DEMENTIA PRAECOX OR SCHIZOPHRENIA, AND THE DIAGNOSIS OR DIFFERENTIAL DIAGNOSIS OF THE DISEASE

BY

T. A. VAN DYK, B.Sc., M.A., H.E.D., D.Litt. et Phil. (S.A.)



PUBLIKASIES VAN DIE UNIVERSITEIT VAN DIE NOORDE PUBLICATIONS OF THE UNIVERSITY OF THE NORTH

Reeks / Series C No. 4

Publikasiekomitee van die Senaat:

Publications Committee of the Senate:

Prof. dr. M. W. Smuts (Voorsitter/Chairman)

Prof. dr. D. R. Janse van Vuuren (Ondervoorsitter/Vice-Chairman)

Prof. dr. H. van der Merwe (Sekretaris/Secretary)

Prof. dr. W. Bertelsmann

Prof. P. J. Heiberg

Mnr. W. J. Botha

Die Universiteitsbibliotekaris/The University Librarian (ex officio)

Mnr. D. F. P. du Toit

Die menings hierin uitgespreek, is dié van die skrywer en nie noodwendig dié van die Universiteit of van die komitee nie.

The views expressed in this publication are those of the writer and not necessarily those of the University or of the committee.

Die publikasies van die Universiteit van die Noorde omvat die volgende reekse:

The publications of the University of the North comprise the following

Reeks A

Bydraes van personeellede en nagraadse studente.

Reeks B

Lesings deur gassprekers.

Reeks C

Intreeredes.

series:

Series A

Contributions by members of staff and post graduate students.

Series B

Lectures by guest-speakers.

Series C

Inaugural addresses.

DEMENTIA PRAECOX OR SCHIZOPHRENIA, AND THE DIAGNOSIS OR DIFFERENTIAL DIAGNOSIS OF THE DISEASE

Inaugural Address

by

T. A. VAN DYK, B.Sc., M.A., H.E.D., D.Litt. et Phil. (S.A.)

REEKS / SERIES C No. 4 1961



PUBLIKASIES VAN DIE UNIVERSITEIT VAN DIE NOORDE PUBLICATIONS OF THE UNIVERSITY OF THE NORTH Reprint 1973.

ISBN 0 949992 21 6

Northern Press, Pietersburg E-1995

DEMENTIA PRAECOX OR SCHIZOPHRENIA, AND THE DIAGNOSIS OR DIFFERENTIAL DIAGNOSIS OF THE DISEASE

A. Historical Perspective, Concepts and Approaches.

"Démence précoce", meaning premature insanity, is a concept which was already used as early as 1860 by the French psychiatrist Morel. He published a description of the mental condition of a 14 year old boy which sharply distinguished itself by the exceptional mental deterioration and loss of memory which accompanied it.¹⁾

The German authority, Sander, astounded the psychiatric profession in 1868 with a lucid exposition in which he gave a clinical picture of paranoia. In the meantime this concept had come from Hippocrates, while Esquirol in 1838 had already made use of the term "monomanie" in the description of a condition characterized by systematized persecutory ideas.²⁾

In 1872 Hecker entered the field with the publication "Die Hebephrenie", in which he gives an outline of a puberty psychosis ending in a rather rapid deterioration.³⁾

Kahlbaum, both a contemporary and a countryman of Sander and Hecker, came to light in 1674 with a monograph entitled "Catatonia" in which, at the same time, he contributed the concepts of "symptom complex" and "verbigeration" to the terminology of psychiatric literature. An equally formidable clinical picture was provided by Kahlbaum in this monograph.⁴⁾

After the death of Morel in 1874 leadership in the field of psychiatry, hitherto held by the French, shifted to Germany. Indeed, during the second half of the 19th century, this field was characterized in Germany by an ever-increasing accumulation of diagnoses and publications. As a result of this, there arose—particularly in German psychiatry, which in contra-distinction to the French school laid more emphasis on the psychoses—a dynamic tendency, actually an ambition, to classify this verbose mass of literature. In fact it reached such ridiculous proportions that the composer Berlioz was prompted to remark that on completion of their respective studies the rhetorician expressed his eloquence by the writing of a classification. (5)

