

BOOK REVIEWS

BIOLOGICAL MECHANISMS OF SCHIZOPHRENIA AND SCHIZOPHRENIA-LIKE PSYCHOSES

Edited by H. Mitsuda and T. Fukuda (1974)

Published by Igaku Shoin Ltd., P.O.B. 5 Hongo Bunkyo-Ku, Tokyo 113-91 Japan

This book contains the papers read by a group of biologically oriented psychiatrists at a "Conference on clinico-biological psychiatry" in Kyoto, May, 1973. The general conclusions which emerge clearly are: (1) That schizophrenia is a biologically determined illness. (2) That current systems of classification are inadequate. (3) That there is no single disease such as schizophrenia. There are instead a large number of schizophreniclike reactions or syndromes. (4) That the prognosis for chronic schizophrenia, i.e., untreated or treated by standard therapy, has changed very little.

Thus Wortis states: "In conclusion I would suggest that it may be futile to seek a single etiology for the condition we call schizophrenia, that it is a symptom-complex or syndrome with many possible causes and that the common mechanism in this syndrome is an inhibition, suppression or reduction of cerebral cortical activity. I also suggest that the syndrome includes several conditions or diseases."

This volume contains a useful summary of modern thinking about the schizophrenias which

has only begun to incorporate Orthomolecular ideas. As such I recommend it to Orthomolecular physicians who need to be aware of the biochemical and physiological research which is underway.

It is clear these investigators are groping toward a uniform system for viewing the schizophrenias. The syndrome is being fragmented into a variety of more or less specific or homogeneous groups.

Historically there has been the view that there were three major psychoses: (a) schizophrenia, (b) the endogenous depressions, (c) the organic psychoses. In fact, there never was any clear-cut distinction between these conditions and we have had to place patients in the inter-faces, eg., in the schizo-affective group, the schizophrenic epileptoid group and so on. However, we have known over the past 100 years that these groups were not homogeneous and that the diagnosis did not indicate the kind of treatment nearly as well as would the diagnosis of diabetes or pneumonia. The diagnosis is based upon clinical description, but has always suffered from the attempt to use personality factors or ways of reacting to illness as part of the diagnosis. Attempts to homogenize the groups have not been very successful, but they have been used as if they were pure for treatment experiments, for examination, for clear-cut biochemical differences, and for genetic studies. The results have, therefore, always been encouraging, but seldom conclusive. This these authors recognize, but until

they actually follow through with a reasonable approach there will be very little progress of necessity.

I believe there is a solution. Let us accept the conclusion that schizophrenia is a syndrome, that the presence of the syndrome merely indicates a disturbance in brain biochemistry, and that the treatment prognosis and biochemistry of each specific subgroup may bear no relationship to each other. Let us accept John Conolly's syndrome, "a disease of perception combined with an inability to determine whether these perceptual changes are real or not," as a basis. In other words, let us define the schizophrenic syndrome as one characterized by distortions of perception and changes in thinking (disorder in content and in the process of thinking). Changes in mood and behavior will most often also be present. In the absence of changes in perception and thought the syndrome is absent.

The causes of the syndrome may be divided into a number of categories, but I am convinced the most useful classification is based upon response to treatment. After all, the main use for diagnosis is to determine appropriate treatment. By selecting groups of patients who respond to specific treatment one may eventually find objective indices, clinical or biochemical, which help us determine in advance which treatment to use.

Orthomolecular psychiatrists recognize that the majority of the schizophrenic syndromes may be divided into the following treatment-responsive groups:

- (a) The vitamin B dependencies — vitamin B3 dependent, vitamin B6 dependent, vitamin B12 dependent, folic acid dependent. It is possible other B vitamins may also be involved as our clinical studies become more widespread. The vitamin B6-dependent group may be isolated by measuring the quantity of mauve factor (kryptopyrrole) in the urine.
- (b) The mineral imbalances.
- (c) The brain allergies.
- (d) The dysrhythmic group.

(e) Those of unknown origin.

The dependencies respond to appropriate doses of the specific vitamin. Those ill because of mineral or trace element imbalances will respond when these are corrected. The brain allergies (to foods, bacteria, and chemicals in the environment) respond when these are removed or neutralized. The dysrhythmias respond to anticonvulsant medication. This volume contains very important information about this group.

Only when these groups are studied as homogeneous groups will there be significant progress in determining prognosis and in improving treatment. To compare the allergies and the vitamin dependencies with each other with respect to genetics, chemistry, and so on is as futile as it would be to compare pneumonia due to pneumococcus and tuberculosis.

I am particularly annoyed by investigators who persist in making these errors. Our current best examples are those who treat the chronic schizophrenic syndromes who contain a large proportion of brain allergies and syndromes of unknown origin as if they were vitamin-dependent syndromes. They do not respond, but neither will antibiotics, useful for pneumococcal pneumonia, be very helpful in treating tuberculosis pneumonia.

