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100 Years of DSM-III Paranoia

How Stable a Diagnosis Over Time?

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Summary. Modified stricter criteria for DSM-III paranoia were fulfilled by 63 (37%) of 169 Heidelberg probands given a diagnosis of "Case Record Paranoia" (CRP) during a 100-year period (1878–1977). Clinical findings were chiefly interpreted in light of the controversial issues of age, illness duration and type of delusional content pertinent to the formulation of a present-day valid definition for this disorder. With respect to diagnostic consistency over time, 56% of DSM-III paranoia cases with at least one further Heidelberg admission proved to be non-stable, non-consistency being overwhelmingly due to a change in a DSM-III schizophrenic direction.

Key words: Paranoia – Delusional disorder – DSM-III – Diagnostic consistency

Introduction

The term paranoia has a rather long and checkered history in psychiatry (Lewis 1970; Munro 1982). Recently, Kendler and Tsuang (1981) reviewed the various clinical concepts historically associated with paranoia from the point of view of the criteria that have been used to define them. Their analysis made it clear that Kraepelin's (1899, 1903/04, 1909/13) concept, one which evolved from the sixth to the eighth edition of his textbook, was descriptively the most carefully thought out of all. Basically, two features can be considered central to his definition of paranoia. First, the insidious development of an unshakable delusional system of non-bizarre quality, usually without recovery, but with a chronically progressive course; and second, the absence of genuine hallucinations, thought disorder, disturbed volition or personality deterioration.

At present at least three sets of inclusion and exclusion criteria are proposed for diagnosing paranoia. Winokur (1977) published criteria for what he termed delusional disorder, Kendler (1980) for an entity he called simple delusional disorder, and DSM-III (American Psychiatric Association 1980) included paranoia as a sub-group of the non-schizophrenic paranoid disorders. However, it remains a moot point as to which of these modern definitions most closely approaches Kraepelin's fully evolved concept. The purpose of this paper, then, is to examine some aspects of this clinical issue by applying modified stricter DSM-III criteria for paranoia to an appropriate sample of all paranoia and paranoia-related states, including some diagnosed in patients seen by Kraepelin, Mayer-Gross and Schneider, from the same clinic during a period of 100 years.

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Materials and Methods

We examined the diagnostic books of the Heidelberg Psychiatric University Clinic year by year from its opening in 1878 up to and including 1977 in order to extract all patients given a diagnosis of paranoia. Aside from the term paranoia itself, the following were also deemed acceptable as being clinically equivalent or states closely related to paranoia: paranoid development, pathological jealousy development, sensitive delusional state in Kretschmer's (1966) sense, pathological litigious development. All patients discharged with any of these diagnoses were said to have "Diagnostic Book Paranoia" (DBP). Other diagnostic expressions, however, which primarily focused on short-term acute reactive or/and personality aspects that had always been present such as paranoid episode, paranoid reaction, sensitive reaction, delusional-like reaction and paranoid personality were dropped from consideration.

The search revealed a total of 217 patients with DBP. Unfortunately, the case records of 30 DBP probands could not be located, 15 actually had a non-paranoia discharge diagnosis in their case records, and 3 case records could not be used because they lacked adequate information or could not be read. This left a total of 169 probands with "Case Record Paranoia". (CRP). These were further scrutinized in terms of modified DSM-III criteria for paranoia and the reasons for exclusion of those not fulfilling the criteria systematically documented.

In contrast to DSM-III we were stricter in that the appearance of any kind of hallucination at any time, even when non-prominent, sufficed for exclusion. The same was true for the presence of a full affective syndrome at any time or any duration, the specific DSM-III nuances of chronology in this respect being disregarded. Our definition of "organicity" also cast a rather wide net; aside from an obvious organic brain syndrome, illnesses or health problems seriously impairing everyday social functioning, e.g. deafness or being very hard of hearing, were considered grounds for exclusion. Aside from the psychotic phenomena of DSM-III's A criterion for schizophrenic disorder, the first rank symptom of delusional perception (Schneider 1971) as well as its variant "Personenverkennung" or misidentification of person (Huber et al. 1979) were also viewed in terms of exclusion symptomatology. Although the presence of delusional litigiousness, delusional erotomania or delusional megalomania alone was sufficient reason for exclusion, their concomitant occurrence with the "right" kind – in DSM-III's view – of delusional persecutory and/or jealous content merited a positive rating or inclusion.

Thus, CRP probands fulfilling the modified criteria for DSM-III paranoia represented the starting point for an analysis

of some of the controversial aspects surrounding the present DSM-III concept. These issues primarily involved duration, type of delusional content and the necessity of an age requirement. And since these CRP patients represented a sample of very narrowly defined non-hallucinatory paranoia, they particularly lent themselves to an examination of the central question of whether or not paranoia is a stable diagnosis over time.