Many of these classifications soon passed into oblivion. In the last quarter of the 19th century, however, a youthful student came to the fore who was destined to inscribe his name in bold letters across the history of psychiatry, namely Kaepelin.⁶⁾

Like many of his predecessors and particularly his contemporaries, Kraepelin was an advocate of the biological approach in psychiatry. He assumed, fundamentally, that the majority of mental diseases were biologically predetermined.

In accordance with the biological method, Kraepelin did not regard the individual, but searched in the mass of case histories that he had collected for consistent and conspicuous phenomena, otherwise he could not have arrived at a clear picture of a mental disease as a whole. Through partly following the lead of Kahlbaum, his classification of mental diseases was dichotomic. He grouped together those caused by external conditions, which were therefore curable, and those which developed as a result of inherent constitutional factors and were consequently incurable.

Kraepelin regarded the concept of dementia praecox as a composite nosological entity, comprising the four forms known as *simplex*, *hebephrenia*, *catatonia* and *paranoid*, each of which in fact was only one disease entity. The essential feature of this disease — deterioration culminating in dementia — was in his opinion correlated with the degeneration and disruption of the integrated functions of the psyche — the emotional, volitional and intellectual.

The finer details of the original formulation of this disease, were, with the passage of time, modified in some degree by Kraepelin. To the end of his life in 1926 he believed, however, that dementia praecox was a nosoligical entity, biological in its nature, and overwhelmingly determined by hereditary factors. Indeed, the fundamental pattern of the disease, according to him, is attributable to some type of metabolic disturbance — some chemical abnormality — in the physiology of the body.

In this concept of Kraepelin's, in which the work of his predecessors (who also stressed the inevitable degeneration of the disease) clearly culminates, there is implicit the unitary theory⁷⁾ of dementia praecox in which the nuclear or process nature of the disease is premised.

Despite this presentation of the condition, however, Kraepelin, at a Congress in 1898, where he read a paper entitled "The Diagnosis and Prognosis of Dementia Praecox", admitted the fact that 13 per cent of all cases suffering from the disease do recover without any notable defect — despite the fact that the disease has such a degenerative course. This admission immediately evoked opposition from such professional experts as Ernst Meyer, Korsakof, Serbski and others. Amongst others, Serbski's objection was not without grounds: "Should we con-

sider those recovered cases, cases of deterioration without deterioration, or dementia without dementia?"8)

This terse question on the part of Serbski reflects directly on the whole nature of the problem as we still encounter it today, namely that all patients suffering from dementia praecox do not deteriorate and ultimately lapse into dementia. Zilboorg and Henry⁹⁾ give a fine corrobation in this respect: "It is of more than passing interest to note that the infleunce of French psychiatry on the Germans can be traced to the very end of the nineteenth century and directly into the Kraepelinian system itself, despite its originality. The most outstanding feature of this originality, the prognostic approach, proved a double-edged sword. It threatened for a while to retard the whole course of psychiatric progress and perhaps could have, had it not been for the later work of Kraepelin's contemporary, Eugen Bleuler (1857—1939) . . . "

As indicated by Serbski's objection, this doubt relative to Kraepelin's view on dementia praecox grew with the passage of time.

More than any of his predecessors or successors, it was the Swiss psychiatrist, Bleuler, who most modified the exposition of Kraepelin. Unlike Kraepelin, however, Bleuler came under the sphere of influence of Freud — hence he paid more attention to the individual and consequently the content of the symptoms of individual patients. And though Bleuler later broke away from Freud, he remained partially under the infleunce of the psycho-analytic school. Justifiably, Zilboorg and Henry¹⁰) have attributed to Freud the most important contribution to the psychiatry of the 20th century. Bleuler's weighty monograph on dementia praecox¹¹) — the product of many years of conscientious research — utilised both the psychoanalytic interpretation of the emotions and the concepts of psychological association.

