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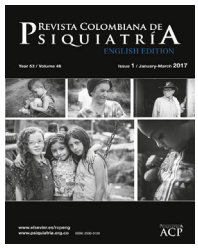

Review Article

One hundred and fifty years of hebephrenia. A review

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ABSTRACT

Introduction: The publication of Hecker's article on hebephrenia in 1871 was a fundamental milestone for clinical psychiatry. Despite the initial recognition, many voices were raised against this diagnostic category and its limits were attenuated throughout the 20th century until its disappearance at the beginning of this century (along with the other subtypes of schizophrenia) in the DSM and ICD.
Discussion: However, given the consistency of the clinical picture, there is the possibility of other criteria emerging that would lead its systematic study to continue or recommence. In this sense, the concepts of deficit schizophrenia, hebephrenia as a replacement for schizophrenia as a whole, and Leonhard's hebephrenias as systematic schizophrenias stand out. This article discusses the main diagnostic conflicts of the category of hebephrenia over time, with emphasis on the problems of recent decades.
Conclusions: The concept of hebephrenia has begun to be revalued in recent years, and the concepts of deficit schizophrenia, of hebephrenia as a major category, and of systematic hebephrenias allow further investigation of this foundational picture of clinical psychiatry.

Ciento cincuenta años de hebefrenia. Una revisión

Palabras clave:
Hebefrenia
Heboidofrenia
Esquizofrenia
Clasificación de Leonhard
Esquizofrenias sistemáticas

RESUMEN

Introducción: La publicación del artículo de Hecker sobre la hebefrenia en 1871 fue un hito fundamental para la psiquiatría clínica. A pesar del reconocimiento inicial, se alzaron muchas voces en contra de esta categoría diagnóstica y sus límites se fueron diluyendo a lo largo del siglo xx hasta su desaparición a comienzos de este siglo—con el resto de los subtipos de esquizofrenia—del DSM y la CIE.

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Discusión: Contrariamente a su disolución conceptual, la consistencia del cuadro clínico hace posible que surjan otros criterios para continuar o reiniciar su estudio sistemático. Sobresalen en este sentido los conceptos de esquizofrenia deficitaria, de hebefrenia como sustitución de la esquizofrenia en su conjunto y las hebefrenias como esquizofrenias sistemáticas de Leonhard. En el presente artículo se discuten los principales conflictos diagnósticos de la categoría de hebefrenia a lo largo del tiempo, haciendo hincapié en la problemática de las últimas décadas.

Conclusiones: El concepto de hebefrenia comenzó a revalorizarse en los últimos años y los conceptos de esquizofrenia deficitaria, de hebefrenia como categoría mayor y de hebefrenias sistemáticas permiten profundizar en nuevas investigaciones sobre este cuadro fundacional de la psiquiatría clínica.

Introduction

Some 150 years ago, Hecker[1] published an article that was a fundamental milestone for psychiatry. In this article he meticulously described and illustrated with representative cases a disorder that his teacher, Kahlbaum,[2] had isolated and named hebephrenia. The stormy evolution of psychiatry over the years resulted in this disorder taking backstage when making clinical decisions, until eventually it was forgotten about and removed from the conceptual tree of current diagnostic categories thanks to the development of operational diagnostic systems and the descriptive weakness of dominant psychiatry. One hundred years after Hecker's publication, Pethö[3] presented a disorder that also disappeared in a similar way to the diagnostic category of hebephrenia, this time due to controversies from the early and mid 20th century. In this article, we will take another look at some aspects of this discussion but will focus particularly on the diagnostic short circuits that have arisen over recent decades.

