Two-year follow-up after a randomised controlled trial of self- and clinician-accompanied exposure for phobia/panic disorders

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Background Long-term follow-up has rarely been reported after self-exposure therapy for phobias.

Aims Completion of such a follow-up.

Method Two-year follow-up was achieved in 68 (85%) of 80 patients with phobias who had completed a previous 14-week randomised controlled trial comparing therapist-accompanied self-exposure, self-exposure or self-relaxation. Measures were self-reported ratings of symptoms, satisfaction and use of other treatment.

Results Improvement at week 14 was maintained 2 years later. Clinician-accompanied exposure and self-exposure did not differ on any measure. Compliance with self-exposure homework during weeks 0–8 predicted more improvement 2 years later. Patients who failed to improve with relaxation by week 14 improved after subsequent crossover to exposure. A need for more treatment for their phobias was still felt by 33 patients (49%).

Conclusions Patients with phobias maintained their improvement to 2-year follow-up after the end of self-exposure therapy.

Declaration of interest None.

In randomised controlled trials (RCTs) exposure reduced fear more than did relaxation, and clinician-accompanied exposure appeared redundant (Marks, 1987; Al-Kubaisy et al, 1992). An important question is whether gains continue for years after treatment has ended, because the patients in the RCTs usually have been very chronic (Noyes et al, 1996). In several studies improvement did continue for years after clinician- accompanied exposure and/or exposure plus cognitive therapy (panic disorder: O’Rourke et al, 1996; agoraphobia: Lelliott et al, 1987; Fava et al, 2001a; social phobia: Juster & Heimberg, 1995; Fava et al, 2001b; specific phobia: Ost, 1989; obsessive-compulsive disorder: O’Sullivan et al, 1991). Only Fava et al examined self-exposure alone. We report the status of Al-Kubaisy et al’s (1992) patients 2 years after the end of the original RCT to determine how outcome at 2 years after self-exposure compared with that after clinician-accompanied self-exposure.

METHOD

Patient sample

Two-year post-treatment follow-up was achieved in 68 (85%) out of 80 psychiatric out-patients who had completed a 14-week RCT (Al-Kubaisy et al, 1992). Before treatment, all had a disabling (target phobia total score >20 on a 0–32 scale) phobic disorder by ICD–10 (World Health Organization, 1992) criteria (16 with agoraphobia, 22 social phobia, 30 specific phobias) for at least 1 year (mean duration=18 years; s.d.=11). Mean age was 35 years (s.d.=11) and 25 (37%) were men.

Design

Details of the RCT are reported by Al-Kubaisy et al (1992). Patients were randomised to one of three treatment conditions: clinician-accompanied self-exposure (Ee); self-exposure only (e); and self-relaxation (r). During weeks 0–8, all patients had six 60-min sessions with a clinician. The Ee sessions totalled 150 min to include an extra 90 min doing clinician-accompanied live exposure. At week 14, exposure therapy was offered to patients who had not improved (mean target fear reduction <2 on 0–8 scale) after self-relaxation; acceptors were crossed over to have Ee or e (r=Ee/ r=e). The r patients who did not cross over are called r-only hereafter.

Two years after the end of treatment, patients were invited by letter to attend for assessment; those who did not attend were posted outcome scales to rate and return.

Measures

At weeks 0, 8, 14 and 26 after study entry, patients had self- and independent assessor ratings (higher scores = more severe symptoms) using the following measures: the target phobias (Watson & Marks, 1971) (each patient negotiated with the therapist individualised targets (usually three or four) of exposure homework): fear and avoidance (each with mean range 0–8); the Fear Questionnaire (FQ; Marks & Mathews, 1979), containing 15-item total phobia (FQT; total score range 0–120), single-item global phobia severity (0–8) and single-item depression (0–8) subscores (McKenzie & Marks, 1999); the Beck Depression Inventory (BDI; 0–52; Beck et al, 1974); and the Work, Home Management, Social and Private Leisure Adjustment scale (four-item WSA: 0–32; Marks, 1986).