In this work, briefly embodied later in his handbook on psychiatry,²¹⁾ Bleuler put forward his own concepts on dementia praecox. For him the clinical picture comprised a group of syndromes and definite disease processes which he called "schizophrenias" — hence Bleuler's so well-known name for this multifarious disease, namely, "schizophrenia".

Bleuler did not believe that the disease necessarily began at an early age, nor for that matter that it must end in degeneration and dementia. He emphasized the splitting of the personality, in particular the disturbed relationship between the intellectual and emotional facets of the personality. In so far as the psychodynamics of the disease were concerned, Bleuler stressed the following fundamental symptoms: 13) disturbances of association, which lead to a process of total mental confusion; disturbances of affect; ambivalence; autism; disturbances of attention and will and schizophrenic dementia. As accessory symptoms⁴¹⁾ he names hallucinations, delusions and illusions; disturbances of memory, speech and writing; and the catatonic symptoms, among others, catalepsy, stupor, hyperkinaesthesia, stereotypy, mannerisms and negativism.

Bleuler's exposition differed further from the classical attitude in that he took cognizance of environmental factors. But despite the prominent psychological impact of his psychopathological concept of schizophrenia — more declaratory than explanatory, by contrast with that of Kraepelin — he believed just as did Kraepelin that the aetiology of schizophrenia lay in a disturbed biology of the body. Moreover, Bleuler was of the opinion that the psychosis often got out of hand because the psychological disturbances developed independently of pathological life experiences. "He claimed that the schizophrenic thinking process is of organic nature and 'less a deficiency than an intoxication'."

Some years ago Cameron, 16) reverting to Bleuler's approach, drew attention to the fact that the reformulation of the concept (of schizophrenia) by Bleuler had lent added impetus to research into the condition, but despite this had still fallen short, due to a vital defect. Bleuler could not relinquish the belief that it would some day be determined that dementia praecox is a disease of the brain. To American psychiatry this dogmatic adherence on the part of Bleuler to the physical viewpoint was a disappointment, especially in view of the fact that the humanitarian and practically pure therapeutic approach of Freud had nowhere else in the world taken root so strongly as in the U.S.A.

To sum op the foregoing discussion briefly: The constant emphasis on the progressive nature of dementia praecox and the inexorable deterioration and dementia by which it was accompanied, is a characteristic feature of classic psychiatric literature. Against this, with the passage of time, speculation has arisen as to whether this undermining disease process should be assumed to be equally at work in all forms of dementia praecox since some patients seem to recover without notable defect. We thus discern, respectively, the unitary theory of dementia praecox (chiefly Kraepelin) and the postulation of the disease as being multifarious (chiefly Bleuler). Both these authorities, however, regarded the disease as being of organic

origin, and — especially as the literary records usually do not refer to it — the speaker would like to recall that Kraepelin did not assert that all dementia praecox sufferers ultimately lapse into a condition of deterioration and dementia.

Adolf Meyer, who established himself in America in 1892, came into the lead in 1906 with his psycho-biological approach to schizophrenia.¹⁷⁾

Meyer did not regard the psychosis so much as a disease process but rather as an abnormal reaction to life-experiences — a condition of which many patients could be cured. What is usually termed dementia he describes as parergastic reaction type or parergasia — a condition characterized by odd, bizarre and disorganized behaviour and thinking.

The typical features which Meyer ascribes to schizophrenia are the following: destruction of judgment with no indication of delirium, manic depressive psychosis, hysterical or epileptoid disturbances; contradictions in the mood and general behavioural reactions of the patient; strange disturbances of attention; deterioration of functions based primarily upon instinct; and defective power of discrimination between what is real and what is unreal. Complementary to this Bellak offers this comment: "While the psycho-biological school believes that the parergastic behaviour is foreign to the normal waking life and is reminiscent only of archaic forms of behavior, it is believed that in essence all components are present in various degrees and on a continuum form the so-called normal to the full-blown psychotic".

