OUTPATIENT PRE-ADMISSION AND AFTERCARE FOR PATIENTS WITH DEPRESSIVE AND ANXIETY DISORDERS: PRELIMINARY RESULTS FROM AN AUSTRIAN CLINIC

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Abstract

Outpatient pre-admission and aftercare is in common use for inpatients with addictive and post-traumatic disorders but is rarely offered to patients suffering from depression or anxiety. Thus, this pilot study has installed and evaluated psychological pre-admission and aftercare on a group basis for patients who had sought inpatient treatment of depression or anxiety at an Austrian psychosomatic clinic.

Outpatient pre-admission care aimed at supporting patients ahead of admitting them to the clinic. During the first year of the project N = 59 patients (N=37 or 63% of them female) with a mean age of 47.7 years (s = 11.1 years) participated in pre-admission care. A statistically significant reduction of clinical symptoms was achieved as indicated by the Brief Symptom Inventory (BSI), although in most cases symptoms were still clinically relevant and necessitated inpatient admissions.

After leaving outpatient care, two steps of aftercare (ten weekly group sessions each) were supplemented by assertiveness trainings, relaxation, or psycho-education in coping with stress. Older patients were offered special programs ("60+"). During Step 1, aggregated data from regular and 60+ groups (N = 100, 71 female, mean age 53.1, s = 13.1), indicated that symptom reduction achieved during the inpatient stay had been maintained. During Step 2, results from N = 36 patients, (N = 28 female, mean age 53.1, s = 11.6) pointed to a statistically significant reduction of symptoms. The findings suggest providing aftercare for a period of at least 20 week to patients with anxiety or depression.

Keywords: Depression, anxiety, inpatient treatment, pre-admission care, aftercare

Introduction

Aims of the Study

The present study started from theoretical considerations and empirical results which suggested that inpatient treatment of patients with depressive or anxiety disorders should be supplemented both by pre-admission care and by aftercare on an outpatient basis.

Pre-Admission Care

First encouraging evidence on the effects of pre-admission care provided by a German psychosomatic clinic has been provided by Rief, Leibl, and Fichter (1991) on the basis of data from N = 3,668 patients. More recently, Kobelt, Winkler and Petermann (2011) focused on the importance of preparing patients for their hospital admission by preceding interventions and, more generally, Peukert (2011) emphasized the financial effects of outpatient care.

At a psychosomatic clinic like the present one at Waiern (Austria), in contrast to acute care, patients have to wait for their admission for several weeks. Pre-admission care did not

aim at symptom reduction in the first place, but rather was intended to prevent deterioration of symptomatology by professional support. In single cases, of course, pre-admission care might render in-patient admissions unnecessary.

Aftercare

For patients with addictive (Thiel & Ackermann, 2004) and post-traumatic stress disorders (Hoffmann & Wondrack, 2007; Ludwig, 2008) aftercare since several decades poses an important part of regular treatment. For affective, anxiety and somatoform disorders, however, aftercare has just been started to be installed at some German clinics, following an initiative by the German pension insurance scheme (Berger, Brakemeier, Klesse & Schramm, 2009). A longitidinal study has yielded encouraging results (Kobelt und Schmid-Ott, 2010) and there is some indication that especially patients with high symptom load (Kobelt, Nickel, Grosch, Lamprecht & Künsebeck, 2004) as well as socially underpriviledged patients of psychosomatic clinics (Kobelt, Lieverscheidt, Grosch & Petermann, 2010) benefit from aftercare.

Apart from this encouraging evidence from Germany, little is known about the effects of psychological aftercare, especially on an international basis. After obtaining positive results by a previous small-scale study (Renner, Salem & Scholz, 2009) the present investigation aimed at studying the effects of aftercare for patients with anxiety and depression in a patient sample from outside Germany, taking the possibility into account that the results might be generalized cautiously to international patient populations.