At 2 years’ post-treatment, patients were asked to rate the above according to satisfaction with treatment during weeks 0–14 and any subsequent treatment, and treatment success: ‘Success’ (0–8: 0–2 failure, 3–5 moderate success, 6–8 marked success); ‘Improved as much as expected’ (0–8: 0–2 less than expected, 3–5 about what was expected, 6–8 more than expected); ‘Needed further treatment (and which for your phobia and/or other psychological problems?’; and ‘Choose same treatment again if need further help?’

Statistical analysis

Only self-rated measures were analysed because assessor-rated measures were unavailable for patients who did not attend follow-up and so could be biased. Self- and assessor-rated measures had correlated highly at baseline and week 14. Pearson’s correlation coefficients were 0.65–0.93 (n=66–75, P<0.001) on the target phobias.
and on the WSA, and for the self-rated BDI v. assessor-rated Hamilton Rating Scale for Depression (Hamilton, 1960). Because at weeks 8 and 14 the three treatment conditions had differed similarly regardless of type of phobia (Al-Kubaisy et al., 1992), the three types of phobia were pooled for analysis of inter-treatment differences at 2 years. Data from r—Ee/r—e patients were pooled to boost cell size, a further rationale being the absence of significant differences between Ee and e at 2 years (see below).

Clinical ratings were tested by repeated-measures analysis of variance (ANOVA) in each treatment group. Paired t-tests were used as a post hoc analysis with reference points of weeks 0, 8 and 14. Group comparison on symptom severity is valid for Ee v. e because r patients were not assigned randomly to r-only or r—Ee/r—e after week 14. Two-way ANOVAs were used to test the influence of compliance or co-therapist on the outcome of Ee and e. The χ² and Fisher’s exact test were used for categorical data. All statistical tests were two-tailed and the significance level was set at P<0.05.

RESULTS

Patients followed up (rated) at 2 years v. non-followed-up (unrated) patients

At pretreatment, the 68 patients with 2-year ratings, compared with the unrated 12 patients, had similar demographic and clinical features, including symptom severity, but more rated patients had been employed (82% v. 50%; χ² (1)=5.96, P=0.015).

At 2 years, numbers from each of the original treatment conditions were (numbers at week 14 in italic): Ee 25 (27); e 23 (26); r-only 10 (15). Numbers from the crossover conditions were r—Ee 3 (4) and r—e 7 (8); more r-only patients had been followed up (33% v. 11%, P=0.043).

Patients with follow-up had improved more than the non-followed-up patients during weeks 0–8 on all measures except FQT, with a week 0–8 mean fall in: target fear, 2.8 v. 1.1 (t(78)=2.48, P=0.015); target avoidance, 3.4 v. 0.9 (t(78)=3.56, P=0.001); global phobia severity, 2.3 v. 0.4 (t(78)=2.87, P=0.005); WSA total, 5.4 v. 1.2 (t(74)=2.10, P=0.039); single-item depression, 4.7 v. −2.1 (t(78)=2.87, P=0.017); and BDI, 1.9 v. −0.9 (t(77)=2.28, P=0.025).

Outcome on clinical ratings over 2 years

Of all the patients, 91% identified three (26%) or four (65%) most fearful situations or activities as treatment targets (9% had very specific phobias). The mean total amount of self-exposure homework set was 75 h in Ee and 79 h in e; the mean total amount actually done by patients was 39 h in Ee and 52 h in e. Clinical ratings at weeks 0, 8 and 14 post-entry and 2 years after treatment ended appear in Fig. 1 and Table 1.

Six 90-min sessions of clinician-accompanied exposure during weeks 0–8 did not affect the 2-year ratings – interaction between Ee or e and time was not significant on any measure (Table 1). Both Ee and e improved significantly and then remained stable up to 2 years on nearly all measures. The great bulk of improvement had occurred between weeks 0 and 14 (see Table 1) rather than thereafter. From week 0 to 2 years, Ee patients improved by a mean of 58% (s.d.=27) on their target fear, nearly all of this (57%, s.d.=26) having been achieved during weeks 0–14 and almost none thereafter during follow-up. From week 0 to 2 years, e patients improved by a mean of 53% (s.d.=33), all of this having been attained during weeks 0–14 (57%, s.d.=33), with a tiny loss of gain thereafter.

