Comorbidity, stigma and emotional perception in psychiatric disorders

Andrea Schmitt · Peter Falkai

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Schizophrenia is associated with significant comorbidity and mortality—patients seemingly suffer more often from type-2 diabetes mellitus, diabetogenic complications plus environmentally influenced conditions than non-schizophrenic patients. Schoepf et al. [1] in a 12-year follow-up study with 1,418 adult schizophrenic patients and 14,180 age- and gender-matched hospital controls compared whether comorbidities with somatic diseases in fact lead to higher mortality. They discovered many of them to be more prevalent plus associated with a worse outcome in the schizophrenia population, whereas these patients suffered less from hypertension, hyperlipidemia, angina and cataract than controls. In the end, except parkinsonism the hospital mortality due to comorbid physical diseases did not significantly differ from the control population. Parkinsonism, again, was significantly prevalent in deceased schizophrenic patients compared to those surviving the study period. Anyhow, the authors recommend to thoroughly monitor and manage the most prevalent comorbidities in schizophrenia. Since there is an overlap between affective and schizophrenia symptoms in a large group of patients, Wilson et al. [2] critically question the reliability and clinical utility of the diagnosis of schizoaffective disorder after finding statistically significant deviances between clinical and research diagnoses in 134 psychiatric inpatients: While the treating clinicians had diagnosed 48 of these patients with schizophrenia, 50 with schizoaffective disorder and 36 with psychotic bipolar disorder, trained research personal again using the Structured

Clinical Interview of the DSM-IV-TR inclusive an explicit time threshold for criterion C diagnosed 64 patients with schizophrenia, 38 with schizoaffective disorder and 32 with psychotic bipolar disorder. The authors assume a tendency for less severe diagnoses on clinician side and advocate a more stringent criterion C for the diagnosis schizoaffective disorder to address an implicit bias in clinical practice, which in the end might affect the prevalence of the psychotic disorder diagnoses.

Only few studies so far have broached the issue of disempowerment and stigma-related stress in patients with mental illness due to involuntary hospitalization. Rüsch et al. [3] assessed shame and self-contempt, self-stigma, empowerment, quality of life and self-esteem in 186 seriously mentally ill persons. Self-stigma was significantly associated with higher stigma stress levels independent of psychiatric symptoms, diagnosis, age, gender or the number of involuntary hospitalizations during lifetime inducing a negative effect on quality of life and empowerment. Thus, emotional reactions and stigma as a stressor should be considered in interventions to reduce the negative effects of compulsory measures.

In an fMRI study with 18 female patients with a diagnosis of borderline personality disorder and 18 healthy female controls, Scherpiet et al. [4] investigated whether not only the perception of emotional stimuli but also the mere anticipation of upcoming emotional pictures leads to emotional dysregulation associated with the disorder. Compared to controls, the patient sample showed deficient recruitment of various brain areas related to cognitive-emotional interaction already in the anticipation phase of both negative and ambiguously announced stimuli possibly adding to the emotional dysregulation and contributing to hypersensitivity toward emotional cues. Emotional perception is also subject of Schönenberg and Jusytes [5]

A. Schmitt (✉) · P. Falkai
Department of Psychiatry and Psychotherapy, Ludwig-Maximilians-University Munich, Nußbaumstr. 7, 80336 Munich, Germany
e-mail: Andrea.Schmitt@med.uni-muenchen.de

study with 55 detained male violent offenders compared to 55 healthy controls matched for education and age. Since aggressive individuals strongly tend to attribute hostile intent to the behavior of others which possibly provokes and aggravates socially inadequate conduct, the authors assumed an additional hostile attribution bias in the perception of facial affect in these persons. Compared to controls, violent subjects indeed prioritized hostile interpretation of negatively classified emotional expressions containing proportions of an angry expression, while for the happy-fearful expression dimension, no group differences could be observed. The authors conclude this misinterpretation of non-verbal cues to at least partly underlie aggressive-impulsive behavior in aggressive individuals.

Clock-related genes and their products are known to tightly regulate the human circadian rhythm, which is frequently disturbed in ADHD. Clinical trials bespoke an association between ADHD and the CLOCK gene whose role was thought to be mediated by rhythm dysregulation. In consideration of the perception of ADHD ultimately being an extreme end of a continuum of traits inherent to the general population, in a sample of 1,289 healthy adults, Jeong et al. [6] investigated the genetic association between ADHD-related features and the CLOCK gene, which they hypothesized to base on a mediating role of evening preference. Albeit the authors found evidence that the CLOCK gene's association with clinical ADHD samples may be generalizable to traits measured in the general population, a mediating role of evening preference, however, could not be verified. Based on findings of a dysfunction of the autonomic nervous system (ANS) in schizophrenia patients, Ieda et al. [7] used the marker salivary alpha-amylase (sAA) for ANS function to investigate this dysfunction by measuring sAA and heart rate variability of 25 schizophrenic patients compared with

controls. The authors found a significant increase in sAA plus considerably lower parasympathetic nervous system activity in the heart rate variability in the patient sample but no significant group differences in sympathetic nervous system activity.

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