Aftercare aimed at a continued stabilization of symptomatology after discharge from the clinic, i.e., symptoms were expected not to deteriorate even under conditions of everyday stress, stemming either from the patients' vocational obligations, from a problematic family system, or both (cf., the "vulnerability-stress model" of clinical psychology, e.g. Ingram & Luxton, 2005). In this respect, it should be considered that this type of aftercare to date does not exist in Austria on a larger scale. It should also be noted that outpatient psychological treatment or psychotherapy are not financed by the Austrian insurence system on a regular basis and thus must be considered unaffordable for most patients.

Special Aftercare for Older Patients

Demographic development in Central Europe is leading to increasing numbers of older patients who have special needs with respect to therapy and aftercare and, in contrast to younger people, are interested in special themes like dealing with life as a pensioner, feeling lonely at old age, coping with grief after the death of a beloved relative and dealing with the finite nature of one's own life. On the other hand, themes like returning to employment after a longer period of illness have lost relevance for older patients. From these considerations we have decided to install special offers for aftercare aiming at the special need of patients beyond 60 years of age.

Procedure and Results

Figure 1 gives a summary of the procedure in the course of pre-admission care, in-patient treatment and aftercare, together with assessment occasions (t_0 to t_4). It can be seen that during pre-admission assessment and at various other stages of the procedure, patients may be referred to other services which might seem more appropriate in specific cases.

Figure 1 also shows the possibility of referring patients to a special offer aiming at psychological stabilization in cases where in-patient treatment is not considered necessary after completing pre-admission care. Assessment at t_0 takes place before pre-admission care commences, Assessments at t_1 and t_2 take place immediately prior to and after in-patient treatment respectively. Follow-up Assessments t_3 and t_4 take place after patients have completed ten sessions of aftercare Step 1 and Step 2 respectively.

