### Psychoeducational and Cognitive Behavioral Treatment Programs: Implementation and Evaluation From 1995 to 2015 in Kraepelin's Former Hospital

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**Objective:** Programs that view individuals as capable of taking an active role in managing their illness have gained importance in Europe and the United States. This article describes the implementation and evaluation of group psychoeducational and cognitive behavioral treatment programs at the Department of Psychiatry and Psychotherapy, Ludwig Maximilian University, Munich, Germany, over the past 20 years. Methods: Implementing psychoeducational programs was the first step to establish cognitive behavioral psychotherapy and dispel the myth of schizophrenia for patients. Programs are also provided for patients with mood disorders, substance use disorders, or both. These groups include topics such as psychoeducation about the illness, establishing rewarding activities, stress management, cognitive therapy, and relapse prevention. Results: More than 1000 patients with schizophrenia or mood disorders (380 schizophrenia, 563 major depression, and 110 bipolar) have participated in illness management groups to learn about their illness and its treatment, and to learn skills to manage their illness. Patients have expressed satisfaction with the programs, and research has supported their effectiveness. Conclusions: Individuals with severe disorders can benefit from psychoeducational and cognitive treatment programs if the programs are adapted to the level of neuropsychological functioning and compensate for cognitive deficits and emotional overload. These findings suggest that providing information about the illness and coping skills for patients and relatives are important for treatment outcome.

*Key words:* psychoeducation/cognitivebehavioral strategies/stress-vulnerability-coping model/transtheoretical model/schizophrenia/major depression

#### Introduction

Emil Kraepelin<sup>1,2</sup> founded the psychiatric hospital in Munich in the 19th century and was one of the first to develop psychopathological entities that consider the interrelationships between physical and mental states in mental illness. The stress-coping-vulnerability,<sup>3</sup> sociodevelopmental-cognitive,<sup>4</sup> and transtheoretical<sup>5</sup> models currently form the basis for combined treatment programs that include psychopharmacotherapy and psychotherapy in this hospital. Group psychotherapy has been offered since 1995 and includes psychoeducational and cognitive behavioral group interventions for postacute patients and their relatives.

The hospital has a long and successful history in psychopharmacotherapy, marked by the former department heads Hanns Hippius<sup>6-8</sup> (1971–1994) and Hans-Jürgen Möller<sup>9,10</sup> (1994–2012) and the current head, Peter Falkai (2012-present).<sup>11-13</sup> Hanns Hippius was an important member of the Study Commission constituted by the German Federal Government to review the status of psychiatry 25 years after the Second World War. This commission concluded that the quality of services had to be improved for psychiatric in- and outpatients. Hippius and his co-workers'6 main research focus was clinical psychiatry, in particular biological psychiatry and clinical psychopharmacology. He established high standards of treatment in psychopharmacotherapy<sup>7</sup>, pioneered the introduction of clozapine<sup>8</sup> as well as sociotherapy in psychiatry, and established both a day clinic and a self-help group for patients. His successor, Hans-Jürgen Möller,<sup>9,10</sup> conducted genetic, neuroimaging, and follow-up studies of naturalistically treated patients with schizophrenia and mood disorders. He was interested in clinical-psychiatric research methodology as well as geriatric psychiatry and dementia. Furthermore, he shaped the hospital's cognitive

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behavioral orientation by inviting Annette Schaub to implement group psychotherapy for patients and their relatives. He was succeeded by Peter Falkai, who has focused on structural imaging, molecular processing, genetics, and pathomorphological processing. His research aims are to increase the understanding of psychoses by identifying candidate molecules and pathways underlying the pathophysiology in schizophrenia. He is the author of the guidelines for the German Association of Psychiatry and Psychotherapy (DGPPN)<sup>11</sup> on biological treatment of schizophrenia<sup>12</sup> and is one of the editors of the the German version of the Diagnostic and Statistical Manual of Mental Disorders DSM-5.13 These recent and current heads of the department have strongly supported a pragmatic integration of biological treatment and psychotherapy. This article reviews the psychological and biological underpinnings of the implementation of these approaches from 1995 to 2015 and briefly summarizes research on psychoeducational and cognitive behavioral treatment programs at this hospital.<sup>14</sup>