From the foregoing it is clear the Meyer neither adheres to the psychoanalytic viewpoint nor to the views of Bleuler. For this reason Zilboorg and Henry²⁰⁾ maintain also that Meyer's theory does not bind itself to any other theory — and yet it is not eclectic. Rather, Meyer incorporated all available data into the framework of phenomena of pathological mental reactions. Meyer's most notable contribution to psychiatry, as well as the most important aspect of his system, lays in his extraordinary erudition and learning. In this connection he was one of the last representatives of an age which demanded that a psychiatrist be fully conversant, not only with the normal routine of dealing with patients, but also with the history of medicine and science.

Despite his psycho-biological approach, it cannot be denied that Meyer, in contradistinction especially to Kraepelin, but also to Bleuler, achieved the general acceptance of the psychogenic approach to schizophrenia (or of the schizophrenias) in America.

Indeed, Meyer made much of the defects of adjustments in the schizophrenic, that is of the disturbances of the bio-social reaction patterns, which so essentially determine personality make-up.

Once again, to summarize: Under the infleunce of such predecessors as Bleuler, Freud and especially Meyer, later American psychiatry distinguished itself by the development of knowledge relative to the functional aspects operating in the aetiology of schizophrenia. The fundamental view is that certain individuals, meeting life situations to which they experience difficulty in adjusting, withdraw themselves or strike some compromise — generally of an unsatisfactory nature. Beset with increasing problems, they give up the struggle and retreat into their own world of phantasy. As time goes on, this ill-fated defence mechanism becomes so strong that the patient achieves the satisfaction of his motives in a world of his own fabrication and the figments of his own imagination. He lives in a state of total unreality and his own ideas, desires and beliefs are projected onto other individuals in the environment. This progressive distortion and ultimately marked disruption of the function of the ego is thus the most outstanding feature of the disease.

In this brief historical survey, the pendulum can indeed be seen to have swung from the one extreme to the other. And the greater the deviation from belief in the purely physical causes of dementia praecox, the greater has been the weight attached to its psychic content. With this shift of emphasis a greater and deeper insight into the psychosis developed, but the speaker cannot refrain from remarking that Kraepelin's successors could not succeed in materially altering his formulation of dementia praecox or even in modifying it. Small wonder that Landis and Bolles,21) only a few years ago were still constrained to say: "His formulation (meaning that of Kraepelin) was so well put together that no one has subsequently been able to do more than shift the emphasis with respect to the importance of certain details". Bellak,22) a contemporary expert on dementia praecox, is also of opinion that the time has come to undertake a basic programme of research into the nature of schizophrenia which in essence still bears the stamp of Kraepelin.

Bleuler, one of Kraepelin's strongest critics, did not himself venture to reclassify or modify Kraepelin's classic sub-divisions. In the same way Bleuler's reformulation of the terminology involved was nothing new, for Kraepelin had already (as has been indicated) described to us the breaking up of the integrative

functions of the psychi. To the speaker the so-called "splitting of mental life" (Bleuler) is in any case more lucidly and scientifically described by the term "intra-psychic ataxia", the author of which is Stransky.²³⁾ Indeed, the term "splitting of metal life" has latterly been replaced to an increasing extent by the term "withdrawal symptom". Thornton, for example remarks: "Now whether Bleulerian terms as schizoid and schizophrenic are the most aptly chosen words for describing certain psychic phenomena is, in the author's opinion, still open to question. For whereas, from an etymological point of view, such terms intrinsically convey the idea, of 'split mind' or 'split personality', more and more in the jargon of psychiatry they have come to connote the recalcitrant tendency of schizoid and schizophrenic persons to break away from objective reality".²⁴⁾

Taking the foregoing into consideration, there is no justifiable ground in the mind of the speaker for the abandonment of the term "dementia praecox" given to us by Kraepelin and the substitution therefore of Bleuler's term "schizophrenia". In both psychiatry and psychology the identification of the clinical picture follows, overwhelmingly, the principle of the classic sub-division. Moreover, as appears from the most recent literature on the subject — which unfortunately cannot be dealt with here — there are now certain findings relating to the central and autonomic nervous system and the ductless glands, which indicate that an organic pathology cannot entirely be ruled out of the aetiology of the disease.