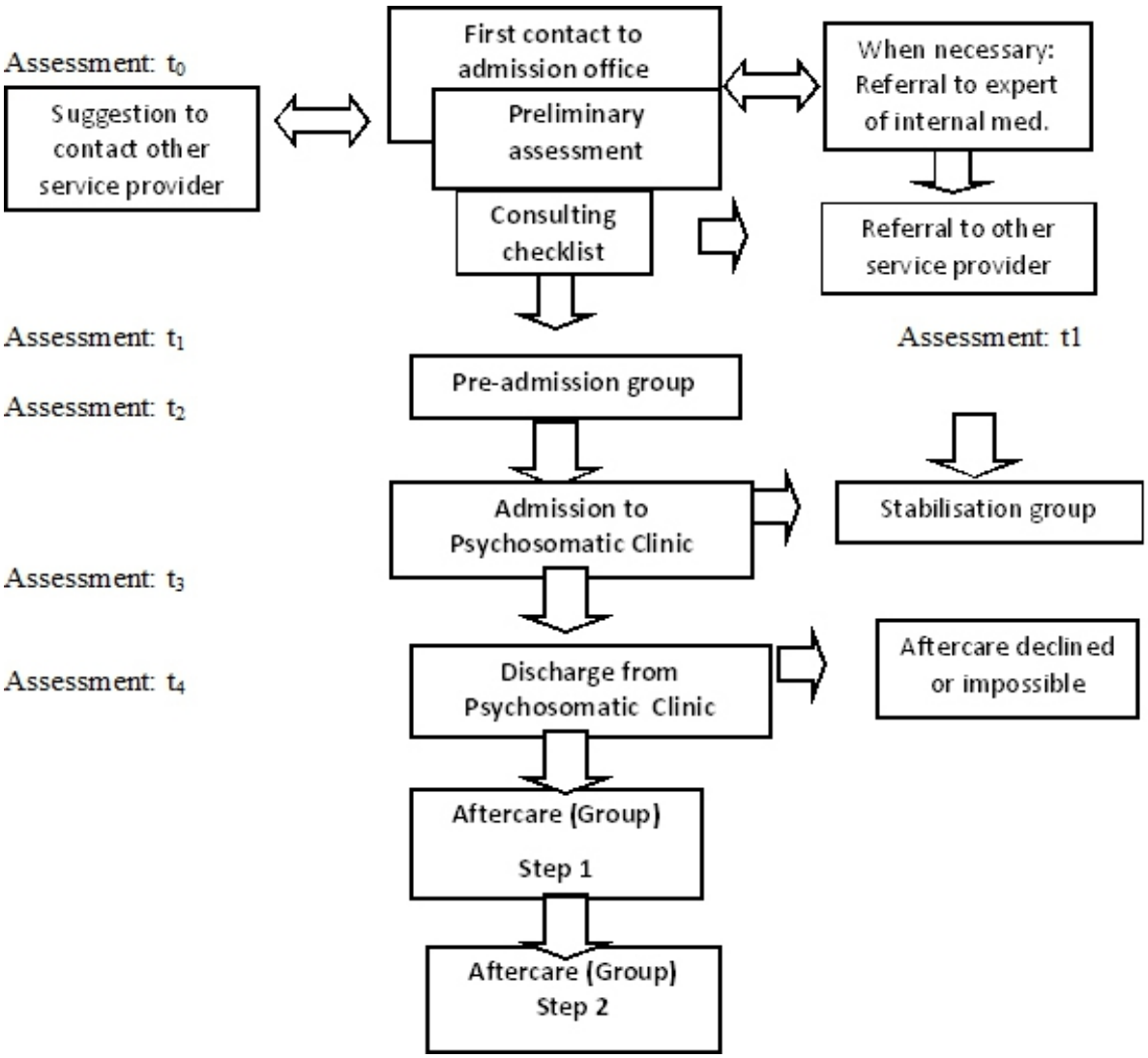

Figure 1: Flowchart: From Pre-Admission Care to Aftercare

From **Figure 2** the number of patients participating in pre-admission and stabilization groups during the first project year can be seen. During the first year of the pilot project A total of N = 59 patients (N=37 or 63% of them female) with a mean age of 47.7 years (s = 11.1 years) participated in pre-admission groups during the first project year. Whereas during the first months the number of participants rose constantly, the numbers dropped to a more manageable group size when stabilization group had commenced.

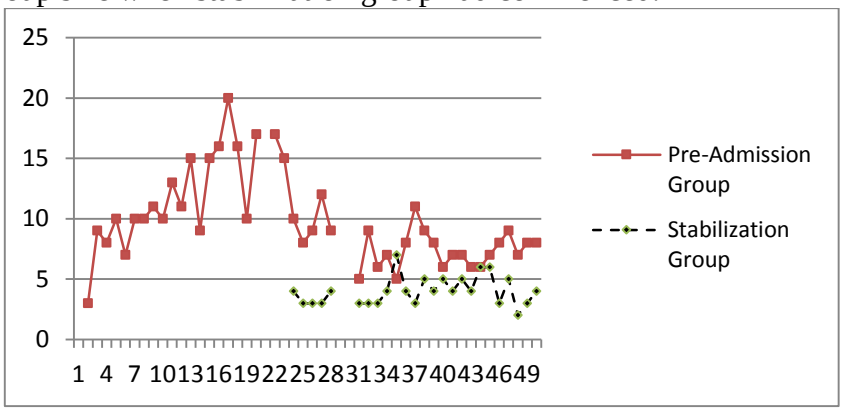

Figure 2: Number of patients participating in Pre-Admission and Stabilization Groups during the first project year (Weeks 1 to 52)

Figures 3 and **4** show the number of participants in the first project year for aftercare Step 1