Results

Of 169 Heidelberg patients with CRP, 63 (male: 40; female: 23) or 37% fulfilled the modified DSM-III criteria for paranoia (= CRP-positive). The grounds for the exclusion of the remaining 106 probands with CRP from a DSM-III diagnosis of paranoia (= CRP-negative) are listed in Table 1. In the overwhelming majority of cases rejection was due to more than one cause.

A very high proportion (57%) of the CRP-negative probands were excluded because of the presence of hallucinations; they fulfilled at least one of the A3, A4 or A5 criteria of DSM-III schizophrenic disorder or presented with some other so-called "non-schizophrenic" hallucination. On the other hand, only 7% and 9% were dropped due to DSM-III A-criterion-oriented bizarre delusions (A1) or incoherence/marked loosening (A6) respectively as defined for schizophrenic disorder; however, 20% were excluded because of the presence of a delusional perception and/or misidentification of person. Furthermore, 7% of CRP probands negative for DSM-III paranoia were rejected because delusions were lacking (ideas of reference were not considered as delusional equivalents) and 4% were discarded because of the presence of the "wrong" type, according to DSM-III, of delusional theme in the absence of delusional persecutory and/or jealous content.

With respect to so-called non-psychotic grounds for rejection of CRP-negative probands Table 1 shows that the corresponding rate because of a manifest DSM-III full affective syndrome was 20% (manic: 6%; depressive: 14%). Moreover, a high 32% were excluded because of relevant "organicity". Interestingly, 10% of CRP-negative patients would have been positive expect for the fact that their delusional illness was less than 6 months but at least 1 week in duration at index admission, such cases being diagnosed as acute paranoid reactions in DSM-III.

Some clinical data of importance to the issue of what criteria should be used to define paranoia are presented in Table 2. Of the CRP-positive probands, 95% fulfilled the modified criteria for a diagnosis of DSM-III paranoia on first admission to Heidelberg. The greatest number of such admissions occurred between the ages of 31 and 40 years (30%) and 41 and 50 years (38%). For the four remaining age segments the percentages ranged much lower (3% to 13%); only 8% were first admitted after the age of 60 years. That the nature of CRP-positive illness in the majority was indeed very chronic, not one just managing to meet the 6-month duration criterion, was buttressed by the fact that 35% had been delusionally ill for 5 or more years and 70% and 87% for at least 2 years and 1 year respectively prior to the first DSM-III paranoia index admission. As for the presenting delusional themes, 62% had only persecutory and 21% only jealous content, whereas 18% manifested both kinds of content. Moreover, in 15 cases (24%) the themes of persecution and/or jealousy were coupled with delusional litigious, erotomanic or megalomanic content.

Table 3 gives a breakdown of some findings relevant to the question of whether or not the diagnosis of a modified form of DSM-III paranoia demonstrates consistency over time. Of the 63 CRP-positive probands, 25 (male: 14; female: 11) or 40% had at least 1 more admission to Heidelberg; in all, there were

Table 1. Exclusion grounds in negative CRP[a]

Total number of CRP-negative probands	106
No delusions present[b]	7 (6.6%)
"Wrong" type of delusional content[c]	4 (3.8%)
Emotion/behaviour not appropriate to delusional content	0
Duration less than 6 months	11 (10.4%)
Had bizarre delusions[d]	7 (6.6%)
Had incoherence/marked loosening[e]	9 (8.5%)
Delusional perception and/or misidentification of person	21 (19.8%)
Presence of any kind of hallucination at any time[f]	60 (56.6%)
Presence of affective syndrome at any time[g]	21 (19.8%)
Manic	6 (5.7%)
Depressive	15 (14.1%)
Presence of relevant "organicity"	34 (32.1%)

[a] For many cases more than one cause for exclusion present.
[b] Simple ideas of reference unacceptable as delusional equivalent.
[c] = Fulfilled A2 criterion of DSM-III schizophrenic disorder.
[d] = Fulfilled A1 criterion of DSM-III schizophrenic disorder.
[e] = Fulfilled A6 criterion of DSM-III schizophrenic disorders.
[f] = Fulfilled A3 and/or A4 and/or A5 criteria of DSM-III schizophrenic disorder and/or other kind of "non-schizophrenic" hallucination.
[g] = Fulfilled DSM-III criteria for full depressive or manic syndrome.