Hebephrenia and heboidophrenia

Hecker[1] described hebephrenia, or juvenile madness, as a disorder that starts between 18 and 22 years of age and quickly develops into dementia. According to the author, the illness takes the contradictory form of being puberty related with exalted seriousness and important ideas on the one hand, and jokes and rude expressions on the other. The disorder starts with melancholic symptoms that are expressed as persistent sadness, which may be accompanied by incessant delusional ideas, but this is superficial sadness that contrasts with the presence of unmotivated laughter and the tendency to tell puerile jokes. In addition to bizarre and child-like behaviour, the inclination to perform purposeless or meaningless activity and vagrancy is characteristic of the disorder. Hecker said that these individuals could roam the world for a long time with nobody realising they were sick. In many cases they may be qualified as simulators, hence their importance for forensic psychiatry. Delusional ideas and hallucinations are less pronounced. Their speech is pompous and empty and they tend to lead scientific discussions that contrast with their unquestioning and puerile conceptions. Their formal speech disorder becomes more evident in written text as they have incorrect syntax and incohesive phrases and cannot conclude their thoughts in a precise manner. They may also use strange jargon. Other characteristic symptoms include exaggerated gesticulation and unusual mannerisms and intercurrent episodes of excitement, which may result in anger. A cure can only be deficient. According to Hecker, patients tend to have "certain limitation, indolence and incapacity to perform intellectual work" from childhood, although this is not so evident as to impede their development.

In 1885, Kahlbaum[4] isolated heboidophrenia as a form of moral insanity. He reported that it was similar to hebephrenia due to the changes in behaviour, moral perversityänd link to puberty, but it was different from hebephrenia due to presenting with only mild periods of excitement and the lack of a progressive mental deterioration. In 1890, he published a more detailed clinical description, in which he considered it to be closely related to hebephrenia, and he therefore also called it "juvenile semi-insanity".[5] Individuals with heboidophrenia, or heboidophrenics, as they are also known, are distinguished by their eccentric behaviour and their failings or deviations from customs and moral norms, which in extreme cases may turn into criminal behaviours. Unlike hebephrenia, heboidophrenia does not progress to dementia. Since these individuals also have other impairments, it is not appropriate to class them as having moral insanity. Patients are generally characterised as fluctuating between shallow melancholic and expansive moods and inappropriate, puerile and poor thoughts, but with no delusional ideas. The two cases presented by Kahlbaum also show the tendency to lie to and bother others, to commit purposeless crimes and to have depressed moods that contrast with a high self-esteem. For Kahlbaum, hebephrenia and heboidophrenia are hebetic forms of mental disorder.

Stages of degradation of the concept of hebephrenia

Despite the introduction of hebephrenia in Griesinger's paper,[6] re-drafted by Levinstein-Schlegel, the diffusion of Daraszkiewics' monograph,[7] in which he presented cases of severe hebephrenia, and inclusion of the diagnostic category

of hebephrenia in Kraepelin's dementia praecox,[8] its nosological independence was questioned by some authors, especially Bleuler.[9] Wernicke[10] indicated that Kahlbaum's heboidophrenia was uncommon, although he described a hypochondriacal psychosis that developed as moderate hebephrenia, which he called abortive hebephrenia. It could be said that, between the early and mid 20th century, a slow and sustained undermining of the diagnostic category of hebephrenia began to unfold, which grew in parallel to the general acceptance of the symptoms. For teaching purposes, this conceptual degradation could be divided into two periods: dissolution (partial) and abolition, respectively. These two stages must be understood as a way of ordering the material from the discussion and not as a defined historical periodisation.