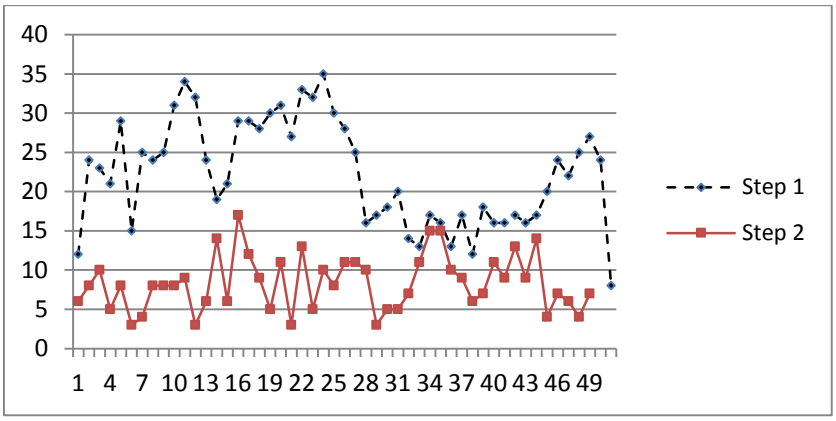

Figure 3: Number of patients participating in aftercare Step 1 and Step 2 groups during the first project year (Weeks 1 to 52)

and 2 and 60+. For aftercare 60+ only Step 1 was provided.

Aftercare Step 1 was provided in two or three sub-groups. It can be seen that there was constant interest in all of these offers over the year, with Step 1 attracting considerable more patients than Step 2.

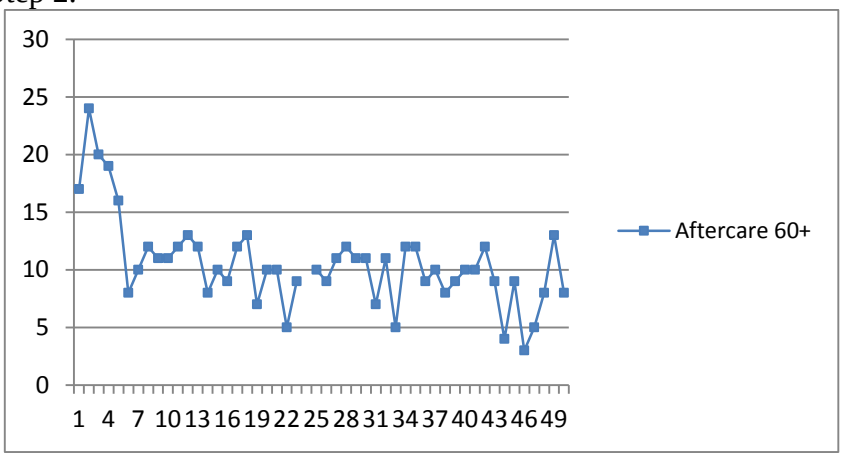

Figure 4: Number of patients participating in aftercare 60+ groups during the first project year (Weeks 1 to 52)

In Step 1, taking patients from regular aftercare groups and 60+ groups together, a total of N = 100 (71 female, mean age 53.1, s = 13.1) patients participated. For Step 2, a total of N = 36 (N = 28 of them female, with a mean age of 53.1 years, s = 11.6) participated during the first project year.

As a measure of clinical symptomatology, the German version of the Brief Symptom Inventory (BSI, Franke, 2000) was used. Apart from nine disorder specific subscales, the Global Severity Index (GSI) represents the arithmetic mean of all items and thus is a measure of a patients' total symptom load.

On the BSI, clinical symptoms are indicated on a five-point scale, ranging from 0 = "Not at all" to 4 = "Severe". T-Values of 50 equal the population mean and T-Values < 60 may be regarded as clinically inconspicuous. T-Values between 60 and 70 are marginally conspicuous and T-Values > 70 are clearly clinically conspicuous.

Table 1 summarizes the subscales of the questionnaire.