Table 2. Some descriptive data on positive CRP

Total number of CRP-positive probands	63
Age at 1st CRP-positive admission	
15–20 years	2 (3.2%)
21–30 years	8 (12.7%)
31–40 years	19 (30.2%)
41–50 years	24 (38.1%)
51–60 years	5 (7.9%)
61–70 years	5 (7.9%)
First diagnosis of positive CRP	
At 1st admission	60 (95.2%)
At 2nd admission	1 (1.6%)
At 3rd admission	1 (1.6%)
At 4th admission	1 (1.6%)
Delusional themes	
Only persecution[a, b]	39 (61.9%)
Only jealousy	13 (20.6%)
Both themes[c]	11 (17.5%)
Duration of illness before 1st CRP-positive admission	
6–12 months	8 (12.7%)
1–2 years	11 (17.5%)
2–3 years	10 (15.9%)
3–4 years	7 (11.1%)
4–5 years	5 (7.9%)
5–10 years	10 (15.9%)
10–15 years	8 (12.7%)
15+ years	4 (6.3%)

[a] 8 also had delusional litigious content.
[b] 2 also had delusional megalomanic content.
[c] 5 also had delusional erotomanic content.

Table 3. Diagnostic stability over time in positive CRP

Total number of CRP-positive probands	63
CRP-positive probands with further admission (= PFA)	25 (39.7%)
Number of further admissions	62
Before the CRP-positive diagnosis	7 (11.5%)
After the CRP-positive diagnosis	54 (88.5%)
Diagnostic stability in CRP-positive PFA	
Number of stable cases	11 (44%)
Description of stability	
2[a] = paranoia[b]	7
2–3 = paranoia[b]	3
2–4 = paranoia[b]	1
Diagnostic non-stability in CRP-positive PFA	
Number of non-stable cases	14 (56%)
Description of non-stability	
2[a] = schizophrenia[c]	4
2–3 = schizophrenia[c]	1
2–6 = paranoia[b] + 7–9 = schizophrenia[c]	2
2–7 = paranoia[b] + 8–11 = schizophrenia[c]	1
2 = paranoia[b] + 3–4 = schizophrenia[c]	1
2 = borderline + 3 agitated depression[d] + 4 = schizoaffective[c]	1
1 = schizophrenia[c] + 2 = paranoia[b]	2
1 = depressive neurosis[d] + 2 = chronic endogenous depression[d] + 3–4 = paranoia[b]	1
1–3 = schizoid personality + 4 = paranoia[b]	1

[a] Numbers refer to 2nd, 3rd, 4th admission and so on.
[b] = Fulfilled modified DSM-III criteria for paranoia.
[c] = Fulfilled DSM-III criteria for schizophrenic disorder.
[d] = Fulfilled DSM-III criteria for major depressive disorder.

62 further admissions. When diagnostic consistency was determined on the basis of CRP-positive probands with at least 1 further admission, the diagnostic stability to non-stability relationship was 44% to 56%. Moreover, if one assumes that CRP-positive patients with only a single index admission actually remained diagnostically stable after discharge, calculations then carried out on the basis of all 63 probands with positive CRP would show stability rising to a very high 78% and non-stability falling to a correspondingly low 22%. In those 14 cases of paranoia presenting with diagnostic non-consistency the tendency was to go in the direction of DSM-III schizophrenic disorder 71% of the time; with respect to the remaining cases, 2 initially schizophrenic, a 3rd beginning as an affective disorder, and a 4th with a diagnosis of schizoid personality at first index admission, shifted to paranoia on some further admission.

Discussion

There are three important differences relating to the issues of age, duration of illness and type of delusional content between DSM-III paranoia and our own modification of the DSM-III criteria, on the one hand, and Kendler's (1980) and Winokur's (1977) definitions, on the other. First of all, the latter authors both state that the onset of (simple) delusional illness (paranoia) must occur before the age of 60 years; the criteria for DSM-III paranoia make no such stipulation. Even if our definition had incorporated their age requirement, only a very low 7% of the original 169 probands with CRP would have had to be excluded for this reason alone; as for the 63 CRP patients actually positive for modified DSM-III paranoia only 8% also happened to be older than 60 years at first index admission.

Secondly, whereas Winokur allowed the delusion to have been present for any length of time prior to diagnostic assessment and Kendler demanded at least a period of 2 weeks, DSM-III firmly required a 6-month duration of delusional illness for paranoia. In our sample the greater part of the original group of 169 CRP probands certainly suffered from an illness in a chronic direction since only 11 (7%) had to be excluded for falling under the 6-month time limit. And of the 63 CRP patients positive for DSM-III paranoia, 35% presented with a duration of delusional illness longer than 5 years and 87% had already been ill for at least 1 year before the first paranoia index admission.