Dissolution of hebephrenia

The dissolution process for the diagnostic categories of hebephrenia and heboidophrenia is evident in the paper by Bleuler,[9] who introduces two forms of schizophrenia that are largely the same, namely simple schizophrenia (Diem's concept of *dementia simplex*) and latent schizophrenia, and ultimately, when hebephrenia was finally degraded to a residual category due to being considered the ẗlarge potẅhere cases that could not be classified as any of the other clinical forms (paranoid, catatonic and simple)[11] were thrown. Diem's dementia simplex[12] is a disorder that had already been observed by several psychiatrists of the time, which involves the slow and progressive development of negative symptoms that may start during puberty but also around the age of 20 or 30. Patients show a slow decline in interests, intellectual capacity and affective resonance. They become lazy, with no will or self-control. Some patients experience increased irritability and intolerance and may turn to alcohol abuse and vagrancy. The clinical position of this disorder has varied from formal independence from schizophrenia (e.g. Schneider[13] included hebephrenia in the simple form) and the inclusion of hebephrenia as a form of schizophrenia (e.g. Lange,[14] among others). However, latent schizophrenia, the most common form according to Bleuler,[9] covers all the symptoms characteristic of the disorder developed and its possible combinations. Such patients are solitary, irritable, strange and capricious people in whom hidden paranoid or catatonic symptoms may also be discovered. In the mid 20th century, these mild cases, which were already included in Kahlbaum's heboidophrenia, gave rise to new diagnostic categories in the English literature, such as pseudoneurotic schizophrenia[15] and pseudopsychopathic schizophrenia,[16] due to their apparent similarity to neurosis and psychopathy, respectively. In American psychiatry, hebephrenia was symbolically transformed with the publication of the DSM-III,[17] in which it was renamed disorganised schizophrenia, while latent schizophrenia, a schizophrenia subtype in the DSM-II,[18] became known as a personality disorder, schizotypal disorder. In the WHO International Classification of Diseases, latent schizophrenia was a type of schizophrenia until the introduction of the ICD-10,[19,20] which presented schizotypal disorder as a probable personality disorder, but in the schizophrenia section. Curiously, in both the DSM-III and the ICD-10, the presence of Kurt Schneider's first-rank symptoms[13] is required to diagnose schizophrenia, a vital step for the diagnosis of hebephrenia, when Schneider himself had stopped considering Kahlbaum–Hecker's disorder to be an independent form of schizophrenia and instead considered it to be a subtype of simple schizophrenia. Furthermore, it has been demonstrated that Schneider's first-rank symptoms are often present in psychoses with a good prognosis[21] and therefore their relevance in the diagnosis of schizophrenia is not justified. This relevance was put aside in successive editions of the DSM and ICD-11.[22] Schizotypal disorder[20] has all the characteristics of mild hebephrenia: inappropriate affect, eccentric behaviour, odd, paranoid or other bizarre ideas, suspiciousness, occasional illusions, depersonalisation and derealisation, obsessive ruminations without inner resistance, vague, circumstantial thinking and speech and transient n̈ear-psychoticör m̈icropsychoticëpisodes. Nevertheless, the same disorder, which was diagnosed as schizophrenic some years ago, became known as a disorder with an "ultra-high risk" of psychosis.[23] Therefore, it is no surprise that many studies show a significant match between those individuals at ultra-high risk and schizophrenics in terms of anatomical,[24] neurocognitive,[25] symptomatic[26] and linguistic[27] impairments explained as being on the s̈chizophrenic spectrum.̈ However, depending on the level of impairment and the predominant symptoms, many people with hebephrenia must be classified as residual schizophrenics according to commonly used operational systems.[28,29] In our clinical experience, it is common for many hebephrenics to be committed due to a dysthymic episode with delusional ideas and/or hallucinations, which is inevitably diagnosed as paranoid schizophrenia. Once the dysthymia passes, the diagnosis remains. In some cases, after a period of time, hebephrenia that has been diagnosed as paranoid schizophrenia is changed to residual schizophrenia.