BSI Subscale	α	Number of Items	Item example (shortened)
1. Somatization	.79	7	Heart or chest aches
2. Obsessive / compulsive	.84	6	Compulsion to control over and over again...
3. Interpersonal insecurity	.81	4	Feeling inferior to others
4. Depression	.87	6	Thoughts of ending one's life
5. Anxiety	.81	6	Feeling overly scared
6. Aggression/Hostility	.72	5	Feeling irritable and nervous
7. Phobic anxiety	.82	5	Feeling anxious in open places...
8. Paranoid ideation	.78	5	Thinking that others take advantage of you
9. Psychoticism	.70	5	The idea that someone controls your thoughts
GSI Global Severity Index	.96	49	

Table 1: Scales and subscales of the Brief Symptom Inventory (BSI)

Figure 5 shows the results from the pre-admission groups during project year 1.

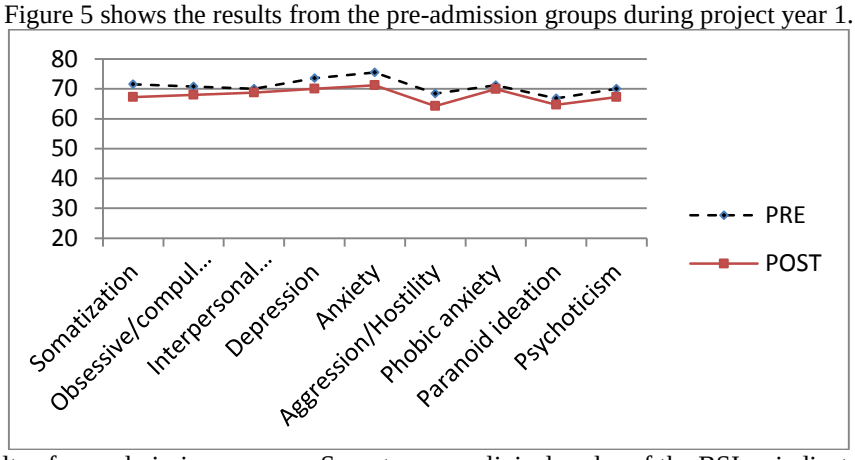

Figure 5: Results of pre-admission groups – Symptoms on clinical scales of the BSI as indicated by T-Values (population mean = 50, standard deviation = 10)

It can be seen that clinical symptomatology was clearly above T = 70 before the intervention, indicating clinically conspicuous results. After the intervention, symptomatology had dropped. On the BSI's scale, ranging from 0 to 4, the Global Severity Index (GSI) was M = 1.71 (s = 0.72) before the intervention. At the end of pre-admission group therapy, the mean GSI was M = 1.44 (s = 0.82), indicating an improvement of symptomatology which was significant at the 1% level (t = 3.410, df = 58, p = .001). The effect size amounted to d = 0.455[29], resembling a "medium" effect in the sense of Cohen (1988).

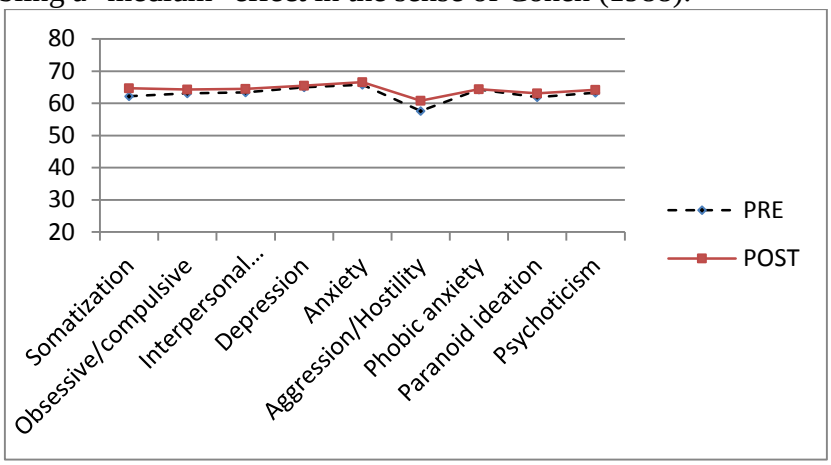

Figure 6: Results of aftercare Step I groups (Aggregated data from regular and 60+ groups) – Symptoms on clinical scales of the BSI as indicated by T-Values (population mean = 50, standard deviation = 10)