#### Methods

#### Conceptual Frameworks Guiding Treatment Programs

The stress-coping-vulnerability3, sociodevelopmentalcognitive.<sup>4</sup> and transtheoretical<sup>5</sup> models guide illness management or psychoeducational programs<sup>14</sup> in psychiatric illness. The first model<sup>3</sup> highlights the interactions between biological vulnerability, protective personal (eg, self-efficacy, antipsychotic medication) and environmental factors (eg. effective family problem solving [p. 392]), and stress factors (eg, high expressed emotion). The second model<sup>4</sup> identifies the interplay between feedback loops in cognitive processing based on dysregulated dopamine leading to misattribution up to paranoia. The third model<sup>5</sup> proposes that motivation to change develops over a series of stages and uses motivational enhancement approaches at the earliest stage to help clients identify and pursue their personal goals and to explore how improved illness management can help them achieve these goals. These models have provided a valuable framework for psychoeducational and cognitive programs aimed at modifying psychological and social-environmental factors that can precipitate relapses (eg, poor coping ability, lack of social support) and harnessing patient motivation for active collaboration with others, with the goal of improving the course of the illness.

Teaching schizophrenia patients about the nature of their illness is an essential element of therapy.<sup>15</sup> In comparison to schizophrenia,<sup>3</sup> there are different foci in bipolar disorder<sup>16</sup> that place greater emphasis on circadian rhythms, or in major depression on multifactorial concepts, including psychosocial and biological concepts, linked in causal chains or cumulative feedback loops. Our description of the coping-oriented group treatment

program<sup>17</sup> provides the rationale for our treatment approach to schizophrenia, which we then adapted to bipolar disorder<sup>18</sup> and major depression.<sup>19</sup> The different components of this framework were adapted to patients' needs (see figure 1).

### Implementation of Psychoeducational and Cognitive Behavioral Programs

Treatment for schizophrenia and mood disorders has gained importance during the last 30 years. Beck's cognitive approach<sup>20,21</sup> laid the groundwork for cognitivebehavioral therapy (CBT) in schizophrenia and mood disorders. The term "psychoeducation" was used to refer to workshops aimed at educating relatives of persons with schizophrenia about the disorder and its treatment,<sup>22</sup> which were later provided to relatives of persons with mood disorders<sup>23</sup> and more recently to patients themselves.<sup>14</sup> Whereas the terms psychoeducation and illness management<sup>14</sup> have much in common, the former is more narrowly defined and refers to didactic, psychotherapeutic interventions that inform patients and/or their relatives about the illness and its treatment. Illness management programs include psychoeducation, but also teach cognitive-behavioral strategies aimed at improving treatment adherence, coping with symptoms and stressors, developing a relapse prevention plan, and modifying dysfunctional beliefs about the illness and oneself. The primary goal of these programs is to enhance the patients' ability to manage their illness in collaboration with others.

In Europe, a greater emphasis had traditionally been placed on psychoeducation and teaching coping strategies, whereas in the US skills training approaches predominated.<sup>24</sup> The results of a multicenter collaborative working group including 10 treatment sites set up to implement Medication and Symptom Management Modules<sup>25</sup> demonstrated the clinical feasibility of these modules; however, cultural and professional differences



**Fig. 1.** Stress-vulnerability-coping model<sup>3,19</sup> (modified by the authors).

between Europe and the United States had an influence on the ways that the modules were used.<sup>25–27</sup> Currently, cognitive interventions at the hospital include both CBT for psychosis (CBTp) <sup>28–30</sup> and cognitive remediation,<sup>31,32</sup> with influences from both the United States as well as Europe.