Abolition of hebephrenia

Abolition of the concept of hebephrenia began in the 21st century with the emergence of two links of the same abolitionist chain. On the one hand was the project known as D̈econstructing psychosis;̈[30] and on the other was the resulting omission of schizophrenia subtypes from the most important diagnostic systems, DSM-5[31] and ICD-11.[22] Although these initiatives are not specific to the diagnostic category of hebephrenia, they affect this diagnostic category and help sow seeds of de-classification of severe mental disorders. In February 2006, the "Deconstructing psychosis" conference was held in Washington as part of a joint initiative of the American Psychiatric Association and the World Health Organization for the development of the DSM-5 and ICD-11. In April 2007, the subject was discussed again at the Schizophrenia Research Conference in Colorado Springs. The main idea of one of the project's two working groups was to replace the diagnostic categories of schizophrenia and bipolar disorder with a general psychotic syndrome and to adopt dimensional rather than the previously established categorical criteria. Nevertheless, the view of the second group, which proposed keeping the original dichotomy, was given priority,

with the proposed addition of a dimensional perspective. The reasons for making these changes can possibly be divided into social (stigma of being diagnosed with schizophrenia), neurobiological (inconclusive genetic, pharmacological and imaging studies to enable differentiation between the disorders), epidemiological (presence of psychotic symptoms among the general population) and clinical (lack of delimitation of symptoms) causes. These points are discussed in detail in other papers.[32] Here we will only refer to the most relevant aspects for hebephrenia diagnosis.

The DSM defines mental disorders as syndromes characterised by significant disturbance in an individual's cognition, emotion regulation or behaviour that reflects a dysfunction in the processes underlying mental functioning. Given that a syndrome is defined as the simultaneous occurrence of signs and symptoms irrespective of their causes, it is difficult to imagine a true schizophrenic syndrome: what are the common signs and symptoms in a cross-section between hebephrenia and fantastic paraphrenia? If we choose the deficit symptoms, we exclude the fantastic phenomena that give the paranoid disorder its own characteristics. In clinical practice, we often talk about schizophrenic syndrome when both hallucinations and delirium are present at the same time (therefore, in general), which is probably often more closely related to acute psychoses with a good prognosis (cycloid psychoses), which have effectively been described as intercurrent syndromes in various conditions.[33–36] According to Jablensky,[37] the concept of disorder does not always correspond to the concept of syndrome in medical classifications because it is based on the communication of subjective experiences and patterns of behaviour, many of which appear as isolated symptoms, habitual behaviours and personality traits, which gives the disorder an ambiguous status that creates conceptual confusion and hinders the advancement of knowledge. Nevertheless, the definition of a disorder prevails, with the listing of such general symptoms that we can rarely have a clear idea of the disorder we are classifying by simply reading such generic lists. In 1928, Kleist,[38] in his discussion about atypical or marginal psychoses, indicated that he did not include s̈chizoid psychoses,̈ which may correspond to schizophrenia, in this group because the diagnosis of schizophrenia is not based on the onset of certain regular syndromes (such as manic and melancholic syndromes in cycloid psychoses) but rather on mental impairment, which is expressed, for example, as psychomotor defect with inactivity in catatonia or affective devastation in hebephrenia. However, according to Goldar et al.,[39] the essential thing to note about hebephrenia is the extravagance, inappropriate behaviours, loss of cultural and community preventive values, which Minkowski[40] called p̈ragmatic dementiaänd attributed to schizophrenia in general. What would a ḧebephrenic syndromeb̈e like then? Hebephrenia is not diagnosed exclusively in a cross-section. It requires an evolutionary component, which is why it is a disorder that is hard to operationalise.[41] However, dimensional studies associate the bizarre behaviour and disorganisation with a poor outcome, which could suggest a new approach to this nosological problem.[42] Other authors[43,44] have described what they refer to as ä separate disease within the syndrome of schizophrenia,̈ which they call deficit schizophrenia, characterised by persistent primary negative symptoms, an insidious course of illness and poor response to treatment. Hebephrenia is probably part of this clinical form. But does this only apply to hebephrenia? The authors believe that the deficit/non-deficit dichotomy reduces the heterogeneity of schizophrenia. However, the problem is still the same: we have the measurements but not the paint, the detailed picture that justifies the statistics.