[29] Effect size for paired-samples' t-Test, computed by the online tool http://www.cognitiveflexibility.org/effectsize/

From Figure 6, which shows the aggregated results from the regular and the 60+ interventions, it is evident that symptoms have slightly deteriorated on most of the BSI disorder specific scales. This can be explained by the fact that during the post-discharge period of time patients were confronted with stress, both from their vocational activities and from their personal relationships. Still, in spite of the considerable sample size of N = 100, deterioration of symptoms as indicated by the Global Index GSI was statistically non-significant (Pre M = 1.06, s = 0.79; Post M = 1.14, s = 0.80; t = - 1.447, df = 99, p = .151).
Figure 7 shows the results obtained from Aftercare Step 2 group.

Here, on most of the disorder specific scales, symptoms could be reduced considerably. The average GSI amounted to M = 1.07 (s = 0.76) before and to M = 0.88 (s = 0.76) at the end of Aftercare Step 2. This improvement is statistically significant at the 5% level (t = 2.256, df = 35, p = 0,030 with an effect size of d = 0.376.

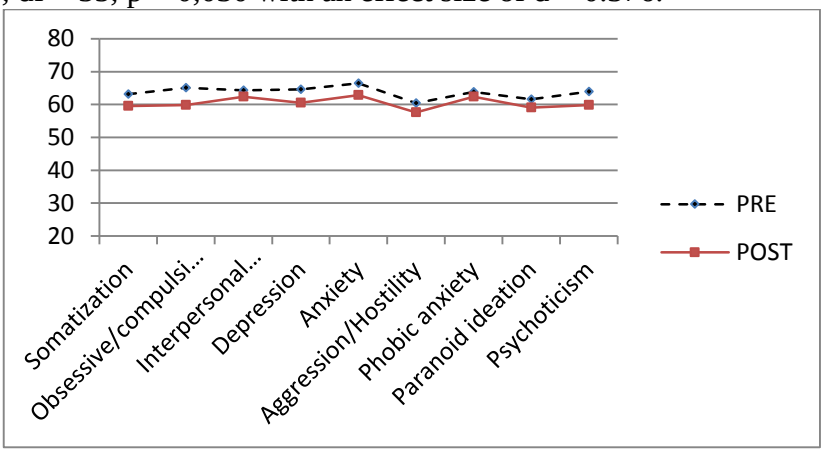

Figure 7: Results of aftercare Step II groups (Aggregated data from regular and 60+ groups) – Symptoms on clinical scales of the BSI as indicated by T-Values (population mean = 50, standard deviation = 10)

Conclusion

From the results it became evident that both, psychological pre-admission care and aftercare are beneficial with respect to the patients' ability to cope with their symptoms. Pre-admission group participation overall had a medium and statistically highly significant effect on symptom reduction.

With respect to aftercare, we have found that the first ten weeks (Step 1) of the intervention had enabled patients to avoid statistically significant deterioration with respect to their symptom load. Moreover, those patients who had participated in Step 2 of aftercare even achieved a statistically significant, additional reduction of symptomatology.

From these results it may be concluded that clinical psychological pre-admission care has a clearly documented effect on symptom reduction for patients diagnosed with anxiety or depression. For the same group of patients, aftercare generally may be recommended as a means of preserving the effects achieved by inpatient treatment; in order to achieve additional effects on symptom reduction, however, a duration of aftercare exceeding a period of three months is recommended, with a duration of six months being clearly beneficial. Future research is needed in order to assess the effects of an aftercare duration exceeding a six months period.

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