Meta-analyses have demonstrated the effectiveness of psychoeducational interventions in schizophrenia<sup>33</sup> and cognitive-behavioral strategies in the latter<sup>34</sup> and major depression.<sup>35</sup> Individual and group treatment have been found to be of comparable effectiveness in schizophrenia.<sup>36</sup> Meta-analysis of cognitive remediation have shown cognitive benefits for persons with schizophrenia, and when cognitive remediation has been combined with psychiatric rehabilitation benefit to other areas of functioning, relative to rehabilitation alone.<sup>37</sup> Relapse prevention programs gained importance in schizophrenia<sup>38</sup> and unipolar<sup>39-41</sup> and bipolar disorders,<sup>14</sup> and have shown lower relapse rates than standard treatment or comparable interventions in randomized controlled studies combining psychopharmacological and psychotherapeutic strategies.

From 1995 to 1997, illness management programs for schizophrenia and mood disorders were implemented at the Munich hospital.<sup>14,17–19,42</sup> Specialized treatment units for schizophrenia<sup>43,44</sup> and mood disorders<sup>45</sup> were established, integrating pharmacological<sup>9</sup> and CBT app roaches.<sup>17–19,42,46,47</sup> Three different group programs for

schizophrenia,<sup>17</sup> bipolar disorder,<sup>18</sup> and major depression<sup>19</sup> were implemented. The programs include psychoeducation to improve both knowledge about mental illness and treatment adherence. Strategies are taught to develop and support a lifestyle that promotes health and quality of life and to decrease chronic symptoms. All programs can be used in a single setting (compare with ref. Wykes et al<sup>36</sup>), and psychoeducational groups for relatives are available.<sup>17–19</sup>

Table 1 gives an overview of the main programs for schizophrenia and mood disorders. There are illnessrelated groups offered for the whole clinic following a specific treatment curriculum covering 4-12 sessions (4 for substance abuse, 12 for depression and schizophrenia), with a maximum of 13 patients per group. Additionally, there are ward-specific groups provided for patients in each of the 10 wards specialized on depression, schizophrenia, or substance abuse. These groups last for 8 sessions each and include a maximum of 18 patients. Shortly after admission, patients attend these groups to avoid waiting lists for illness-related groups. Due to cognitive impairments, patients may benefit from participating in more than one round of group sessions in their ward. Groups that provide psychoeducation (eg, knowledge about the illness) and teach cognitive behavioral strategies (eg, coping techniques, assign homework) are more demanding than psychoeducational groups, but appear to be tolerated well by patients. Psychoeducational groups mainly provide knowledge about the illness (working

Contents Psychoeducation: Providing information about the illness and its treatment on the basis of the stress-vulnerability-coping model<sup>3</sup> Symptom management, establishing rewarding activities Recognizing and changing dysfunctional cognitions in illness and self-confidence Relapse prevention Programs Ward-specific groups<sup>a</sup> Treatment-specific groups Coping-orientated treatment in schizophrenia<sup>17</sup> Cognitive-psychoeducational treatment in bipolar disorder<sup>18</sup> Cognitive-psychoeducational treatment in depression<sup>19</sup> Cognitive-psychoeducational treatment in elderly patients with depression<sup>19,48</sup> Metacognitive training<sup>31</sup> Group for training eating habits in anorexia nervosa<sup>49,50</sup> Procedure Treatment-specific groups Group leader: 1 psychologist Group members: 8-13 patients Duration: 12 sessions,  $2 \times$  a week, for 75–90 min Treatment manual, information and work sheets, homework assignments, video-based supervision Groups for relatives of patients with schizophrenia or affective disorders<sup>17-19</sup> Consulting hours for children of patients with psychiatric illness<sup>51</sup> Ward-specific groups Groups cover depression, schizophrenia, and substance abuse on illness-specific wards

<sup>b</sup>Only if needed.

