1 of these 2 studies (e.g., Barlow et al., 1981) had a cell size of only 6 and hence its findings may not be generalisable.

Conclusion. Couples-based treatment programmes such as partner-assisted exposure or marital therapy tend to have a more positive effect on the quality of couples relationships than individually-based treatment conditions such as individual exposure therapy

DISCUSSION

From this review the following conclusions may be drawn. First, PDA is sometimes, but not always, associated with couple relationship problems. In couples where one member has PDA, it is unclear whether couple relationship difficulties are predisposing or maintaining

factors for PDA or both. Second, in some instances the initial quality of couples' relationship affects their response to couples-based or individual treatment, with non-distressed couples deriving greater benefits from treatment. Third, partner-assisted exposure therapy, whether conducted with couples on their own or in groups, leads to symptomatic improvement for 23% to 45% of cases. It is as effective as individual exposure therapy and female friend-assisted exposure therapy and is more effective than partner-assisted problem-solving therapy and marital therapy. Fourth, combining it with cognitive therapy, which addresses problematic belief systems underlying avoidant behaviour, and with couples-based communication training, which empowers couples to address relationship issues, may enhance the efficacy of partner-assisted exposure therapy. A treatment combination of group-based partner-assisted therapy and cognitive therapy can result in as many as 84% of participants being rated as treatment responders.

Fifth, couples-based treatment programmes such as partner-assisted exposure or marital therapy tend to have a more positive effect on the quality of couples relationships than individually-based treatment conditions such as individual exposure therapy. It may be that while exposure is a critical aspect of all effective therapeutic approaches to PDA, couple-focused interventions may enhance maintenance of treatment gains by facilitating interactions that positively reinforce and perpetuate exposure attempts. These conclusions are consistent with those from previous narrative reviews and meta-analyses of the literature on the quality couples and PDA (Carter et al., 1994; Daiuto et al., 1998; Dewey & Hunsley, 1990; Emmelkamp & Gerlsma, 1994; Kleiner & Marshall, 1985; Vandereycken, 1983).

The most important implication of these conclusions for practice is that the quality of couples' relationships should be routinely assessed as part of a preliminary evaluation of

people with PDA in stable long-term relationships and couples-oriented treatment programmes should be routinely used particularly in the case of distressed couples. From this review it may be concluded that partner-assisted exposure combined with cognitive therapy and couples communication training or marital therapy is the treatment package of choice for distressed couples.

With respect to future research, there are a number of areas that deserve urgent attention. Considering that men's roles traditionally require greater independence, it seems reasonable to hypothesise that husband's phobias would influence marital quality at least as strongly as wives' phobias (McLeod, 1994, p. 767). Hence, there is a need to evaluate couples-based treatment programmes for men with PDA. Other special populations that need to be considered include gay couples or those who are poor treatment responders such as people who meet the diagnostic criteria for personality disorders as well as PDA. There is also a need to evaluate programmes designed for members of different ethnic groups that entail sensitivity to cultural and personal characteristics of participants. Studies that examine the impact of design features that may make programmes more effective are also required. For example, there is a need for studies that compare the impact of programmes in which partner-assisted exposure is combined with a variety of other relationship-oriented interventions such as systemic marital therapy or behavioural marital therapy. Studies that evaluate the impact of treatment duration, location, and therapist training also require evaluation.

Future treatment outcome studies should meet the methodological criteria listed in Table 4. In addition, future evaluation studies should routinely include assessments of programme integrity into the research design. In such studies, treatment sessions are recorded and blind raters use programme integrity checklists to evaluate the degree to which sessions

approximate manualised training curricula. Such integrity checks allow researchers to state with confidence the degree to which a pure and potent version of their programme has been evaluated.

Studies are also required that investigate the mechanisms and processes that underpin treatment efficacy. It is clear that there is wide variability in couples' responses to treatment. The determinants of these different outcomes require careful investigation.

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Table 1 DSM-IV and ICD-10 diagnostic criteria for panic disorder with agoraphobia (PDA).

