Eur Arch Psychiatry Clin Neurosci (2008) 258 [Suppl 2]:107–110 DOI 10.1007/s00406-008-2013-2

STUDY BASED DISCUSSION

Jules Angst · Alex Gamma

Diagnosis and course of affective psychoses: was Kraepelin right?

Abstract Kraepelin's basic attitude to the classification of psychoses was data-oriented and flexible. In his latter years he was close to revising his own celebrated dichotomy between manic-depressive insanity and dementia praecox in order to take account of a large group of intermediate psychoses, which today are called schizo-affective. His concept of a continuum from healthy to ill has stood the test of time and corresponds to modern epidemiological findings. Kraepelin's unitarian concept of manic-depressive insanity did not survive. It was differentiated and broken down into several subgroups, and a proportional diagnostic spectrum with a continuum from mania via bipolar disorders to depression has recently even been proposed. Bipolar disorders would in that case be comorbid disorders of mania plus depression. In contrast to Kraepelin's unitarian view the long-term prognosis of subgroups of mood disorders varies considerably. Overall it is nevertheless astonishing how much of Kraepelin's legacy has survived.

Key words affective disorders · schizo-affective disorders · spectrum

Fundamentals of Kraepelin's nosology

Kraepelin's celebrated "dichotomy", which dates from 1899, distinguished manic-depressive insanity (MDI) from dementia praecox. Kraepelin, who knew the work of Kahlbaum well, integrated the latter's concepts of catatonia and hebephrenia into dementia praecox. There are also similarities between Kraepelin's dichotomy and that of Kahlbaum, which distinguished between limited psychological disorders "vecordia" (including dysthymia melaena and dysthymia elata) having a good prognosis and, a total psychological disorder "vesania" with a progressive course to dementia (defectus) [15]. Kahlbaum had also written on cyclical insanity [16, 17] and had used symptomatology, course and good vs. bad outcome as essential criteria for the classification, as Kraepelin did later.

Although it has undergone some modification, the Kraepelinian dichotomy has largely survived intact. Kurt Kolle's prophecy in 1956 has turned out to be generally accurate: "It is my conviction that Kraepelin's work will last for ever. Prophecy in science is a dubious exercise; it is likely, however, that Kraepelin's nosology of psychiatric disorders will survive even in the face of new discoveries" [20].

Although Kraepelin stood by his dichotomy between manic-depressive insanity and dementia praecox throughout his life, in his latter years he came close to considering changes in it. In 1920 "The Patterns of Mental Disorder" ([23] English translation in Hirsch and Shepherd), he wrote: "No experienced psychiatrist will deny that there is an alarmingly large number of cases in which it seems impossible, in spite of the most careful observation, to make a firm diagnosis"; "… it is becoming increasingly clear that we cannot distinguish satisfactorily between these two illnesses and this brings home the suspicion that our formulation of the problem may be incorrect". In this paper Kraepelin even adopted the term schizophrenia for dementia praecox.

This work, written in the context of the dispute with Hoche's syndromal theory [14], demonstrates Kraepelin's great ability to continuously develop his classification of psychic disorders. Again Kolle's comment was correct: "This example shows Kraepelin to be a full and profound seeker after truth, who did not hesitate to give up his own concepts when new facts shed new light on the problems at hand."

If Kraepelin were still alive, he would probably have substantially developed his diagnostic system,

Emer. Prof. Dr. med. J. Angst (✉) · Dr. Phil. A. Gamma
Psychiatrische Universitätsklinik
Lenggstrasse 31, Postfach 1931
8032 Zurich, Switzerland
Tel.: +41-44/384-2611
Fax: +41-44/384-2446
E-Mail: jangst@bli.uzh.ch

EAPCN 2013

but it would have been only on grounds of new clinical facts. Whoever still clings to Kraepelin's classification of 1915, calling themselves "neo-Kraepelinian", while disregarding the doubts expressed by Kraepelin in 1920, should better be called an "archeo-Kraepelinian". Knowing as we do Kraepelin's own capacity and will to progress, we should not be afraid of refining his nosology. Following his model, further developments must, however, be based on reproducible observations and data.

Kraepelin's continuum from healthy to ill

While much has changed within the classification of affective disorders since the last edition of Kraepelin's textbook [22], his concept of a continuum of severity, showing gradual transitions from psychotic syndromes via major and minor syndromes to the healthy state, has survived and continues to stimulate considerable debate. Kraepelin conceptualised the individual course of affective disorders over a lifetime as a movement along the continuum from normal fluctuations in mood (including basic states or temperaments) via full-blown mania and depression to psychotic syndromes. On the continuum from healthy to ill, Kraepelin defined the basic states as enduring pathological states, persisting outside bouts of the illness in the form of residual peculiarities and usually preceding the illness as dispositions (depressive, manic, cyclothymic and irritable). Such basic states also included current concepts of temperament [24].

Today we interpret our observations of the course of affective disorders in the same way; it is only the quality and the frequency of our measurements (up to daily or hourly recordings) that have improved. Modern data confirm Kraepelin's observations. We can assume that everybody is disposed to experience depressed and elevated mood, that grief and being in love represent subclinical depressive and hypomanic states within the norm. A recent study using the Hypomania Check List HCL-32 [5] have shown young people who are in love to have scores for hypomania comparable to bipolar II patients [11]. Healthy people therefore are very similar to bipolars under certain conditions, which is compatible with Kraepelin's view of a continuum.