The programs listed refer to 6 of 10 wards including patients with schizophrenia, mood disorders, mental, and behavioral disorders due to the use of psychoactive substances and an acute ward.

<sup>&</sup>lt;sup>a</sup>Limited weekly to n = 18 persons.

with flipcharts etc.), whereas cognitive groups focus on cognitive techniques and use homework assignments. The term cognitive-psychoeducational group relates to a combination of both (also see Schaub et al<sup>47</sup>). There is a high range of comorbidity, however, the groups do not deal with comorbidity in special up to now.

The different treatment programs were implemented in several phases.<sup>42</sup>

*Phase 1.* First, we developed or modified existing manuals<sup>17,52</sup> and assessed the level of neuropsychological functioning in different disorders.<sup>47</sup> We adapted the programs to the average duration of inpatient stay.<sup>17</sup> Furthermore, we visited special treatment settings in schizophrenia and depression to learn about common pitfalls. We started an education program for treatment teams, which included physicians, psychologists, and nurses, by providing workshops that provided information about the psychiatric disorders and advances in treatment, as well as training in behavioral skills for effective communication with patients. We also developed a questionnaire to assess patient's perceptions of the effectiveness of treatments in order to optimize treatment strategies.

*Phase 2.* Next, we conducted clinical assessments at the beginning of treatment, the end of treatment, and at followup in order to evaluate outcomes. Satisfaction with specific treatment programs was assessed in order to determine their applicability in the inpatient setting and whether they were acceptable to patients.<sup>53</sup> We modified instruments to assess patients' knowledge of mental illness and its treatment. Knowledge about psychosis was assessed using a modified multiple choice test based on Hahlweg.<sup>54</sup>

Phase 3. Finally, we conducted randomized controlled trials to evaluate our programs. For example, we conducted one trial to evaluate whether the cognitive-psychoeducational group intervention led to greater gains in knowledge about the illness and better outcomes over 2 years as compared to a standard treatment control group.<sup>17</sup> Measures for studies in schizophrenia covered the following instruments (see also Schaub et al<sup>17</sup>): Diagnoses were assessed according to the Diagnostic and Statistical Manual of Mental Disorders DSM-IV,<sup>55</sup> symptoms were assessed with the Brief Psychiatric Rating Scale -Expanded (BPRS),<sup>56</sup> with analyses based on Velligan's factor analysis<sup>57</sup> as well as with the Scale for the Assessment of Negative Symptoms (SANS).<sup>58</sup> Psychosocial functioning was assessed with the Global Assessment Functioning Scale (GAF).<sup>55,59</sup> Knowledge about psychosis and its treatment was assessed using a modified multiple choice test based on Hahlweg<sup>54</sup> and satisfaction with treatment was assessed using a 4-item questionnaire<sup>53</sup> administered at the end of each group treatment.

Kraepelin's hospital opened its doors to accommodate the new spirit of comprehensive psychotherapy while continuing

its successful history in psychopharmacotherapy. Parallel to our research, we began to recruit trainee psychologists by arranging collaborations with 5 behavioral institutes in Munich. The first author was appointed as supervisor by the Bavarian Medical Association and has since 1997 provided training and supervision for physicians and psychologists in CBT. Whereas at first she was in charge of training for the whole hospital, 2 additional leading psychologists have been added to the staff, one in 2004 and the other in 2011. She has been responsible for 6 wards. The number of psychologists receiving training in psychotherapy increased from 1 in 1995 to 232 in her area in 2016.

