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Research report

Predictors of short- and long-term avoidance in completers of inpatient group interventions for agoraphobia

Asle Hoffart [a,b,*], Tuva Øktedalen [a,b], Karol Svanøe [c], Liv M. Hedley [d], Harold Sexton [d]

[a] Research Institute, Modum Bad, N-3370 Vikersund, Norway
[b] Department of Psychology, University of Oslo, PB 1094, Blindern, N-0317 Oslo, Norway
[c] Buskerud and Vestfold University College, PB 2243, N-3103 Tønsberg, Norway
[d] Research Institute, Modum Bad, N-3370 Vikersund, Norway

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ABSTRACT

Background: Little is currently known about predictors of follow-up outcome of psychological treatment of agoraphobia. In this study, we wished to examine predictors of short- and long-term avoidance after inpatient group interventions for agoraphobia.
Methods: Ninety-six (68%) of 141 agoraphobic patients (74% women) who had completed treatment in two open and one randomized controlled trial (RCT) were followed up 13 to 21 years after start of treatment.
Results: Major depression at pre-treatment predicted less short-term (up to one year after end of treatment) improvement in agoraphobic avoidance. Working and being married/cohabiting at pre-treatment predicted greater long-term (across one-year, two-year, and 13–21 years follow-up) improvement. In contrast, the duration of agoraphobia, amount of Axis I and II co-morbidity, being diagnosed with avoidant, dependent, and obsessive-compulsive personality disorder, and the use of antidepressants and benzodiazepines the month before intake to treatment, were unrelated to short-term as well as long-term outcome.
Limitations: As many as 31.9% of the included patients did not attend long-term follow-up and the power of the study was limited. The long time period between the two and 13–21 year follow-ups is a limitation, in which it is difficult to assess what actually happened. Although all the patients received some form of CBT, there was variability among the treatments.
Conclusions: The only short-term predictor identified represented a clinical feature, whereas the long-term predictors represented features of the patients' life situation. The limited power of the study precludes the inference that non-significant predictors are unrelated to follow-up outcome.

1. Introduction

Agoraphobia – with or without panic disorder – has a lifetime prevalence rate of 5–6% (Kessler et al., 2005). It is associated with an increased risk of suicide, severe social impairment, and significant comorbidity with other mental and medical disorders (Milrod and Busch, 1995). Recent meta-analyses suggest that both cognitive therapy and exposure therapy are efficacious (Norton and Price, 2007; Stewart and Chambless, 2009) appearing to be equally effective (Norton and Price, 2007). Some evidence also supports the efficacy of psychodynamic therapy for panic disorder (Milrod et al., 2007).

However, it is important to know to what degree initial treatment gains are maintained over time. Furthermore, knowledge of pre-treatment predictors of long-term outcome may inform theory and assist in treatment planning (Brown and Barlow, 1995). No predictor studies of psychological therapies for panic disorder/agoraphobia have extended beyond a two-year follow-up. Durham et al. (2005) examined a wider sample of anxiety disorder patients (including 189 panic disorder patients, 116 generalized anxiety disorder patients, and 31 post-traumatic stress disorder patients) at 2–14 years follow-up. These patients had participated in eight trials comparing cognitive-behavioral treatment (CBT) and non-CBT. Unemployment and severity of functional impairment predicted poorer outcome in terms of clinical significant change. Marriage/cohabiting correlated negatively with a dimensional long-term symptom factor. In short-term follow-up studies, no variables have consistently been found to predict follow-up outcome. However, at least some studies have provided support for the

* Corresponding author at: Research Institute, Modum Bad, N-3370 Vikersund, Norway. Tel.: +47 32 74 98 61; fax: +47 32 74 98 68.
E-mail address: asle.hoffart@modum-bad.no (A. Hoffart).

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following clinical and demographic predictors of poorer outcome in panic disorder/agoraphobia patients: duration (Faravelli et al., 1995), co-morbid major depression (Cowley et al., 1996), benzodiazepine use (Brown and Barlow, 1995), antidepressant use (Barlow et al., 2000), and the presence of DSM Cluster C personality disorders (avoidant, dependent, obsessive-compulsive; Hoffart and Hedley, 1997). Also treatment response variables such as degree of compliance with treatment, quality of therapeutic alliance, and immediate treatment response may influence follow-up outcome, but their ability to predict such outcome in agoraphobia has hardly been studied (for generalized anxiety disorder, however, see Durham et al., 2009). Thus, little is currently known about predictors of follow-up outcome of psychological treatment of agoraphobia. Studies of more short-term follow-up have yielded inconsistent results and no study has examined predictors of long-term outcome in a purely agoraphobic sample.