Advocating for hebephrenia: Kleist and Leonhard

One of the authors who worked most on Hecker's disorder was Kleist,[45] who, from the beginning of the last century, differentiated between three forms of hebephrenia: a silly or puerile form, a depressive form and an apathetic form, which included simple schizophrenia. Later, Leonhard[46] confirmed Kleist's three variants, which he called puerile hebephrenia, eccentric hebephrenia and flat hebephrenia, respectively, and also added a fourth category, autistic hebephrenia. In short, puerile hebephrenia is characterised by aimless laughter, "child-like mischief", affective and ethical blunting and episodes of dysthymia. Such episodes and affective blunting are common to all types of hebephrenia. Eccentric or bizarre hebephrenia exhibits a uniform and plaintive discontent, stereotypical, frequently hypochondriacal complaints and unusual mannerisms. Flat hebephrenia is characterised by a carefree contentment and marked apathy. Finally, autistic hebephrenia is characterised by undecipherable mimicking, brief, evasive responses, bad moods and isolation. Hallucinations and delusions, if present, are in the background. Combinations of these pure forms may occur. The distinctive or c̈rystallisedsymptoms of hebephrenias are slow and progressive. Initial symptoms are accessory and non-specific and therefore their progression is similar to that of neurodegenerative diseases.[47] According to Leonhard's hypothesis, a specific cerebral system is affected in hebephrenia, in this case related to affective traits. It therefore forms part of s̈ystematic schizophreniasẗogether with chronic catatonia and paranoid or paraphrenic forms. Leonhard refers to flowering schizophrenic disorders, in which several systems are affected, as äsystematic schizophrenias.̈ Common characteristics of systematic schizophrenias include an insidious and progressive course of illness, few symptoms and low family burden. Asystematic schizophrenias, however, generally have flares, are polymorphous and have a high family burden. It must be remembered that Leonhard believed that the name schizophrenia was only kept out of tradition but he considered that each of the varieties that he described were independent diseases. The specific affective impairment of hebephrenias is not linked to the most elementary feelings, which Leonhard[48,49] called direct (sensory and instinctive) feelings, but rather to indirect feelings, which are not related to the current situation but to the discernment of what may occur or be relevant to the individual (also known as judicative feelings) and whose increase generates the greatest future-oriented mindset of willingness, which goes beyond momentary interests. This hypothesis has been studied in more detail by other authors.[50,51] From

