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E-mail support as an adjunct to cognitive-behavioral group therapy for social anxiety disorder: Impact on dropout and outcome

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ABSTRACT

The present study evaluates the impact of semi-individualized e-mail support as an adjunct to cognitive behavioral group therapy (CBGT) for social anxiety disorder (SAD) on dropout and outcome. The effectiveness of additional semi-individualized e-mail support was evaluated for the whole sample and for a subsample of patients at risk of dropping out of therapy. A total of 91 patients with SAD were allocated either to the intervention condition (CBGT with e-mail support), or to the control condition (CBGT without e-mail support). Anxiety symptoms, depression, global symptomatology and life satisfaction were assessed at pretreatment, post-treatment and follow-up (3, 6 and 12 months). From pre-treatment to post-treatment, both groups improved significantly on all symptom measures. Therapy gains were maintained at the 1-year follow-up. Subsample analyses showed that CBGT+e-mail was more effective than CGBT alone in reducing symptom severity among patients missing at least two therapy sessions. Additionally, in this subgroup, those receiving additional e-mail support showed a tendency towards lower dropout rates. Based on the results of this study, semi-individualized e-mail support between sessions seems to enhance the effectiveness of CBGT for SAD patients at risk of dropping out of treatment and should be considered as an additional tool in clinical practice.

1. Introduction

CBGT is an effective treatment for patients with SAD (Blanco et al., 2010; Wersebe et al., 2013). However, with a dropout-rate of about 18%, not every SAD patient benefits sufficiently from group therapy (McEvoy et al., 2012). In line with the increasing development of internet-based interventions in the treatment of psychiatric disorders, e-mail contact from the therapist between the sessions can be an option to provide additional personalized support to every single patient and to increase the effectiveness of CBGT.

E-technologies including e-mail are reported as effective ways for improving treatment (see Shingleton, et al., 2013 for a clinical practice review). In this review, e-mail support provided as a complement to self-help programs led to similar symptom reduction than face-to-face therapy among patients suffering from eating disorders. Although e-technologies are reported as a possibility to reach more individuals, relatively high dropout rates especially among patients with higher pathology or higher cognitive symptoms are reported in this review. In general, support with the greatest amount of therapist interaction was found to be associated with higher binging/purging abstinence rates. As shown in a study on the efficacy of internet-delivered self-help treatment for insomnia, additional motivational weekly e-mail support can increase the effectiveness of the program, as well as encourage more patients to complete treatment (Lancee et al., 2013). This is in line with the literature generally showing higher effects of high intensity guidance programs compared with unguided or low intensity guidance therapies (Berger, 2015).

Although "therapeutic letters" (Pyle, 2006) and personalized e-therapy are presented in the literature as interventions for enhancing patient involvement in treatment, encouraging progress, improving attendance and more generally for extending psychotherapy beyond the session (Peterson and Beck, 2003; McDaniel, 2003), only a few studies have focused on therapist e-support as an adjunct to face-to-face therapy. The above mentioned review reports good adherence but modest effects of automated prompting and text messages in addition to usual therapy in the reduction of binge eating/purging (Shingleton et al., 2013). Based on two case reports, therapist's e-mail contact was successfully applied for improving homework adherence (Murdoch and

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Connor-Greene, 2000). Some studies evaluated the effect of e-mail contact in the context of aftercare programs. Patients benefitting from weekly e-mail contact with the therapist during three months after hospitalization reported high satisfaction, low dropout (8%) and positive acceptance of this form of support (Wolf et al., 2006). A 12-week multimodal aftercare program following psychiatric hospitalization (including patient-coach communication in addition to a self-management module, online patient support group and online symptom monitoring) was evaluated in a randomized controlled trial. In this study, aftercare in addition to treatment as usual (outpatient psychotherapy) was found to be superior to treatment as usual alone in reducing psychopathological symptoms (Ebert et al., 2013). In another study evaluating the efficacy of a short intervention program after attempted suicide, patients receiving three face-to-face sessions followed by regular personalized letters from the therapist over a period of 2 years (in addition to treatment as usual) showed significantly lower suicidal behavior than patients undergoing only regular clinical treatment (Gysin-Maillart et al., 2016). As these aftercare programs were evaluated as a whole, however, no conclusion can be drawn on the additional effect of the communication with the therapist outside of face-to-face sessions. In order to integrate written communication efficiently within face-to-face therapy, its effect on outcome and adherence needs to be studied systematically. In particular, the impact of between-session e-mail contact as an adjunct to face-to-face group therapies has not been studied up to date. Considering the rather high dropout rate in group therapy, the development of evidence-based strategies for improving attendance and/or the benefit of group therapy is particularly relevant for clinical practice. Further, characteristics of the group context (e.g., alliance not only to the therapist but also to the group, issues related to what group members might think of one's performance or absence) add some complexity and results have to be interpreted with caution.