I fully expect that in the future there will be an amalgamation of biological psychiatrists as represented in this book and Orthomolecular psychiatrists who differ in two essential characteristics: (1) they are more apt to be heavily involved in treating schizophrenics — they are clinicians; (2) their biological orientation includes a consideration of the biochemical environment of the patient.

I have not attempted to provide a summary of this book which I found interesting. This kind of book requires either a very massive examination which becomes a summary or merely enough discussion about the content to stimulate interest in it. The latter I have tried to do.

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MODERN NUTRITION IN HEALTH AND DISEASE

5th Edition

R. S. Goodhart and M. E. Shils, The Macmillan Company of Canada Ltd., 1973. Price \$38.50

This is a very good textbook for anyone interested in nutrition as it is taught today. Part I, the Foundations of Nutrition, deals with calories, proteins, carbohydrates, fats, and the vitamins, and with minerals and trace elements. Part II discusses the safety and adequacy of the food supply with brief discussions of additives and pesticides and radioactivity in foods. The remaining four parts discuss malnutrition, stress, and relationship of nutrition to prevention and treatment of disease.

It is impossible to prepare a comprehensive review of such a massive book, 1,153 pages. Its major defect, and this would be true of any modern text on nutrition, is that the authors are, so far, unaware of Orthomolecular nutrition, i.e., the use of megadoses of vitamins and above-average doses of minerals. But this criticism should not deter anyone from reading this book.

Due to the general unawareness of the benefits of Orthomolecular nutrition, the authors who write the chapters on vitamins overemphasize the potential dangers of vitamins while downgrading the known benefits for many of taking above-average doses. There is an interesting, and to me infuriating, double standard. With respect to toxicity, no controlled studies are demanded, and any report no matter how obscure, even if the report deals with very few patients, is accepted as evidence. On the other hand, no therapeutic claim no matter how well controlled and conducted is accepted unless it has been in the double-blind technique. But this is the standard nutritional approach, and one should not expect a standard text, even a good one, to deviate.

My second criticism is that not enough emphasis

is given to the most toxic additive to our foods—sucrose (table sugar). Every Orthomolecular physician is aware of the toxicity of sugar, which has been amply documented. It is probably a major reason for the rapidly increasing prevalence of many degenerative diseases.

The chapter on vitamin D does not carry a discussion of the difference between vitamins D2 and D3. D3 is much safer, but D2 is generally used to fortify our food. The chapter on vitamin E ignores too many good clinical studies showing the benefits of large doses of vitamin E.

Perhaps the Sixth Edition will carry a chapter on Orthomolecular nutrition which would make this text a superb one. A. Hoffer, M.D., Ph.D. 1201 CN Towers First Avenue South Saskatoon, Sask. S7K 1J5

MARY BARNES: TWO ACCOUNTS OF A JOURNEY THROUGH MADNESS

Mary Barnes and Joseph Berke, M.D.

Harcourt, Brace and Javanovich, N.Y., 1972, England, 1971.

For those who have formed a working relationship with the experience of madness, there can be no feelings other than compassion and empathy over the tale which Mary Barnes and Joseph Berke relate. Indeed, it is an emotion-provoking story, taking us from the depths of a prolonged psychotic episode wherein the individual becomes reduced to an infantile state, to the heights of the creative process where the pure joy of artistic expression is recognized as a peak experience in life. But beyond the impact of the chronicle itself lies a detailed description of a specific treatment method which purports to deal with schizophrenia in a more fruitful manner than any of its predecessors. Such a

claim, to my mind, requires a careful analysis of both the method and its applicability to the broader population. Mary Barnes was only one individual who responded favorably. In any country in the world there exists one percent of the population which is afflicted by schizophrenia. I could not avoid asking myself if this treatment is actually the best—or the only—way to handle this type of problem, despite the fact that both Mary and the therapists who were intimately involved with her were quite pleased with the results.

The first dimension to be explored must be the origin of the schizophrenic process. Why did Mary Barnes have a breakdown? According to the tenets of Dr. Laing and Dr. Berke, schizophrenia stems from within the interactions of the nuclear family; interactions which form a twisted foundation for emotional growth. Actualization is unobtainable unless these learned distortions are disintegrated and reorganized upon a more appropriate footing. This orientation to etiology differs little from the traditional point of view and does not satisfy my personal curiosity as to why the schizophrenic process became apparent only in Mary and her brother and not within the other two siblings who experienced the same upbringing. Why is the family being continuously scapegoated? Could something else have caused Mary to become psychotic? Certainly, the recent research has delineated specific evidence of malfunction in body chemistry being a primary factor in the development of psychosis. Not only is all of this knowledge ignored in practicality, it is scorned in theory to the point where professionals who utilized drugs with their patients are considered to be unable or unwilling to deal with the process in Laingian fashion. This viewpoint can hardly be considered to be open to new evidence, or eclectic in nature. Rather, it is a rigid, authoritarian stance, much out of style with the times.

