



Research paper

Prognostic and prescriptive predictors of improvement in a naturalistic study on inpatient and day hospital treatment of depression



Almut Zeeck^{a,*}, Jörn von Wietersheim^b, Heinz Weiss^c, Carl Eduard Scheidt^{a,d},
Alexander Völker^e, Astrid Helesic^e, Annegret Eckhardt-Henn^f, Manfred Beutel^g,
Katharina Endorf^a, Franziska Treiber^b, Peter Rochlitz^h, Armin Hartmann^a

^a Department for Psychosomatic Medicine and Psychotherapy, University Medical Center, Freiburg, Germany

^b Department for Psychosomatic Medicine and Psychotherapy, University Medical Center, Ulm, Germany

^c Department for Psychosomatic Medicine and Psychotherapy, Robert-Bosch-Krankenhaus, Stuttgart, Germany

^d Thure-von-Uexküll-Klinik, Glottertal, Germany

^e Rhein Klinik, Bad Honnef, Germany

^f Bürgerhospital, Stuttgart, Germany

^g Department for Psychosomatic Medicine and Psychotherapy, University Medical Center, Mainz, Germany

^h Department of Psychosomatic Medicine and Psychotherapy, Fürst Stirum-Klinikum, Bruchsal, Germany

ARTICLE INFO

Article history:

Received 25 September 2015

Received in revised form

5 February 2016

Accepted 9 March 2016

Available online 11 March 2016

Keywords:

Depression

Inpatient

Day hospital

Predictors

Outcome

Subgroups

Psychotherapy

ABSTRACT

Background: The study aimed to identify prognostic (associated with general outcome) and prescriptive (associated with differential outcome in two different settings) predictors of improvement in a naturalistic multi-center study on inpatient and day hospital treatment in major depressive disorder (MDD). **Methods:** 250 inpatients and 250 day hospital patients of eight psychosomatic hospitals were assessed at admission, discharge and a 3-months follow-up. Primary outcome was defined as a reduction of depressive symptomatology from admission to discharge and from discharge to follow-up (QIDS-C, total score). Percent improvement scores at discharge and at follow-up were entered as dependent variables into two General Linear Models with a set of predictor variables and the respective interaction terms with treatment setting. The selection of predictor sets was guided by statistical methods of variable preselection (LASSO).

Results: Three variables were associated with less improvement from admission to discharge: the number of additional axis-I diagnoses, axis-II co-morbidity (SCID) and lower motivation (expert assessment). Social support (F-SozU) predicted symptom course between discharge and 3-month follow-up. Patients with no absent / sick days prior to admission showed a less favorable symptom course after discharge when treated as inpatients.

Conclusions: Patients with co-morbidity show less improvement during the active treatment phase. Motivation can be considered a prerequisite for symptom reduction, whereas social support seems to be an important factor for the maintenance of treatment gains. The lack in prescriptive predictors found may point to the fact that inpatient and day hospital treatment have comparable effects for most subgroups of patients with MDD.

© 2016 Elsevier B.V. All rights reserved.

1. Introduction

In the treatment of depression, optimizing treatment strategies can be considered a high priority task. This is not possible without the knowledge about subgroups of patients diagnosed with major depressive disorder (MDD) who might have different treatment

needs (Lichtenberg and Belmaker, 2010). Although there were many efforts to describe subtypes of MDD based on etiology, theoretical concepts, biological markers or sophisticated empirical methods (e.g. Baumeister and Parker, 2010; Blatt et al., 2010; Lichtenberg and Belmaker, 2010; Beck, 1983) findings concerning their relevance for treatment response remain conflicting (Bühler et al., 2014). The identification of predictors could help to differentiate between subgroups of patients with differences in treatment response. Two types of predictors can be distinguished: “prognostic predictors”, which are associated with general outcome irrespective of treatment

* Correspondence to: Department of Psychosomatic Medicine and Psychotherapy, University Medical Center, Freiburg Hauptstrasse 8, 79104 Freiburg, Germany.

E-mail address: almut.zeeck@uniklinik-freiburg.de (A. Zeeck).

modality and “prescriptive predictors” (also called moderators), which are baseline characteristics predicting variation in response as a function of treatment type (Fournier et al., 2009; Carter et al., 2011; Huibers et al., 2014, 2015). Prescriptive predictors refer to the optimal treatment for a given patient and have the potential to guide treatment decisions (Huibers et al., 2014).

1.1. Prognostic predictors

Several factors were repeatedly found to be associated with the general course and overall treatment outcome in MDD: the number of previous episodes, depression severity, the duration of the current episode, co-morbidity (mental, somatic), incomplete remission of the last episode, age at onset and “double depression” (co-morbidity with dysthymia), whereas a higher probability for relapse was found to be associated with younger age, female gender, a lack of social support and being single (DGPPN, 2015; Driessen and Hollon, 2010; Hamilton and Dobson, 2002). However, in a recent meta-analysis, gender was not found to be related to outcome (Cuijpers et al., 2014). Traumatic childhood experiences were not only identified as a risk factor for depression, but also as a risk factor for an unfavorable long-term course and relapse (Heim et al., 2008). Fava et al. (2008) found that a subgroup of patients with high levels of anxiety showed poorer outcomes in antidepressant treatment. In contrast, Arnow et al. (2015) could not find a differential response to antidepressant medication distinguishing eight subtypes according to melancholic, atypical and anxious features and Huibers et al. (2014) identified higher agoraphobia scores as predictors of a good response across different treatments (cognitive or interpersonal psychotherapy with or without antidepressant medication).

