



Editorial

Psychiatry shifting to a new paradigm

Psychiatry is a medical discipline. Though seemingly obvious, this is true only for about the last 220 years. While several types of institutions for mental healthcare have a tradition of hundreds of years, mostly run by religious congregations, in the beginning of the 19th century, physicians in Great Britain, France, Germany and Italy began to claim that mental disorders were medical conditions. In the following decades, institutions - typically asylums - for the treatment of mental disorders were established all over Europe and many other countries, guided by physicians. Outpatient treatment, in contrast, was an innovation of the 20th century. To our knowledge, the term, 'psychiatry' was conceptualized by Johann Christian Reil in Halle/Germany in 1808¹. Within the next half-century, psychiatry established itself as a medical speciality with chairs in universities in an increasing number of countries. It lasted till the end of the Second World War in most countries until the former asylums were called hospitals. Nowadays, psychiatry is a medical discipline like many others, following the same customs as other medical disciplines. We look back on more than 200 years in which psychiatry has been conceptualized along the 'medical model', notwithstanding emphasis of other aspects in social psychiatry or the antipsychiatry movement with a climax in the 1960s and 1970s². However, such critics against a medical/biological conceptualization have only hesitantly been integrated into the mainstream model over long time, except for psychological therapies. At the current point of time, we can state that the physician-led approach has yielded considerable advances for the speciality and for people with mental disorders. Our understanding of the nature of mental conditions has increasingly improved, particularly as to their neurobiological aspects, and effective therapeutic approaches have

been developed for most disorders. Most importantly, drug development and drug treatment since the 1950s enabled millions of people with severe mental disorders to live outside institutions in the community. In the last two decades, psychotherapy has developed from a selective upper-class treatment in times of Sigmund Freud to an integrative part of psychiatric inpatient and outpatient treatment, shifting from a method-centred to a disorder-specific approach, however limited by availability of qualified staff. An important aspect of the integration of psychiatry into the medical disciplines has been evidence-based medicine. Evidence-based medicine allows to ground treatment decisions on best available evidence, using meta-analyses and systematic reviews that quantify the efficacy of different treatment options. The approach of evidence-based medicine enabled developing clear treatment algorithms for guidelines, making psychiatric decisions transparent for physicians, patients and their relatives.

Limitations of the medical approach

The medical approach is not free from drawbacks. Physicians believe in laboratory findings, images and drugs. This can be seen in most medical reports, where the diagnosis of mental disorders is described as a number of medical findings, counting of symptoms included, and the treatment is described as improvement under treatment with drug x, y or z. This is a very limited view of the reality. Except for antipsychotics in acutely psychotic states and benzodiazepines in nearly all acute mental states, most psychoactive drugs have limited efficacy, and a considerable part of patients do not recover completely or suffer from considerable side effects. Several 'decades of the brain' and billions of funding money for corresponding neurobiological research have

This editorial is published on the occasion of the World Mental Health Day - October 10, 2020.

yielded only a scarce impact on routine care even in most specialized units, quite different from advances, *e.g.*, in cancer therapy. Up to now, neuroimaging is relevant neither for diagnostics nor for treatment decisions in the vast majority of cases, and except for drug monitoring, laboratory findings still serve only to exclude somatic conditions. Furthermore, the long-expected decryption of the human genome that has been accompanied by huge promises with respect to mental disorders such as schizophrenia has not unfolded clinical consequences for psychiatric diagnostics and treatment so far. Rather, there was some disillusion among geneticists since we had to realize that even the use of big data did not eventually lead to the detection of single genes with high impact on the development of severe mental conditions, as had been supposed for more than 100 years. Instead, it has become clear that (i) genetic patterns correspond little with clinical diagnoses, (ii) a wide number of genes can be responsible for a disposition for mental disorders but each single one only to a rather small extent, and (iii) causation of mental states is not unidirectional but encompasses a complex interplay between different genes, environment and epigenetic mechanisms that are still poorly understood³. On the other hand, evidence-based medicine has shown that non-biological interventions such as psychotherapy, sports, housing, appropriate work or living in a green environment unfold effect sizes comparable to drugs or even better in some cases⁴. In addition to these challenges for the medical conception of psychiatry, there are three more adversities to be considered. First, the development of new drugs has been very disappointing in recent years. Since the introduction of second-generation antipsychotics more than 20 years ago⁵, no major innovations have been introduced into the market. Big pharmaceutical companies have buried considerable money in research, seem to lose hope and withdraw from research in mental disorders. Second, since the so-called triadic model of psychiatry with a subdivision in neurotic, endogenous and organic entities has been falsified within the past decades of research, psychiatry does not have any more a unifying theoretical paradigm⁶. A paradigm is a kind of general theory that explains the phenomena observed in the field and is generally accepted by researchers and practitioners⁷. The lack of such a paradigm in the field is obvious. It is reflected, among others, by the existence of multitude of more or less purely descriptive diagnoses that are not separated among

each other by distinguishable pathophysiological pathways and specific therapeutic approaches. For example, anxiety disorders, depressive disorders and obsessive-compulsive disorders each should be treated with an antidepressant of the SSRI (selective serotonin reuptake inhibitor) class in combination with cognitive-behavioural therapy. Third, the labour market looks gloomy for the profession worldwide. Many physicians, probably those most talented, do not tend to work in psychiatry, and in many countries, psychiatry has a recruiting problem among physicians and a stigma problem for patients and professionals as well.