In recent years, it became necessary to develop new group programs or to modify existing ones in order to meet the needs of children and their parents with mental illness,<sup>51</sup> patients with alcohol or drug dependence and comorbid depressive disorders,<sup>19</sup> elderly patients with depression,<sup>48</sup> as well as patients with anorexia nervosa (body mass index < 12).<sup>49,50</sup> Additional programs developed now include metacognitive training,<sup>31</sup> interpersonal therapy,<sup>60</sup> treatment for chronic depression,<sup>61</sup> stress management,<sup>62</sup> social skills training,<sup>63</sup> building up self-confidence,<sup>64</sup> as well as social and skills training for borderline personality disorder.<sup>65</sup> Progress was made by improving the salary for psychologists and providing medical seminars combined with training in CBT for physicians and psychologists. To ensure treatment continuity, we focused in particular on the gap between inpatient and outpatient treatment. Treatment contract documents for psychiatric patients were implemented to plan details related to the patients' inpatient stay; after giving informed consent, decisions were made collaboratively on strategies to be taken at the medical or personal level, including treatment strategies and care for children.

Recently, treatment pathways in the care of patients gained importance in Germany<sup>66</sup> and were established at this hospital for disorders such as depression, schizophrenia, substance abuse, chronic depression, and emotional instability. However, the development, implementation, and analysis of guidelines or clear-cut clinical pathways to care must consider individual, clinical, and care system aspects and their interplay. Results suggest that system aspects tend to dominate over clinical factors of schizophrenia and depression. As a consequence, the definition, implementation, and evaluation of clinical pathways or pathways to mental healthcare is first and foremost the responsibility of the national mental health care system and must be understood on that level, before findings are summarized internationally and models of best practice are established.

#### Results

#### Patients' Diagnosis and Duration of Hospitalization From 1995 to 2015

Since 1995, the Department of Psychiatry and Psychotherapy, Ludwig Maximilian University, Munich, has 200 beds for inpatients in 10 wards. Statistical reports

from April 1995 show that the most common diagnosis among the 1641 patients was schizophrenia (24.7%), followed by affective psychosis (23.6%) and alcohol and medication dependence (23.3%); all diagnoses were according to ICD-9.67 Diagnoses with prevalence rates below 10% included adaptive reactions (5.8%), organic psychoses (7.2%), neurosis (4.6%), personality disorders (3.8%), and nonorganic psychosis (2.1%). Patients' mean age was 45 years (median 43 y; women: 48 y, median 47 y; men: 42 y, median 40 y). The mean total duration of hospital stay was 44.4 days (median: 33). Patients with nonpsychotic disorders caused by brain damage spent the longest time in hospital (mean 65.3 d, median 51), followed by affective psychosis (mean 63.0 d, median 49 d), neurosis (mean 54.1 d, median 42 d), and schizophrenia (mean 53.1 d, median 43 d). The interrelationship between duration of hospitalization and age showed that older patients had been hospitalized for more days.

After Peter Falkai took over as chairman of this hospital in 2012, he worked on optimizing the treatment process and reducing the duration of hospital stay. 20 years after the introduction of psychoeducational and cognitive-behavioral programs, in 2015 the number of inpatients was 50% higher than in 1995. The most common diagnosis among the 2806 inpatients was mood disorders (F3: 40%), followed by mental and behavioral disorders due to the use of psychoactive substances (F1; 25%), and schizophrenia, schizotypal personality disorder, and delusional disorders (F2; 15%); all diagnoses were according to ICD-10.68 Patients' mean age was 45 years (women: 46 y; men: 44 y). The mean total duration of hospital stay was 29.1 days (median: 20.0) in 2015. The average length of stay of schizophrenia, schizotypal personality disorder, and delusional disorders (F2) was 38 days (median 28 d) compared to mood disorders (F3) 37 days (median 29 d).

We have also seen striking changes over the last 20 years with the duration of the hospital stay decreasing by about 50%. Additionally, 65 patients with schizophrenia or alcohol and drug dependence are treated in our outpatient clinic. As a result, mood disorders are the most common diagnosis among inpatients, followed by schizophrenia and disorders induced by psychoactive substances.