The r-only patients had improved mostly by week 14 (46%, s.d.=29), with slight further gain over the next 2 years (10%, s.d.=28), and overall improvement from week 0 to 2 years was 56% (s.d.=31).

The r—Ee/r—e patients improved on target fear by a mean of merely 7% (s.d.=16) during weeks 0–14 but by 45% (s.d.=43) between week 14 and 2 years; the latter was significant, as was improvement between week 14 and 2 years for target avoidance, global phobia and WSA (see Table 1).

On target avoidance, the Ee patients improved by 65% (s.d.=25) from week 0 to 2 years; 67% (s.d.=23) of the gains had been during weeks 0–14, with little change thereafter. Improvement for e patients was 57% (s.d.=31) from week 0 to 2 years; 60% (s.d.=32) of these gains had been during weeks 0–14 and almost none thereafter. Analysis of variance revealed no difference between Ee and e. Improvement for r-only was 61% (s.d.=28) from week 0 to 2 years, of which 45% (s.d.=24) was during weeks 0–14 and 16% (s.d.=25) thereafter. Group r—Ee/r—e improved by 59% (s.d.=29) from week 0 to 2 years, of which just 10% (s.d.=11) was during relaxation in weeks 0–14 and 49% (s.d.=32) after crossing over to exposure at week 14.

![Fig. 1](image-url) Outcomes on target fear and avoidance raw scores: Ee, clinician-accompanied self-exposure; e, self-exposure; r-only, self-relaxation; r—Ee/r—d, self-relaxation then crossed over to Ee or e at week 14.
Table I  Overall outcomes on clinical measures: raw scores

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<th></th>
<th>Week 0</th>
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<th>Week 14</th>
<th>Two years</th>
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FQ, Fear Questionnaire; WSA, Work, Home Management, Social and Private Leisure Adjustment; BDI, Beck Depression Inventory; Ee, clinician-accompanied self-exposure; e, self-exposure only; r, self-relaxation; r-only, self-relaxation with no crossover; arrows denote crossover.

*P < 0.05, paired t-test, compared with weeks 0 (pretreatment), 8 and 14, respectively. Interaction between group factor (Ee x e) and time factor was not significant on any measure.

**Week 0–8 compliance predicted outcome**

The therapist had rated Ee and e patients for between-session compliance with the exposure-homework tasks negotiated during week 0–8 sessions (≥85% of negotiated tasks carried out=compliant, n=15; ≤50%=non-compliant, n=12). As in past studies (e.g. de Araujo et al, 1996), compliant patients improved significantly more than non-compliant patients on target phobia avoidance and fear at week 26 and 2 years.

**Ee and e patients’ use of a co-therapist**

A relative or friend as co-therapist had been recruited during weeks 0–14 by 11 (44%) patients in Ee and by 8 (35%) in e. The presence of a co-therapist did not relate significantly to overall improvement of target fear or target avoidance from week 0 to 2 years in either Ee or e, despite Ee and e patients having improved slightly more in weeks 0–14 on target fear if they had a co-therapist (F(1,44)=3.63; P=0.063); by including the five patients who had no 2-year rating in this analysis, the difference became significant (F(1,49)=4.67; P=0.036). On target avoidance, e patients with a co-therapist tended
to improve more during weeks 0–14 
\( F(1,14) = 2.97; P = 0.092 \). At 2 years, how-
ever, e patients who had a co-therapist lost 
22% of their former improvement, a loss 
that was significantly greater than in r 
patients who had no co-therapist (6% 
more improvement) or in Ee patients 
(5% further improvement with and −8% 
without a co-therapist; \( F(1,14) = 5.90; 
P = 0.019 \)).

**Retrospective self-evaluations** 
of treatment

**Treatment success**

Ratings were similar across treatment 
groups: 29 patients (43%) rated treatment 
as markedly successful, 19 (29%) as 
moderately successful and 19 (29%) as a 
failure. Success ratings were strongly 
predicted by the percentage improvement 
on target fear from week 0 to 2 years 
(adjusted \( R^2 = 0.464, \beta = 0.688, t = 7.36 \) and 
\( P = 0.0011 \) on stepwise multiple regression) 
but not by the following variables: age; 
gender; education; illness duration; total 
time spent by therapist or patient during 
weeks 0–8; 2-year BDI score.