Shift to an ecological paradigm

How can a new paradigm look like that (i) integrates current research findings, (ii) unfolds measurable impact on best practice standards, (iii) provides an attractive perspective for young professionals, and (iv) provides a convincing didactical and explanatory model for people working in the field, patients, their relatives and policymakers? This has not been phrased explicitly so far, or it has been called simply a social approach⁸. Such a new paradigm is visible still only in rough outlines, but the trajectories can be seen for some time. It could best be named an ecological paradigm. It is based on the idea that mental disorders are the result of a complex interplay between inherited biological and environmental factors, both biographical and present. These environmental factors encompass the wide range of traumatic adversities as well as current stress in a wide conception, ranging from workplace demands over familiar stress to poverty and a range of environmental adversities such as climate, toxic substances, urban overcrowding or unhealthy living styles. This view is not only social or psychological or biological but is more than a simple addition; it is an integrative umbrella whose core idea is interaction. This has several important consequences. First, it will lead to a limited number of syndromes rather than a multitude of clearly distinguishable diagnoses. Diagnostic frameworks (such as ICD-10) will keep their purpose in classification for objectives of research, health insurances, *etc.* but are neither now nor in future based on a coherent theory. Second, approaches from very different directions such as pharmacology or housing interventions are not in opposition but should add to each other in a reasonable manner, with efficacy in relation to unwanted side effects as the most relevant outcome. Third, such

an approach is inevitably multiprofessional, giving not only physicians but also a variety of other professions' important roles, dependent on the necessities of the individual case. This is part of the reality already today: for example, treatment of an acute psychosis is drug-centred, with a physician in the most prominent position. However, in later stages of the disease, under stable medication, the role of psychotherapists, social workers and occupational therapists can be more important. This could be acknowledged in professional role models where non-physicians can lead certain kinds of psychiatric institutions, may be including some clinical departments, thus opening interesting and appropriately valued interdisciplinary perspectives for many young professionals. For psychiatric research, there remains a lot to do. Within the past 40 years, a huge amount of knowledge has been collected on psychoactive drugs regarding their special indications and contraindications, dosages and side effects. Comparable knowledge on the other kind of interventions, such as housing or workplace support, is far from sufficient; ideas on 'for whom, when and how much' are still tentative and poorly evidence based. Proceeding in this direction, psychiatry will be an ecological speciality with thrilling interdisciplinary attractiveness for practitioners and researchers of many disciplines. For people with mental illnesses, that could mean the transition from a medical case to being seen as an individual with a specific biography needing help in a specific living situation.

Conflicts of Interest: None.

Tilman Steinert^{1,2}

¹Clinic for Psychiatry & Psychotherapy I, Ulm University, Ulm & ²Centres for Psychiatry Suedwuerttemberg, Weissenau, Ravensburg, Germany
tilman.steinert@zfp-zentrum.de

Received September 16, 2020

References

1. Reil JC. [Ueber den Begriff der Medicin und ihre Verzweigungen, besonders in Beziehung auf die Berichtigung der Topik der Psychiaterie]. In: Reil JC, Hoffbauer JC, editors. *Beiträge zur Beförderung einer Kurmethode auf psychischem Wege*. Halle: Curtsche Buchhandlung; 1808.
2. Shah P, Mountain D. The medical model is dead - long live the medical model. *Br J Psychiatry* 2007; 191 : 375-7.
3. Smeland OB, Frei O, Dale AM, Andreassen OA. The polygenic architecture of schizophrenia - rethinking pathogenesis and nosology. *Nat Rev Neurol* 2020; 16 : 366-79.
4. Lutgens D, Garipey G, Malla A. Psychological and psychosocial interventions for negative symptoms in psychosis: Systematic review and meta-analysis. *Br J Psychiatry* 2017; 210 : 324-32.
5. Heifets BD, Malenka RC. Disruptive psychopharmacology. *JAMA Psychiatry* 2019; 76 : 775-6.
6. Steinert T. Psychiatry needs a new paradigm. *Acta Psychiatr Scand* 2020; 141 : 563-4.
7. Kuhn TS. *The structure of scientific revolutions*. Chicago, London, UK: University of Chicago Press; 1962.
8. Priebe S, Burns T, Craig TK. The future of academic psychiatry may be social. *Br J Psychiatry* 2013; 202 : 319-20.