In the present study, we wished to contribute to amending this lack of knowledge by examining pre-treatment clinical and demographic predictors of short- and long-term (13–21 years) avoidance in agoraphobic patients who had previously participated in one of three trials at our site. These were the randomized controlled trial (RCT) of 5-weeks with cognitive therapy or guided mastery therapy for agoraphobia (Hoffart, 1998) and two open trials. One of the open trials utilized exposure in a first 5-week phase and psychodynamic therapy in a second 6-week phase (Hoffart et al., 1995) while the other utilized cognitive therapy in a first 5-week phase and schema therapy in a second 6-week phase (Hoffart et al., 2002). Psychodynamic and schema therapy addressed potential vulnerabilities for developing agoraphobia and co-morbid disorders and were intended to protect against relapse. A report on the long-term outcome in the RCT has been published elsewhere, showing that 56.5% of those attending follow-up no longer had a panic disorder/agoraphobia diagnosis (Hoffart et al., in press). In this study, our focus was the combined sample of agoraphobic patients from all the three trials. Common to these patients was that they had received standardized medication-free group-based and agoraphobia-focused CBT. We examined predictors that had received some support in previous studies. Our research questions included the following: will not working, not being married or cohabiting, a longer duration of the disorder, more Axis I and II co-morbidity, major depression, avoidant, dependent, obsessive-compulsive personality disorder, using benzodiazepines, and/or using antidepressants at pre-treatment predict poorer short-term (up to one year after end of treatment) and/or long-term (from one to 13–21 years after end of treatment) course of avoidance?

2. Method

2.1. Participants

Participants were selected among patients who had been treated in a specialized program for agoraphobia at an inpatient clinic. Due to scattered settlement in Norway, such residential adaptations of programs developed in an outpatient setting assist in providing specialized and intensive treatment opportunities for the entire Norwegian population. Thus, the patients were referred due to lack of specialized local treatment or because outpatient treatment attempts had failed. Patients from three different trials, two open and one RCT, were included in the present study of long-term outcome.

In the first open trial, participants were allocated from January 1989 to November 1990 according to following inclusion criteria: (a) DSM-III-R criteria for panic disorder with agoraphobia or agoraphobia without history of panic disorder, (b) symptoms of agoraphobia were considered to be the main problem, and (c) age −65 years. These patients received exposure (E) in a first 5-week phase and psychodynamic therapy (PT) in a second 6-week phase.

In the RCT (allocation from April 1992 to April 1993), the participant inclusion criteria were (a) DSM-III-R criteria for panic disorder with agoraphobia, (b) degree of agoraphobia was moderate or severe, (c) the symptoms of agoraphobia were considered to be the main problem, and (d) age 20–65 years. These patients were randomly allocated to five weeks of either cognitive therapy (CT) or guided mastery therapy (GMT). Six groups were admitted sequentially, alternating between cognitive or guided mastery therapy.

In the second open trial (allocation from January 1996 to February 1997), the participant inclusion criteria were (a) DSM-IV criteria for panic disorder with or without agoraphobia or agoraphobia without history of panic disorder, (b) 22–65 years old, and (c) they presented at least one problem related to DSM-IV Cluster C personality disorder, i.e., they described chronic problems independent of their Axis I disorders and that expressed the core content of the Cluster C personality disorders. These patients received CT in a first 5-week phase and schema therapy (ST) in a second 6-week phase.

As a majority of the participants had tried medication previously without satisfactory effect and the use of medication could potentially interfere with cognitive and behavioral learning, psychotropic medication was not utilized during the inpatient treatment period. Medications were tapered and discontinued prior to admission.

Patients completing treatment were eligible for the present study. The chart of patient flow in Fig. 1 shows that the dropout rates from the treatments were low (13 of 154, on average 8.4%) and that a total of 141 patients from the three trials were included. After their two-year follow-up, these patients were contacted and asked to give informed consent to allow for subsequent follow-up. The patients were fully informed and the follow-up was conducted in compliance with the Regional Ethical Committee. Forty-five (31.9%) of the 141 included patients did not attend this follow-up. Reasons for non-attendance, listed in Fig. 1, indicate that 17 (12.1%) withdrew, while 28 (19.9%) did not attend for other reasons (death, sickness, unavailability). The 96 patients who attended the long-term follow-up were compared on pre-treatment characteristics to the 45 non-attending patients to determine the representativeness of the attenders in relation to the original sample (see Table 1). The two groups of patients were similar, with the exception that relatively more attenders were working (42.7% vs. 24.4%), $X^2(1)=4.58$, $p<.05$; and initially had dysthymia (18.8% vs. 4.4%), $X^2(1)=5.15$, $p<.05$.

The attendance rates were similar across the subsamples, 38 of the 53 (71.7%) patients who received E+PT, 16 of the 23 (69.6%) patients who received CT, 15 of the 23 (65.2%) patients who received GMT, and 27 of the 42 (64.3%) patients who received CT+ST; $X^2(3)=..61$, *ns*. Thirteen (34.2%) of the 38 E+PT and 3 (11.1%) of the 27 CT+ST patients had agoraphobia without a history of panic disorder at pre-treatment. The original inclusion criteria of the RCT excluded this diagnosis.

The proportion married/cohabiting at pre-treatment, 68.8% in the total sample, was similar to the one of the Norwegian population at the time, 67% (Norwegian Social Science Data Services, 1995). However, the proportions having a lower occupational level, 72.9% of the attending and 86.7% of the non-attending patients, were higher than the 63% estimated in the population (Norwegian Social Science Data Services, 1995). This suggests that the sample had a bias toward social disadvantage.

2.2. Treatments

The patients were admitted to closed treatment groups with 8 members in each. Except for the intake session, patients had no individual sessions during the treatments that focused on panic disorder and agoraphobia. The first week consisted of education concerning the treatment model with patients setting specific goals for their treatment. Also, within this first week, any