**Improvement expectancy**

Thirty-five patients (52%) rated improve-
ment as more than expected, nine (14%) 
about what they had expected and 
twenty-two (33%) as less than expected. 
More Ee than e and r patients felt 
that they had improved more than expected 
(linear-by-linear association: \( \chi^2 (1) = 4.36, 
P = 0.038 \)).

**Other treatments from week 26 
2 years**

From week 26 to 2 years, of 67 patients 
who had been followed up, 18 (27%) had 
had other treatment for their phobia. Their 
frequency did not differ significantly across 
diagnosis (seven with agoraphobia, three 
with social phobia and eight with specific 
phobias) or type of treatment during 
weeks 0–14 or crossover from r at week 14 
five 
Ee, six e, three r-only and four r–Ee/ 
r-only. Six (9%) patients had had tran-
quillisers, two had antidepressants, one 
had both types of medication, one had 
counselling and eight (12%) had other 
treatments.

On almost all pretreatment clinical 
measures, patients who had had other 
treatments after week 26 had not differed from 
those who had not, but had been signifi-
cantly worse than patients who had not 
at week 14 and 2 years. It is unlikely that 
they had further gains from other treat-
ments after week 26 because week 14 and 
2-year scores did not differ on repeated-
measures ANOVA.

**Perceived need for further 
treatment at 2 years**

Of 67 patients who had been followed up 
33 (49%) felt that they needed more treat-
ment for their phobia at 2 years (8/24 Ee; 
14/23 e; 5/10 r-only; 6/10 r–Ee/r–e; 67% for 
agoraphobia, 43% for social phobia and 38% 
for specific phobias) and their distribution did not differ across the 
type of treatment. When asked if they 
would choose the same type of treatment 
they had had before week 26, 32 (97%) 
replied, of whom 13 (41%) said ‘yes’ (6/8 
Ee; 5/14 e; 1/5 r-only; 1/5 r–Ee/r–e) and 
19 (59%) said ‘no’ (2/8 Ee; 9/14 e; 4/5 
r-only, 4/5 r–Ee/r–e). If this is a proxy for 
treatment preference, this was signifi-
cantly greater for Ee, next for e and least for 
r (linear-by-linear association: \( \chi^2 
(1) = 6.29, P = 0.012 \); ANOVA on expectancy scores: 
\( F(2,63) = 4.28, P = 0.018 \)).

**DISCUSSION**

**Neither clinician- nor co-therapist-
accompanied exposure enhanced 
2-year outcome**

Although Ee seemed preferred to e, this 
did not enhance outcome in terms of 
self-rated symptom severity and need for 
further treatment, so the 9 h of clinician-
accompanied exposure proved redundant 
up to 2 years later. Our results extend 
earlier similar findings in this sample at 
3–6 months’ follow-up (Al-Kubaisy et al., 
1992) and in other studies (e.g. Marks 
et al., 1988).

Clinician-accompanied exposure had 
been given in a sufficient dose to show 
an effect. The six 90-min sessions during 
weeks 0–8 were even more than is usual in 
National Health Service clinics. For 
spider phobia, one 2-h session of clinician-
accompanied exposure was compared with 
2-h sessions guiding self-exposure over 2 weeks 
(Ost et al., 1991); clinician-
accompanied exposure was superior up to 
1 year but it is unclear how much this 
was due to its exposure bouts having been 
more prolonged and having included 
systematic modelling by a therapist. In 
present patients an effect of clinician-
accompanied exposure sessions in Ee may 
have been overshadowed by the large 
amount of self-exposure homework. 

About one-third of present e patients 
had recruited relatives or friends as co-
therapists whose role during self-exposure 
might have resembled that of a clinician 
during Ee. Such a co-therapist in e was 
associated with slightly more phobia 
reduction in weeks 0–14 but not at 2 years, 
by which time some of these gains had been 
lost.

Contextual cues are important in learn-
ing and memory (e.g. Smith et al., 1978). 
Fear spreads more easily to a neutral 
context than does fear reduction (Bouton, 
A clinician or co-therapist may serve as a 
dual-edged contextual (safety or reminder) 
cue during exposure, facilitating fear 
reduction during active treatment but raising 
the risk of relapse in new phobic situations 
(Rowe & Craske, 1998a) or when the 
context changes to having no clinician or 
co-therapist present (Rodriguez et al., 
1999).