DSM-IV	ICD-10
<p>Criteria for Panic Disorder with Agoraphobia</p> <p>A. Both:</p> <ul style="list-style-type: none">) recurrent unexpected panic attacks; and) at least one of the attacks has been followed by 1 month (or more) of one (or more) of the following: <ul style="list-style-type: none"> a) persistent concern about having additional attacks;) worry about the implications of the attack or its implications (e.g., losing control, having a heart attack, “going crazy”); c) a significant change in behaviour related to the attacks. <p>B. The presence of agoraphobia.</p> <p>C. The panic attacks are not due to the direct physiological effects of a substance or a general medical condition.</p> <p>D. The panic attacks are not better accounted for by another mental disorder.</p> <p>Criteria for Panic Attack</p> <p>A discrete period of intense fear or discomfort, in which four (or more) of the following symptoms developed abruptly and reached a peak within 10 minutes:</p> <ul style="list-style-type: none"> a) palpitations, pounding heart, or accelerated heart rate b) sweating c) trembling or shaking d) sensations of shortness of breath or smothering e) feeling of choking f) chest pain and discomfort g) nausea or abdominal distress h) feeling dizzy, unsteady, light-headed, or faint i) derealisation (feelings of unreality) or depersonalisation (being detached from oneself) j) fear of losing control or going crazy k) fear of dying l) paresthesias (numbness or tingling sensations) m) chills or hot flushes <p>Criteria for Agoraphobia</p> <p>All of the following criteria should be fulfilled for a definite diagnosis:</p> <ul style="list-style-type: none"> a) Anxiety about being in places or situations from which escape might be difficult (or embarrassing) or in which help may not be available in the event of having an unexpected or situationally predisposed panic attack or panic-like symptoms. Agoraphobic fears typically involve characteristic clusters of situations that include being outside the home alone; being in a crowd or standing in a line; being on a bridge; and travelling in a bus, train, or automobile. b) The situations are avoided (e.g., travel is restricted) or else are endured with marked distress or anxiety about having a panic attack or panic-like symptoms, or require the presence of a companion. c) The anxiety or phobic avoidance is not better accounted for by another mental disorder. 	<p>Criteria for Panic Disorder</p> <p>The essential features are recurrent attacks of severe anxiety (panic) that are not restricted to any situation or set of circumstances, and that are therefore unpredictable. As in other anxiety disorders, the dominant symptoms vary from person to person, but sudden onset of palpitations, chest pain, choking sensations, dizziness, and feelings of unreality (depersonalisation or derealisation) are common. There is also, almost invariably, a secondary fear of dying, losing control, or going mad. Individual attacks usually last for minutes only, though sometimes longer; their frequency and the course of the disorder are both rather variable. An individual in a panic attack often experiences a crescendo of fear and autonomic symptoms that result in an exit, usually hurried, from wherever he or she may be. If this occurs in a specific situation, such as a bus or in a crowd, the patient may subsequently avoid that situation. Similarly, frequent and unpredictable panic attacks produce fear of being alone or going into public places. A panic attack is often followed by a persistent fear of having another attack.</p> <p>For a definite diagnosis, several severe attacks of autonomic anxiety should have occurred within a period of about one month;</p> <ul style="list-style-type: none"> a) In circumstances where there is no objective danger; b) Without being confined to known or predictable situations; and c) With comparative freedom from anxiety symptoms between attacks (although anticipatory anxiety is common). <p>Criteria for Agoraphobia</p> <p>The term “agoraphobia” refers to an interrelated and often overlapping cluster of phobias embracing fears of leaving home: fear of entering shops, crowds, and public places, and public places, or of travelling alone in trains, buses, or planes. Whilst the severity of the anxiety and the extent of avoidance behaviour are variable, some sufferers become completely housebound; they are terrified by the thought of collapsing and being left helpless in public. The lack of an immediately available exit is one of the key features of many of these agoraphobic situations.</p> <p>All of the following criteria should be fulfilled for a definite diagnosis:</p> <ul style="list-style-type: none"> a) The psychological or autonomic symptoms must be primarily manifestations of anxiety and not secondary to other symptoms, such as delusions or obsessional thoughts; b) The anxiety must be restricted to (or occur mainly in) at least two of the following situations: crowds, public places, travelling away from home, and travelling alone; c) Avoidance of the phobic situation must be, or have been, a prominent feature.