The second dimension which plagued me was that of time. It took so much time—five years—all of it in isolation

from the world. Granted, five years is nothing in the lifespan of the universe, but it is a considerable portion of the lifespan of one human being; enough that in being cut off from one's environment one would literally forfeit all previous accomplishments and be required to begin anew upon re-entering society. Except for Mary's breakdown periods, she had managed to function in a manner acceptable to society (i.e., she earned a profession and pursued it, maintained herself as an individual, never performed any antisocial acts outside of her home). She was internally unhappy, desperately uncomfortable, and certainly not functioning with maximum potential, but was it absolutely necessary for her to lose those five years in order to regain herself? Were there no strengths within her which could have been more realistically employed? Were there no therapeutic measures which could have been used to shorten the time and keep her involved with the world while she regained herself? It took so long, so incredibly long.

Then there was Mary's brother. His response to exposure to this type of treatment was far less phenomenal. In fact, his condition altered negatively, if at all. He could not stay with the program, although he expressed such a desire and had the courage to try it. Was there any way that his chance of remaining in the therapeutic community might have been enhanced? Could some of his initial anxiety have been relieved in order that he might capture some belief in himself and in the therapy as well? The first step in any successful therapeutic process is enabling the individual to feel confidence in what will happen. For Mary that step occurred, and she was able to continue. For her brother it was too difficult, and he dropped by the wayside. He was written off as "unready." His loss was rationalized as the fact that all will not do well in the program. It is an undeniable fact that with any treatment method there are always those who do not respond. But he

was willing to try. The key to his response was his fear. He was terribly afraid. Increasing environmental demands upon a schizophrenic increases his anxiety in an exaggerated fashion. Why was this not anticipated and treated in the most direct way possible —with drugs? The answer, according to Mary, is simple. To do so would have been to subject him to a force outside of himself, to weaken his own need to change. This type of reasoning does not sit well with me for we would not deny a man with a broken leg a cast, nor would we expect him to heal properly without this assistance. Yet, we would also expect him to cast it aside when it was no longer necessary. Why, then, was Mary's brother denied the benefits of modern medicine and lost to the program altogether?

The major portion of the psychotherapy was involved with removing guilt. The very fact that Mary remained for five years in a state of almost total dependency seems to me to have engendered guilt. The guilt from the past may have been cleansed, but what of the guilt from the present? It is very important to deal with guilt feelings and to work them through on a psychological level. It should also be equally important not to originate any more of them than is absolutely necessary. If Mary had been assigned the role of a sick person, perhaps she would have been protected from the gnawing, destructive feeling that she was an unworthy burden upon all around her. Many long hours of suffering were devoted to reconciling these feelings and to understanding why people would even want to continue to assist her. Many more hours were devoted to testing the limits of her therapist. If the medical model had been considered for her, she would not have had to joust with windmills. Surely she had enough problems without adding these to her burden.

Finally, let us look at Mary as she exists today. She is a totally different person than she used to be, embarking upon life in a very different fashion. Yet, despite these major changes, even at the end of the book she is still frequently coping

with symptoms. She is no longer afraid of them. They are controllable by her. Yet, they persist, particularly in situations which are unfamiliar or threatening. Is this not still the exaggerated reaction to anxiety-provoking situations one sees in all schizophrenics? The symptoms have not vanished, she has simply learned not to panic and to be patient for they will pass with time. We have been teaching schizophrenics to do this for centuries. Up until the past 15 years it had been a necessity due to the lack of knowledge as to the origins of the process. It is a method which leaves the patients severely restricted in their response to their environment. To me, Mary fits well into this latter statement. Her capacities to interact with people, to have intimate personal relationships, are presented as being very limited. This narrowness may be by choice; then again, it may be only an extension of the fact that her problems have not been sufficiently resolved. The mark of a schizophrenic goes beyond anxiety reaction and into the ability to relate interpersonally. Any person who has suffered as Mary suffered only to emerge still unable to enjoy close interpersonal relationships has not, to my mind, been relieved of difficulties. I ask myself how long the remainder of the actualization process will take, or if it will occur at all.

The answer to my initial question, then, is quite negative. The treatment proposed seems to fall short of its promise. For Mary it was enough. She thought so, as did Dr. Berke. I would disagree, both on a specific and on a general basis. My personal and professional beliefs require that more than just psychotherapy be utilized in the treatment of schizophrenia. I can find nothing in this book which alters my opinion. The foundation for the reversal of the schizophrenic process must be built upon a combination of medical knowledge and psychotherapy. Good psychotherapy, in any situation, permits and protects regression, forms a strong bond of loyalty and feeling between

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patient and therapist, and results in the untangling of the communication process as well as providing support through crises. The described treatment was no disappointment in this respect. Dr. Berke comes through as a sincere and dedicated man, skilled in the application of psychological principles and unafraid of emotional involvement with his patient. The book stands as a powerful tribute to the perseverance and love which existed between two human beings, but I must view Mary Barnes' recovery from the depths of psychosis as miraculous, considering the treatment techniques which were not employed.

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