A particular clinical challenge when working with individuals suffering from SAD is that these patients often report difficulties rejoining group therapy after an absence. Consistently with Clark and Wells (1995), when patients are about to enter a social situation (e.g., a group therapy session after an absence), certain assumptions (e.g. "the group will notice that I am stagnating and think that I missed on purpose the last session") or unconditional beliefs (e.g, "I am a looser, other people are much more competent") are activated. Because patients believe that they are in danger of negative evaluation (in group therapy not only by the therapist but also by other patients), they tend to shift their attention towards detailed self-observation of anxious feelings and to use internal information to test and usually confirm the subjective danger of the social situation. In order to prevent new criticism and to reduce fear of rejection, avoidance (further absence from the next session) can be an option which provides relief in the short term but increases the risk of further non-attendance and further disappointment in the long term. Based on the cognitive model of SAD, repeated non-attendance can also lead to dropout and indirectly reduce the potential benefit of therapy not only for the individual but also for the whole group (especially in the case of several dropouts in the same group). In this context and on the background of our clinical observations over the years, we developed the concept of providing between-session support in order to facilitate a continuation of the therapy process for all patients and to improve attendance as well as therapy gains. As we did not find any studies focusing on the number of missed sessions as a dropout predictor and in order to get some information about a possible “dropout alarm system” for clinicians, we chose to separately analyze the whole sample as well as patients having missed at least one or at least two sessions.

Therefore, the present study evaluates the effect of additional e-mail support from the therapist in patients undergoing CBGT for SAD in a between-group design. Therapy groups without e-mail contact served as a control condition.

The first aim of this study was to test the effect of between-session e-mail support on dropout and short- as well as long-term outcome of CBGT for SAD. Our hypothesis was that patients receiving semi-personalized e-mails after each group therapy session would show lower dropout rates and a better therapy outcome than patients undergoing CBGT alone.

The second aim was to explore whether social phobic patients at risk of dropping out of treatment (defined as those missing at least one and at least two therapy sessions respectively) can even benefit more from e-mail support than corresponding patients in the control condition.

2. Material and methods

2.1. Participants

The study was approved by the ethics committee in Zurich (Switzerland) and all subjects provided written informed consent before being included.

From a total of 97 consecutive outpatients undergoing routinely held CBGT for SAD at our Outpatient Unit for Anxiety Disorders, 96 agreed to participate in the study and gave written informed consent. As shown in Fig. 1, five patients were excluded from the analyses (two did not fill out the pretreatment questionnaires and three did not attend group therapy after the initial information session). All patients met DSM-IV criteria for SAD according to the MINI-Interview (Lecrubier et al., 1997), which was a clinical requirement for starting group therapy. Patients with concurrent psychotropic drug treatment ($n=42$) were taking medication for at least 1 month before starting group therapy. The majority was prescribed SSRIs ($n=32$). The medication type and dose remained stable during group therapy. Medication use was evenly distributed in the CBCT and CBCT+email group ($Chi^2=0.21$, $df=1$).

The allocation of patients to CBGT or CBGT+e-mail occurred groupwise (either CBGT or CBGT+e-mail was applied in every whole group). There was no randomization of patients within the same therapy group because it would have been noticed by the patients (for instance in the warm-up at the beginning of each session, where patients had the possibility to bring up their notes referring to the e-mail or to the last session). This could have led to unnecessary comparisons or even forwarding of e-mails between patients, which would have mixed up the intervention and the control condition. As we had a grant for additional therapist resources during two years, we decided to concentrate the more time-consuming CBGT+e-mail condition in this period of time. Based on this practical reason, six consecutive groups were allocated to CBGT+e-mail ($n=44$). Three consecutive groups immediately before and four consecutive groups after the CBGT+e-mail block served as controls (CBGT, $n=47$).

All recruited patients were assessed regarding symptom severity and life satisfaction at pre-treatment (baseline), post-treatment, follow-up 1 (3 months after treatment), follow-up 2 (6 months after treatment) and follow-up 3 (one year after treatment). Assessments were administered in form of questionnaires which patients received at home and sent back to the research assistant in a prepaid envelope.

As shown in Fig. 1, post-treatment assessments were available for 68 patients (completion rate 74.7%), follow-up data for $n=59$ subjects (64.8%) three months, $n=40$ (44.0%) six months and $n=45$ (49.5%) one year after the end of group therapy.

We found at no measurement point any significant differences regarding pretreatment symptoms or age between patients who