The following discussion in connection with diagnostic problems of the condition will perhaps further clarify the speaker's own point of view, as well as his views on terminological differences arising from the two terms "dementia praecox" and "schizophrenia".

B. Diagnostic Problems or Differential Diagnosis, and the Forms of Dementia Praecox.

The literature on dementia praecox appears to be very confusing, especially when it is read with an eye to diagnosis.

Cameron²⁵⁾ has correctly observed that an abandonment of the Kraepelinian types on grounds of invalidity will have to be followed by their immediate replacement with another classification, for without such a division the management of the disease would be extremely difficult. He feels that the unlimited variety provided in its symptomatology demands a form of classification and that the large numbers of schizophrenics make this possible. In view of the fact that the most striking and most important characteristic of schizophrenic disorganization,

according to Cameron, involves a disturbed relationship of the patient's attitude to society, we can begin by grouping schizophrenic patients in accordance with this relationship, viz: whether it is predominantly aggressive, submissive or detached". Under the aggressive schizophrenic reactions, the author differentiates between "persecuted", "grandiose" and "self-punitive" patients; under the submissive schizophrenic reactions, he differentiates between "compliant", "dedicated" and "transformed"; and under the detached schizophrenic reactions he differentiates between "avoidant" and "adient" patients. Considering the almost unlimited scope of our diagnostic problem as it is presented in the literature, the speaker cannot delve into too many details. It is not difficult, however, to appreciate that Cameron's detailed classification merely deals with superficial behavioural changes, which can only lead to confusion and vagueness. Indeed this always remains the case where the student does not confine himself to the classic subgrouping of Kraepelin. In their most recent work, Murphy and Bachrach²⁶⁾ differentiate between six schizophrenic reaction types. namely: "latent schizophrenic reactions," "simple schizophrenic reactions," "hebephrenic reaction types", "paranoid reaction types" and finally "unclassified schizophrenic reactions." In a still more recent work of Ewalt, Strecker and Ebaugh²⁷⁾ we make acquaintace with a further classification viz.: "schizophrenic reaction, simplex type"; "schizophrenic reaction, hebephrenic type": "schizophrenic reaction, catatonic type": "schizophrenic reaction, paranoid type"; "schizophrenic reaction, schizo-affective type"; "schizophrenic reaction, childhood type"; and alas, also "schizophrenic reaction, residual type".

From the available literature there can indeed be compiled an imposing array of classifications, the constituent types of which sometimes coincide with one another (usually in the classic sub-groups) but in other cases differ entirely. Many of the classifications bear witness more to the verbal intelligence of their authors than to their clinical knowledge or insight. Speaker does not believe that such a loose expansion of the classical categories can make any constructive contribution to the literature on the subject. Indeed, it merely adds to the spiral of confusion and blunders. Nevertheless, it seems as though research workers cannot refrain from the temptation of adding their own contributions — this in spite of the already existing mass of literature. Mainly, in view of the fact that the aetiology of dementia praecox is up to the present largely unknown, no classification can be justified to any extent, if it does not take into account the basic symptomatology involved. In the meantime it may be mentioned that such elaborations of Kraepelin's four sub-groups are not unknown in the earlier literature on the subject. Charpentier, 28) for example, differentiated no fewer than eleven sub-groups.