a clinical point of view, Kleist's and Leonhard's hebephrenias are different from the usual diagnostic system criteria because the descriptive emphasis is on both their symptoms and their outcome and prognosis. In this sense, they combine the original emphasis placed on prognosis by Kraepelin and the value given by Wernicke to the precise symptoms. The advantage of a highly-differentiated psychopathological classification, like the Leonhard classification, is that it allows more homogeneous cases to be grouped together for investigation, especially when the main categories are used.[28] Although a lot of training is required, its complexity has not prevented it from having a high inter-rater reliability coefficient[52] and from demonstrating the symptomatic stability of the different disorders, their clinical course and prognosis over the decades[53–55] and the presence of incipient biological validation elements.[56–58] Response to drug treatment has so far been unsatisfactory for modifying nuclear symptoms.[59] The stability of Leonhard's hebephrenias contrasts with the variation of the subcategories of schizophrenia observed in investigations conducted with other diagnostic systems.[60,61] The detailed description of the systematic catatonic disorders that may, in certain cases, be confused with hebephrenias or integrate a residual diagnostic category with hebephrenias and with periodic catatonic defects (asystematic) is also interesting.[28] This is due to the fact that certain almost unknown psychomotor phenomena are often overlooked if they are not actively looked for (e.g. proskynesis) and the fact that the disturbances of volition in systematic catatonia is similar to the affective flattening of hebephrenics.[62] Nevertheless, the marked differences between clinical symptoms should prevent such diagnostic errors in most cases. A meticulous statistical paper based on a grade of membership analysis determined three pure types of schizophrenia: simple, paranoid and a combination of hebephrenic and catatonic elements.[63] These types are not separable in patients with long-term disorders. The authors suggest that Hecker alluded to the occurrence of catatonic phenomena in his original description. We must disagree with this point as there is nothing even closely resembling catatonia in his 1871 article. Furthermore, on pages 419–420, Hecker[1] states: "I said before that not all cases of mental illness presenting around the age of puberty are hebephrenic. So, for example, *Vesania typica* and also, more importantly, the catatonia established by Kahlbaum often appear at the same age and are essentially different from hebephrenia due to their course of illness and symptoms". Unless unusual mannerisms and excitement are considered exclusive signs of catatonia, there is no reason to maintain that Hecker alluded to catatonic symptoms in his paper. Characterisation of a case of hebephrenic-catatonic schizophrenia can be recognised in French psychiatry from the last century. Baruk[64] suggested that Kahlbaum's catatonia was totally different from schizophrenic hebephrenia-catatonia because this presented with no posturing or negativism or neurovegetative changes. Hebephrenia-catatonia is characterised by a state of indifference and apathy with some automatic obedience and some vague posturing. Ey et al.[65] renamed the catatonia described by Kahlbaum[66] in 1874 hebephrenia-catatonia. In the USA, Pfohl and Winokur[67] reviewed 52 clinical records of long-term patients who had been diagnosed as hebephrenic in an earlier study called Iowa 500.[68] Out of 200 schizophrenic patients, 103 were diagnosed as hebephrenic but this group was referred to as hebephrenic-catatonic because they presented with motor symptoms throughout the recorded progression. Of the 103 clinical records, 52 had sufficient information for the study. The definition of hebephrenic schizophrenia used by the authors includes motor symptoms with hebephrenic or catatonic traits. Such motor symptoms include unusual mannerisms and bizarre behaviour. Unfortunately, no detailed description of a typical case of hebephrenia-catatonia that would give a more precise idea of the disorder was provided. It would not be surprising if systematic catatonias had been included in this group. It must be remembered at this time that unusual mannerisms form part of Hecker's and Leonhard's hebephrenia and that stuporous episodes may appear in any endogenous psychosis as described by Kraepelin.[69]

Taylor et al.[70] consider that the concept of schizophrenia has failed and that the construct that best fits the medical model due to being more homogeneous, with distinctive and reliable clinical characteristics and with a consistent course of illness and response to treatment, is hebephrenia. This is therefore closer to Kraepelin's original concept of dementia praecox.[71] Hebephrenia is not a schizophrenia subtype, according to the authors, but the very same schizophrenia. Replacing schizophrenia with hebephrenia would have beneficial consequences for research. This homogeneous disorder known as hebephrenia is in the same line as the deficit schizophrenia mentioned above and is partly in line with Leonhard's systematic schizophrenias. It is perhaps time to incorporate various psychiatric traditions into polydiagnostic studies and not to restrict intellectual and material resources to projects using an invalid operational diagnostic system. In this sense, the abolition of schizophrenia is welcome.

Conclusions

Kahlbaum-Hecker's hebephrenia has suffered from the historical ups-and-downs of the wavering field of psychiatry. It went from being a paradigmatic model illness to its complete abolition at the start of this century thanks to the naming chaos of the 20th century. Unexpectedly, the concept of hebephrenia has begun to be re-assessed in recent years because it offers the necessary consistency for the study of long-term disorders with an unfavourable prognosis. The deficit schizophrenia of Carpenter et al.,[42] the hebephrenia described by Taylor et al.[70] and the hebephrenias of Leonhard[46] (and his systematic schizophrenias in general) form part of this new episode, which we hope will bring the results that medicine has been demanding from our specialty for over 150 years.

Conflicts of interest

The authors have no conflicts of interest to declare.

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