Unity of manic-depressive insanity

With the exception of involutional melancholia, Kraepelin's MDI comprised all states of depression, mania and the combination of the two. Kraepelin assumed a *unity* of MDI in terms of causes, clinical manifestation and course. He also regarded their heredity as uniformly manic-depressive even though he noted that the three subgroups (mania, depression and their combination) could vary in their expression among relatives. Berrios described Kraepelin's concept as an "omnibus concept" and "over-inclusive" and saw the history of the affective disorders after 1910 as "no more than the analysis of the fragmentation of the Kraepelinian notion"[10, p. 300].

Kraepelin's uniform conception has today given way to a more refined, combined categorical and dimensional classification. This happened in several steps. First, depressions and bipolar disorders were separated, on the basis of differences in genetics and course [4, 28, 30]. In a second step, bipolar II was differentiated from bipolar I disorder, on the basis of its course, and was added as a separate subgroup to the international classification [12]. In 1978 a third bipolar subgroup consisting of mania with mild depressions followed [2]. Currently, pure manias are mainly classed as bipolar disorders. This practice is problematic and challenged by a substantial body of data demonstrating that they differ in terms of temperament, course and suicide risk. Manic (like depressive) disorders are clearly less periodic than bipolar disorders, and this difference is associated with differences in genetic predisposition. Compared to bipolar disorders, manias and hypomanias are characterised by a much lower suicide risk and are not associated with a dysthymic or cyclothymic temperament. Manic and hypomanic patients tend to have hyperthymic/hypomanic personalities, and the association with an anxious personality and anxiety disorders typical for bipolar patients tends to be lacking [3, 7]. In sum, these findings are reminiscent of Kleist's concept of unipolar mania and unipolar depression, which defined bipolar disorders as a combination of the two.

My own proposal is a two-dimensional perspective [1] consisting, firstly, of the continuum from healthy to ill, as described by Kraepelin, and secondly, of a proportional diagnostic spectrum, i.e. a continuum of the relative proportions of depressive and manic components. The proposal assumes the existence of manias (M) and depressions (D) and of three bipolar subgroups (Dm, MD, Md) lying in between [2].

The newly proposed proportional dimension includes not only several subgroups of bipolar disorders lying between depression and mania but also assumes a continuous distribution of polygenetic dispositions, where the "mixture ratio" is closely associated with the subcategory of affective disorder. Today, such a subclassification is validated by course of illness, suicide risk and family background and has therapeutic consequences. Kraepelin himself published findings on the basic affective categories (Grundzustände) that could support such a refined classification and he explicitly left the subclassification of manic-depressive disorders open.

The proposed two-dimensional view is in no way intended to replace a more refined categorical diagnostic classification, nor is it meant as definitive: it

could, for example, easily be extended by a third affective dimension, e.g. anxiety. According to our studies, anxiety is a particularly strong component of bipolar syndromes and anxiety disorders strongly comorbid with them.

Course of affective disorders

Kraepelin's unified conception of manic-depressive disorders was based on the observation that, longitudinally, patients' status changed between qualitatively different syndromes and levels of severity, which were not marked by clear borders. He saw no regularity in the sequence of syndromes but considered the lack of dementia [21, p. 1185] as characteristic of DMI. Full remission was the rule, but chronic, mild psychic weaknesses (chronic manias, depressions, and manic-depressive forms) could still occur.

Kraeplin's assumption of a uniform prognosis is today regarded as incorrect. He timed the onset of manic-depressive disorders as between ages 15 and 25, as we do today. However, he observed the onset of depressions to fall between the second and seventh decades of life and their frequency to increase with age. Because Kraepelin did not distinguish between bipolar and pure manic or depressive groups, he found a uniform preponderance of women of about 70%. Today we hold this to be true only for depression; in mania, men may slightly predominate, and in bipolar disorders the sex ratio is close to 1:1.

However, Kraepelin's observed bimodal distribution of the age of onset and especially his observation of a progressive shortening with age of the intervals between disease episodes has been fully confirmed, although he did not yet have modern statistical methods, controlling for the number of episodes as suggested by Slater [29] and recently applied in frailty analyses [18]. Kraepelin's findings that depression, delusions and suicides increase, and that the onset of mania decreases, with age was also correct.

Continuum between affective and schizophrenic disorders

There is also a continuum from syntonic, mood-congruent psychotic affective disorders to parathymic, mood-incongruent psychotic disorders. This continuum of endogenous psychoses is widely supported by longitudinal studies, syndromal analyses and genetic findings [6, 8]. Even Kraepelin's own cases of dementia praecox were shown, in a re-assessment of the patients' records, to form a continuum at symptom level between the two classical groups MDI and dementia praecox [19].

In addition to schizo-affective disorders there is a variety/number of acute psychoses which have a good prognosis and can be located between mood disorders and schizophrenia (acute transient psychoses, schizophreniform psychoses, cycloid psychoses, etc.) [25–27]. Today we may even assume that schizophrenic disorders are often based on or preceded by affective disorders [13]. All this may spell the demise of the Kraepelinian dichotomy.

Conclusions

Since the 1960s Kraepelin's uniform concept of manic-depressive disorders has been highly differentiated and replaced by a classification which comprises several bipolar subgroups and takes into account the proportional components of mania and depression. Schizoaffective psychoses form a bridge in the continuum from affective to schizophrenic disorders and supplement the proportional spectrum from mania to depression by a schizophrenic dimension. Today, Kraepelin's dichotomy is seriously in dispute [8, 9, 13].

By and large, however, most of Kraepelin's clinical findings on manic-depressive disorders have been confirmed. But data on the course are strongly dependent on classification, so while his overall findings on course were very accurate, they have to be differentiated according to modern diagnostic subgroups of affective disorders.

Disclosure The authors have no conflict of interest to declare.

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