This disorderly picture must, to all intents and purposes, be attributed to the fact that the diagnosis of dementia praecox is by no means above suspicion. Kasanin, 29) for example, remarks that the diagnosis of the disease is still an emprical one, depending to a large extent upon the clinical intuition of the psychiatrist and not so much on perceptible factors. In this connection speaker would associate himself with Young,30) who points out that psychiatrists are very loath to make use of available and well-proved diagnostic testing devices (for example the Rorschach Test) to supplement their diagnoses. For the experienced psychologist or psychiatrist it is indeed not difficult to identify an advanced schizophrenic. However, it becomes a problem when an incipient case presents itself. Two such veterans as Piotrowski and Lewis31) also state that the majority of patients in the "State Psychiatric Institute of New York" had produced serious problems relating to differential diagnosis, because on admission their neurotic symptoms had been a great deal more prominent than the schizophrenic symptoms. These writers go still further and say that the difficulties of demonstration and differentiation in less serious forms of schizophrenia, are expressed in the old clinical assertion that psychiatrists who know their patients well find more causes of schizophrenia than those who do not know them so well. Real problems relevant to differential diagnosis, moreover, do not constitute the only reason for the identification of schizophrenics as neurotics. To the detriment of scientific accuracy some psychiatrists under certain circumstances purposely diagnose their patients neurotics, in order by so doing, to prevent further burdening of the patient's mind: a diagnosis of neurosis, namely, carries with it more hope.

On the occasion of the First National Psychiatric Congress which was held in Paris in 1950, the problem of the differential diagnosis of schizophrenia was brought under the magnifying glass. In this connection Langfeldt³²⁾ remarks that the question as to what was to be understood by the concept of schizophrenia constantly repeated itself. The same writer continues to say that during a study assignment which he undertook in the United States of America he had been struck by the divergent diagnostic concepts of schizophrenia held by the different clinics. But despite this, says Langfeldt, the two introductory speakers on the subject "The Sub-division of Schizophrenia" could find no reason for proposing any amendments to the classification originally made by Kraepelin. Against this, Langfeldt (as the third speaker) emphasized the necessity of differentiating

a special group of cases, where as a result of catamnestic study, the disease is indicated to have taken a course other than those characterized by the Kraepelinian symptomatology. These catamnestic studies to which Langfeldt referred would include his follow-up of hospitalized schizophrenics who were diagnosed as doubtful, but who received no treatment and were later discharged, together with a similar group of "typical" schizophrenics who were also admitted to the hospital. Langfeldt defines the schizophrenias as follows: "... as psychoses that as a rule (but not constantly) show an insidious development resulting in a gradual change of personality and with a typical initial symptomatology . . . on the whole the group coincides with the Kraepelinian dementia praecox groups". Continuing, the author points out that as early as 1937 he had indicated that all cases of schizophrenia should be investigated along the following lines: "Schizophrenia?" or "Schizophrenia??" (all according to the degree of doubt in connection with the diagnosis). For such doubtful cases he recommends the term "Schizophreniform psychoses".

Speaker feels this much, that if this proposition on the part of Langfeldt were to be followed, there would at least be less confusion in the literature on the subject. Many writers omit to mention whether their observations have been made relative to typical schizophrenia or not. Langfeldt's approach is healthy and is not based on a loose footing. That there are schizophrenics who do not deteriorate no serious research worker will dispute - as shown earlier Kraepelin had already drawn attention to this fact. It is, therefore, guite logical that efforts should be made to isolate these "atypical" cases - not within the scope of new categories, as has been the tendency, but by putting them into one group, contrary to the well-known groups of Kraepelin. Fortunately it may be said that there are a few other research workers who have exerted influence in this respect. Landis and Bolles93) mention, for example, that the weight of evidence — from all fields of research — indicates that the simplest manner to reflect on this problem is to regard it as a nuclear condition — a disease — which is complicated by a number of other complications which must be seen as "akin to dementia praecox".

In addition, attention must also be drawn to the work of Bellak,³⁴⁾ with whose view speaker identifies himself to a considerable degree. This writer and research worker gives a summary of 3,500 works which deal with all possible aspects of dementia praecox. His approach to the problem is psychosomatic and after a brilliant handling of the data, he comes to the following conclusion in his summing up: "Finally a change

in the diagnostic categories is suggested. It is believed that schizophrenia, of a more prominently psychogenic nature and a more often benign course, be differentiated from the more classical and possibly more constitutionally determined dementia praecox".