A third point concerns the fact that Kendler and Winokur did not restrict the type of allowable content to be found in the non-bizarre delusions of paranoia; in addition, Kendler even considered the mere presence of ideas of reference to be a sufficient inclusion criterion. On the basis of the restrictive DSM-III type of delusional content criterion for paranoia only a very low 2% ($n = 4$) of the original 169 CRP probands had to be rejected because of the "wrong" kind of content; a further 4% ($n = 7$) were dropped from consideration because, unlike Kendler, simple ideas of reference were not acceptable as a substitute for an unequivocal delusion. With regard to the 63 CRP-positive probands presenting with the "right" kind of content, 24% ($n = 15$) were simultaneously coupled with the "wrong" type of litigious (13%), erotomanic (8%) or megalomanic (3%) content.

Despite using a delusional content exclusion criterion and not drawing upon age as an exclusion requirement (this in contrast to Kendler and Winokur), our CRP-positive sample was neither noticeably decreased nor enlarged, respectively. Otherwise, we applied exclusion criteria just as strict as those of Kendler and Winokur with regard to hallucinations, a full affective syndrome and the range of schizophrenic symptomatology, on the one hand, but stricter criteria for duration of illness and background "organicity", on the other. This allowed us to reasonably assume that our modified stricter version of the DSM-III definition of paranoia probably made it just as narrow or even narrower than their concepts.

On the basis of these considerations, it seems useful to compare the diagnostic consistency of our sample of non-hallucinatory paranoia with samples found in four other modern investigations that also examined diagnostic stability and utilized relatively narrow concepts (Faergeman 1963; Johanson 1964; Retterstol 1966, 1970; Winokur 1977). In these studies, only a low 3%–22% of the probands involved developed symptoms of schizophrenia over time, that is, proved to be diagnostically non-consistent. On the other hand, none of these newer studies suggested that more than 6% of paranoia patients manifested clear-cut affective syndromes during the further course of illness. These findings contrast sharply with Kraepelin's (1909) own clinical impressions. An extremely high 80% of his cases originally diagnosed as paranoia went on to dementia praecox (ca. 40%) or paraphrenia (ca. 40%); the remaining 20%, a group he called core paranoia, remained stable.

Our own findings with respect to diagnostic consistency on the basis of probands with a modified diagnosis of DSM-III paranoia and with more than one admission to Heidelberg were clearly in the middle range when compared with the older and more modern rates just mentioned. Indeed, 56% of

our cases proved to be non-stable; of these 71% tended to ultimately be diagnosed as DSM-III schizophrenic disorder whereas only 14% developed a full affective syndrome at some time in the course of their illness. Of the four recent studies cited, Winokur's definition of paranoia (delusional disorder) and his sample size (n = 29) both come closest to the criteria we used and the number of our paranoia probands with at least a second admission to Heidelberg (n = 25). Perhaps the evident discrepancy with respect to diagnostic non-consistency, Winokur's low 6% to our high 56%, can be explained, partially at least, not only by our assumed stricter definition but also by the fact that only 34% of his patients had a follow-up of more than 2 years whereas this was the case in 70% of our patients.

Since the rejection rate among the 63 CRP-positive probands would have been rather low (8%) if we had applied Kendler's and Winokur's under 60 years of age requirement and that of the original 169 CRP patients was actually even lower (4%), we see no objection to accepting an age criterion of this kind and/or dropping the insistence on particular content. As Kendler (1981) has stressed with respect to this latter issue, the type of delusional content is not predictive of outcome in paranoid psychosis. Recently, Spitzer and Williams (1983) have admitted that the limitation of delusional content in paranoia was a mistake, that on this point they and DSM-III's developers had "goofed".

On the other hand, however, the DSM-III chronological criterion of 6 months or even one of greater length, say, 1 to 2 years, might be more appropriate than stipulating no duration (Winokur 1977) or only one of at least 2 weeks (Kendler 1981). For Kraepelin, paranoia was essentially a chronic progressive illness, paradoxically even in those few instances where isolated attacks of delusions occurred. Indeed, in our own sample the overwhelming number of the 106 and 63 CRP probands negative and positive for modified DSM-III criteria for paranoia respectively clearly suffered from a very chronic illness before index admission (e.g. 70% of CRP-positive patients had 2 years of prior illness).

At any rate, aside from chronological considerations such as these when formulating a definition for paranoia, other criteria could also be carefully weighed depending on whether one wishes to view paranoia in terms of being a very infrequent diagnosis or not. If the answer is in the direction of greater rarity, the criteria reflecting more subtle aspects of psychopathology, e.g. the dimensions of delusional experience (Berner et al. 1972; Kendler et al. 1983) and perhaps those related to certain aspects of pre-morbid personality may prove helpful in insuring that patients are chosen adhering as closely as possible to Kraepelin's classical picture of paranoia.

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