Another group of studies focused on the influence of personality dimensions on the course and prognosis of MDD. A two-dimensional model was introduced by S. Blatt, who differentiated between depressed patients primarily dealing with problems in interpersonal relatedness (“anaclitic” or dependent personality configuration) and those being preoccupied mainly with self-definitional issues (“introjective” or self-critical personality configuration) (Blatt et al., 2010; Blatt, 2004; Blatt et al., 1982; Marshall et al., 2008). This model shows similarities to the models of Beck et al. (1979) or Arieti and Bemporad (1980). The interpersonal dimension was also labeled “sociotropy” or “need for approval”, the self-definitional dimension “self-criticism, “autonomy” or “perfectionism” (Blatt et al., 2010). Self-critical, perfectionistic traits were associated with a more problematic course in depression and also shown to interact with the therapeutic alliance (Blatt et al., 1995, 1998, 2010; Hawley et al., 2006; Zuroff et al., 2000).

1.2. Prescriptive predictors

Predictors of overall treatment outcome do not provide the information needed for decisions between different treatment options. This information can only be derived from the identification of prescriptive predictors, which indicate if patients with special characteristics do better in one versus another treatment modality (Fournier et al., 2009; Sotsky et al., 1991). Fournier et al. (2009), for example, found that patients who were married, unemployed and experienced a greater number of recent life events did better in outpatient cognitive therapy compared to antidepressant medication. Huibers et al. (2015) identified six prescriptive predictors (somatic complaints, cognitive problems, paranoid symptoms, interpersonal self-sacrificing, attributional style, number of life events) in a study comparing outpatient cognitive therapy (CT) and interpersonal psychotherapy (IPT). Cognitive problems predicted a better response to IPT, while the other variables predicted a better response to CT. Patients who received their optimal treatment according to these

predictors did significantly better than those who did not (Huibers et al., 2015). Carter et al. (2011) found only one prescriptive predictor for a differential outcome in cognitive-behavior therapy (CBT) vs. IPT: Patients with more symptoms of a personality disorder showed a poorer response to IPT, but not to CBT. The authors concluded that patients with comorbid personality symptoms might benefit from a more structured and directive approach. Stangier et al. (2013) compared maintenance cognitive-behavioral therapy (mCBT) and psychoeducation in remitted outpatients with recurrent depression. The authors found that in patients with five or more previous episodes, mCBT was superior to psychoeducation (primary outcome: first relapse or recurrence of MDD). In an analysis of prescriptive predictors in the NIMH Treatment of Depression Collaborative Research Program, it was shown that good social adjustment was related to a good response to IPT, less impairment in cognitive functioning as measured with the Depressive Attitudes Scale (DAS) predicted a superior response to CBT and work dysfunction predicted superior response to imipramine (Sotsky et al., 1991).

In some studies the personality dimensions described above were found to be related to differential outcome, although results were contradictory: In a study of Marshall et al. (2008), “self-criticism” as measured with the Depressive Experiences Questionnaire (DEQ) was associated with a less favorable course in outpatient IPT, whereas “dependency” showed a trend to a less successful outcome in outpatient CT. In a study of Rector et al. (2000), self-criticism was related to poor outcome in outpatients treated with CT, but not in the pharmacotherapy condition. At the same time, a reduction in self-criticism was the best predictor of response to CT.

Overall, when reviewing the literature on predictors of treatment outcome in MDD, some findings are consistent, while others are mixed or sometimes contradictory, probably due to the fact that studies vary in the samples and treatments studied as well as in methodology (Carter et al., 2011, Huibers et al., 2014).

1.3. Inpatient and day hospital treatment

The following study aims to identify prognostic and prescriptive predictors of inpatient and day hospital treatment in patients with MDD. Although several studies point to a comparable effectiveness of both treatment modalities (Dinger et al., 2014; Horvitz-Lennon et al., 2001; Marshall et al., 2001; Zeeck et al., 2015), only few studies focused on prognostic predictors and no study so far addressed the question of prescriptive predictors. In terms of prognostic predictors in inpatient treatment, the absence of ICD-10 F4 co-morbidity (76% had a diagnosis of phobic or anxiety disorders), an episode duration of < 24 months, suicidal ideation and fewer previous hospitalizations predicted a better outcome in a naturalistic multi-center study conducted in twelve psychiatric hospitals (Riedel et al., 2011). Higher depression scores at baseline predicted response, whereas lower baseline scores predicted remission. A shorter time to severe relapse (defined as rehospitalization and/or suicide) in the three year follow-up period was associated with antipsychotic medication (patients with psychotic depression), no further antidepressive medication, previous hospitalizations at baseline and avoidant personality disorder (Seemüller et al., 2014). In another study, inpatients with chronic depression had lower response and remission rates and were characterized by increased axis-I co-morbidity (Köhler et al., 2015) and longer treatment durations. A further study found that inpatients with melancholic depression and somatic comorbidity had a worse treatment response to antidepressants compared to patients without somatic co-morbidity (Pohle et al., 2009).

In the German health care system, patients with mental health problems can be treated in three different hospital settings: rehabilitation, psychiatry or psychosomatic medicine. Whereas

Download English Version:

<https://daneshyari.com/en/article/6230283>

Download Persian Version:

<https://daneshyari.com/article/6230283>

[Daneshyari.com](https://daneshyari.com)