## *The Role of Neuropsychological Functioning in Psychotherapy*

Neuropsychological functioning plays an important role in psychiatry and psychotherapy. Impaired neuropsychological functioning in schizophrenia has been evaluated in meta-analyses focusing on schizophrenia,<sup>69</sup> schizophrenia or bipolar disorder,<sup>70</sup> and first-episode schizophrenia.<sup>71</sup> These studies indicate that schizophrenia is characterized by broad-based cognitive impairment, with varying degrees of deficit across all ability domains measured by standard clinical tests. Seven separable domains of cognitive deficits were identified in schizophrenia<sup>72</sup> and a battery to measure them in clinical trials was developed. While separable, these cognitive domains have substantial interrelationships.

The data from 112 postacute patients with mood disorder or schizophrenia<sup>47</sup> showed that despite comparable total scores in psychosocial functioning55 and psychopathology,<sup>56</sup> there were significant differences in most subscales and different neuropsychological test profiles.57 Patients with depressive disorder performed better in short-term memory and speed than those with schizophrenia. Sound didactic and behavioral principles<sup>17,47</sup> can compensate for deficits in neuropsychological functioning in severe psychiatric illness (eg, by using repetition, summaries, and illustrations). Another study focused on neuropsychological functioning and neuroimaging in 34 depressed inpatients and 34 healthy controls<sup>73</sup> and found that reduced hippocampal volume was correlated with executive dysfunction. Hippocampal volumes and frontal lobe volumes were significantly smaller in patients than in controls, and lower hippocampal volumes were correlated with poorer performance in the Wisconsin Card Sorting Test.74

# Studies of Illness Management Programs at 1- and 2-Year Follow-ups

The illness management programs<sup>17–19</sup> proved to be clinically feasible in studies that included 98 patients with schizophrenia, 279 patients with major depression, and 86 patients with bipolar disorder, and resulted in a significant increase in knowledge about the respective illnesses; at the postassessment, about 90% of inpatients considered their program to be helpful.<sup>75</sup> The program for mood disorders was investigated in a feasibility study including 231 participants, however, only 125 patients were adherent with treatment assessments (drop-out rate of 54% due to a broad inclusion criteria). The program was then differentiated for patients with major depression or bipolar disorders.<sup>76</sup>

We investigated the effects of group intervention for 62 bipolar patients who attended cognitive-psychoeducational group therapy and their 49 relatives.<sup>77</sup> Psychoeducational interventions in bipolar patients and their relatives improved patients' and their relatives' knowledge of the illness and the burden of the illness as well as high expressed emotion were reduced in relatives at 1-year follow-up.<sup>77</sup> 52 patients with bipolar disorder studied in a naturalistic setting showed improvements in the severity of illness and differential treatment response.<sup>78</sup> At the postassessment, patients with a higher education level performed better than those with less education. A higher number of previous hospitalizations and being male best predicted the readmission rate (30%) at the 2-year follow-up; however, the study lacked a control group, which limits the interpretation of the results.<sup>78</sup>

Randomized controlled trials with a 2-year follow-up<sup>17</sup> evaluated group programs for schizophrenia and major depression. The first study in 196 patients with schizophrenia<sup>17</sup> compared a coping-oriented treatment group with a supportive group as the control group (see article within this supplement).<sup>17</sup> Participants in the coping-oriented group showed greater gains in knowledge from pre- to post-treatment than those in the control group, and improved more on the depression-anxiety subscale of the BPRS-E.<sup>56</sup> Relapse rates did not differ significantly between the groups.

In the second study (Schaub A, Mueser KT, Von Werder T et al, in preparation) 177 patients with major depression were assigned to three different conditions: clinical management, clinical management combined with a group cognitive-behavioral therapy (CBT) program, or clinical management combined with an individual CBT program. At post assessment, patients in both CBT programs were more satisfied with the program than the patients without CBT. The results of 2 year outcome are on its way (personal communication).