In Ee and e, compliance with self-
exposure homework negotiated during 
week 0–8 sessions predicted better outcome 
at week 26 and 2 years. In obsessive-
compulsive disorder, too, such compliance 
predicted more improvement up to six 
months (de Araujo et al., 1996). What deter-
mines compliance is largely unclear.

Compared with the 15% of patients 
without 2-year data, the 85% with such 
data had been very similar at pretreatment. 
By week 8 the 85% had improved more, 
and by week 26 more had had exposure 
in some form (Ee, e or r–Ee/r–e) rather 
than r-only. If the 15% of patients without 
2-year data remained less improved at 2 
years, then gains at 2 years may be over-
stated for the entire sample. This does not 
affect our main conclusions that Ee v. e 
did not differ significantly in outcome, that 
doing self-exposure homework in weeks 0– 
8 predicted more improvement at two years 
and that unimproved r patients improved 
after subsequent exposure.

**Need for further treatment**

The improvement that continued beyond 
week 14 to two years is in accordance with 
the stability of gains in other long-term 
follow-ups noted above. Although exposure
treatments reduce phobias, they seldom abolish them completely (Lelliott et al., 1987; reviewed by Marks, 1987). At 2 years, nearly half of our patients felt that they needed further treatment for their phobias; whether this should be more exposure or another approach deserves study.

Patients who fear many phobic situations may need exposure to them all in order to maximise improvement. Both Ee and e had focused on three or four main phobic targets. Patients who had more phobic situations that they were not exposed to may have remained unimproved in such situations and so felt a need for further treatment. Bearing this out, the percentage of Ee or e patients who felt the need for further treatment was two-fold greater for agoraphobia than specific phobias (with social phobias, including both focal and diffuse phobias, in between).

It is unclear whether desire for further help is reduced by adding non-exposure treatments. Almost half of those with social phobia still sought further treatment during follow-up after exposure plus cognitive therapy (Mersch et al., 1991). Although patients receiving such combined therapy felt less need for further therapy, at 18-month follow-up exposure plus cognitive therapy had no better outcome than exposure alone (Scholien & Emmelkamp, 1996a,b). A liking of more therapist contact is common even when that does not enhance improvement.

**Did relaxation have an effect?**

Of the 27 original r patients, 10 had improved by week 14 and their gains continued to 2 years. This non-random r-only subgroup, however, was not comparable to the originally randomised Ee and r groups. Of the ten r-only patients, four did a mean of 17 h of un instructed ‘self-exposure’ during weeks 0–14, so it is unclear as to what to attribute r-only’s continuing gains at 2 years. The non-follow-up rate for r-only was higher and their improvement was greater than that of the total original r group. Our ten r patients who did not benefit from self-relaxation but went on to improve with Ee or e remained improved at 2 years.

Although r had been far less effective than Ee or e over weeks 0–14, at 2 years patients from all groups rated their treatments as having been similarly successful.

However, the treatment that the original r patients rated as successful at 2 years had by then included self-exposure at some point in at least half of them. Satisfaction can be an unreliable guide to actual improvement.

Patients with post-traumatic stress disorder improved somewhat with therapist-accompanied plus self-relaxation, albeit less than with exposure or cognitive restructuring (Marks et al., 1998), in an RCT that did not test whether improvement was a placebo or a relaxation effect.

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**REFERENCES**


**CLINICAL IMPLICATIONS**

- Improvement in phobias after self-exposure continued up to 2 years post-treatment, although nearly half of the patients still felt that they needed further treatment.
- Clinician-accompanied exposure proved redundant up to the 2-year follow-up.
- Patients who failed to improve with relaxation improved after subsequent exposure.

**LIMITATIONS**

- The three types of phobia had to be pooled because there were too few patients to analyse each phobia type separately.
- Patients who were followed up had only self-ratings at 2 years and they had been more improved at week 14 than the patients not followed up.
- Conclusions about the long-term effects of relaxation are unsafe because ten of the original relaxation patients had crossover exposure therapy after week 14.

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References
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