This is more or less the diagnostics viewpoint, and as indicated earlier in this paper, its accompanying terminological differentiation, to which, *nolens volens* speaker has also come. To sum up in conclusion: Distinguish with regard to diagnosis or differential diagnosis between (a) the "typical" cases under which the classic sub-divisions fall, and maintain the logical concept of dementia praecox of Kraepelin; and (b) the schizophreniform or "atypical" cases and retain for this purpose the later concept schizophrenia of Bleuler.

REFERENCES

- Zilboorg, G. and Henry, G. W.: A History of Medical Psychology, Norton & Comp., New York, 1941; p.p. 400—403.
- 2. t.a.p.
- 3. Zilboorg and Henry: op. cit., p. 448.
- 4. Zilboorg and Henry: op. cit., p. 448.
- 5. Zilboorg and Henry: op. cit., p. 450.
- 6. t.a.p.
- 7. Zilboorg and Henry, op. cit., p. 458.
- 8. Zilboorg and Henry, op. cit., p. 457.
- 9. Zilboorg and Henry, op. cit., p. 458.
- 10. Zilboorg and Henry, op. cit., p. 501.
- Bleuler, E.: Dementia Praecox or the Group of Schizophrenias. Translated by: Zinkin, Z., International Universities Press, New York, 1952.
- Bleuler, E.: Textbook of Psychiatry. Translated by: Brill, A. A., The Macmillan Co., 1939.
- 13. Bleuler, E.: Dementia Praecox or the Group of Schizophrenies. International Universities Press, New York, 1952; pp. 14—94.
- 14. Bleuler, op. ct., p.p. 94—226.
- 15. Bellak, L.: Dementia Praecox, Grune & Stratton, New York, 1948; p. 2.
- Cameron, N.: The Psychology of Behavior Disorders, Houghton Mifflin Co., New York, 1947; p. 449.
- 17. Zilboorg and Henry, op. cit., p. 500.
- Meyer, A.: "Fundamental Conceptions of Dementia Praecox", British Medical Journal, Vol. II, 1906; pp. 757—759.
- 19. Bellak, op. cit., pp. 2-3.
- 20. Zilboorg and Henry, op. cit., p. 503.
- 21. Landis, C. and Bolles, M. M.: Textbook of Abnormal Psychology, Macmillan Co., New York, 1950; p. 157.
- 22. Bellak, op. cit., p. 5.
- 23. Referred to by: Thornton, N.: "Some Notes on Schizoid Personality",
- 24. The Psychoanalytic Review, Vol. 43, April 1946: pp. 220-227.
- 25. Cameron, op. cit., pp. 468-469.
- Murphy, G. and Bachrach, A. J.: An Outline of Abnormal Psychology, Modern Library, New York, 1954; pp. 381—384.

- 27. Ewalt, J. R., Strecker, E. A. and Ebaugh, F. G.: *Practical Clinical Psychiatry*, McGraw-Hill, New York, 1957; p. 202.
- 28. Referred to by: Bleuler, E., op cit., p. 227.
- 29. Kasanin, J. S.: "Developmental Roots of Schizophrenia", *The American Journal of Psychiatry*, Vol. 101, No. 6, 1945; p. 770.
- Young, R. J.: "The Value of the Rorschach Test in Differential Diagnosis", The American Journal of Psychiatry, Vol. 105; 1948; pp. 381—382.
- 31. Piotrowski, Z. A., and Lewis, N. D. C.: "An Experimental Rorschach Diagnostic Aid for Some forms of Schizophrenia", *The American Journal of Psyciatry*, Vol. 107, No. 5, 1950, p. 363.
- 32. Langfeldt, G.: "The Diagnosis of Schizophrenia", *The American Journal of Psychiatry*, Vol. 108, No. 2, 1951; p. 123.
- 33. Landis and Bolles, op. cit., p. 163.
- 34. Bellak, op. cit., p. 447.