#### Summary and Discussion

The challenge facing Kraepelin's former hospital was to change a traditional "custodial" approach in which patients were seen as passive recipients of treatment to a one aimed at empowering patients to take an active role in their own recovery. As the hospital staff was ambivalent about this change, education and training opportunities (eg, lectures, workshops) for staff members were important to shifting attitudes and developing more recovery-oriented treatment skills. This work with psychologists, physicians, and nurses was new and exciting, and created a "collaborative spirit" that facilitated the process of change. Instilling hope that it was possible for people with severe mental illness to change, in staff members and patients alike, played a critical role in changing practices. In addition to providing information and training, creating greater transparency in the treatment process, promoting staff acceptance of diversity between patients, and adapting programs to better meet the patients' needs (eg, having a "resting chair" in a group for the most impaired or most reluctant patient that acknowledged his or her willingness to attend the group allowed the person to take a passive role<sup>17,47</sup>) were important. Due to a primarily biological understanding of schizophrenia, there was some reluctance among staff members to understand that patients with schizophrenia are capable of expressing their own perspectives about their illness (see ref. Süllwold et al<sup>15</sup>), that they are able to identify warning signs of relapse, and to collaborate in preventing further relapses.

At the beginning of the 20th century, patients with schizophrenia were thought to be incapable of playing an active role in their treatment; however, over the last 30 years there have been profound changes.<sup>14-47,79-81</sup> Novel conceptual frameworks<sup>3,4</sup> and empirical data challenged the aforementioned Kraepelinian<sup>2</sup> assumption that schizophrenia was a purely biological disease with an invariably downward trajectory. This has yielded hope that meaningful recovery from schizophrenia<sup>79-81</sup> is possible and that patients can learn to improve the course of their illness. Education about schizophrenia, bipolar disorder, and depression and teaching effective self-help strategies<sup>14-42,75-81</sup> is now widely accepted as a treatment standard. Illness management programs also include cognitive behavioral interventions, such as teaching coping strategies, instilling hope by reframing challenging experiences and setting goals, supporting treatment adherence, and providing groups for relatives that enhance social networks and reduce relapse rates. These programs form the basis for shared decision making and treatment processes at this hospital.<sup>42</sup>

Studies conducted in this hospital have demonstrated the feasibility, effectiveness, and efficacy of illness management group programs in patients with psychiatric illness.<sup>75-81</sup> Therapeutic interventions are also important for children (under the age of 18) who have parents with a psychiatric illness.<sup>51</sup> The interventions inform the children about the illness in a manner consistent with their developmental age, and seek to enhance their self-confidence and self-efficacy, both of which are important protective factors. Sharing information between professionals, relatives, patients, and children may facilitate their coping with the psychiatric illness and improve the quality of family life for all family members.

There have been striking changes over the last 20 years. This hospital has grown into the largest department of psychiatry and psychotherapy at a university hospital in Germany, treating 200 inpatients and 65 outpatients in a day clinic which did not exist in 1995. In 2015, the duration of hospitalization was reduced by about 50% compared to 1995. As a result, mood disorders are the most common diagnosis among inpatients, followed by schizophrenia and disorders induced by psychoactive substances.

Thanks to the outstanding achievements of Kraepelin and his successors, the hospital is known throughout Europe and the United States. Today, illness group programs combined with individual treatment and groups for relatives are regular elements of treatment. For many patients, the hospital buffers stressors such as worries about social stigma and problems concerning education, work, and family. Poor coordination between inpatient and outpatient treatment can risk significant gains in clinical stability and psychosocial functioning. Therefore physicians, psychologists, and social workers work closely together to ensure a good transition from the hospital to outpatient patient in order to continue the recovery process in the community. These results suggest that educating patients about their illness, training self-management skills, instilling hope, and enhancing self-esteem as well as strengthening the patient's social network can be valuable components of a comprehensive approach to the treatment of inpatients.<sup>17–19,75–81</sup>

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