

Editorial

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We have given this entire issue to a discussion of the relation between antisocial behavior, nutrition and Orthomolecular psychiatry. Over the past two years, there has been a growing interest in applying these newer treatment concepts. This has been accelerated by a number of studies by Barbara Reed, by Alex Schauss and by Prof. L. Hippchen, which have captured wide attention. This is very timely as criminologists of all types are coming to the realization that the popular psychosocial solutions have not been very effective when used alone.

Orthomolecular physicians had observed that many of their patients who were, or showed evidence they might become, involved in criminal and antisocial behavior, became normal. These physicians are so preoccupied with treating patients they have no time left to plan and conduct comparison controlled studies which would be convincing to other workers. The fault is not with the Orthomolecular physicians; they have made accurate observations for, after all, it is not hard to recognize the difference between a patient who is in and out of trouble before treatment, and a new state of well-being with no further antisocial problems. Critics may quarrel with the reasons why, not with the facts. Clinical observations are inherently more accurate and dependable than most physicians realize, for they are made by physicians who have a close relationship with their patients within the medical model. Unfortunately the idea has swept through science and medicine that only double blind comparison experiments

constitute evidence. Clinical studies will not be published, nor will investigators receive any research grants, unless their studies are designed to be double blind. We live in a bizarre climate of opinion where excellent clinical studies involving hundreds of patients are ignored because they are not double blind, while small studies done double blind are accepted as highly significant. Statistical significance is confused with clinical efficacy.

Dr. Humphry Osmond and I must accept part responsibility for this as we were the first psychiatrists to complete double blind controlled comparison experiments in 1953, and the first to publish the method in 1955. However, our long familiarity with this method convinced us that it contained many serious errors in logic, applicability and in its ability to yield meaningful results. Nor is it in our opinion ethical since it betrays the basic relationship of trust between patient and physician. We have been penitent for helping thrust such a method upon psychiatry and have tried to make amends by describing its many shortcomings. We remain convinced that well trained clinicians with experience in treatment are the most useful instruments in making medical discoveries.

Often these observations are unacceptable because there is no common explanation. Why should any physician believe vitamins can help schizophrenics when it is believed to be an intrapsychic problem, or a problem with one's parents? Several

decades later other scientists, less preoccupied with standard dogma, may begin to find scientific explanations.

For over 25 years a few clinicians have observed that vitamin B3 and ascorbic acid have valuable anti-psychotic and anti-depressive effects. I have published several dozen reports and several books documenting this data. There have been no negative results when our published methods and criteria were used.

Three schizophrenic subjects who failed to respond to tranquilizer or other modern chemotherapy recovered when given 10 grams or more of ascorbic acid per day. The first two cases were treated twenty years ago and still remain well. The last one failed to respond to a large number of series of ECT, to any standard tranquilizer or antidepressant or to large quantities of vitamin B3, until one and a half years ago. I had almost decided to give her another series of ECT because of her intractable feeling that half her brain was dead. Only ECT had ever helped her before but never for longer than about six months. I decided instead to add ten grams per day of ascorbic acid to her vitamin program. One month later she was normal and has remained so. When last seen a few months ago she was taking a secretarial course (her age is 50) and remained well.

These clinical observations remained unsupported by any rational theory and were rejected. Nearly 100,000 schizophrenic patients have been treated in the past 20 years. There is no doubt in the mind of every physician who has used these vitamins as part of a sophisticated treatment approach that it is remarkably beneficial. Again these observations have been rejected by the naive critic unfamiliar with the clinical literature. The APA report cited lack of rationale as one reason for rejecting it. But there are scientists who have been impressed who are now discovering a rationale. They are at last finding reasons how these vitamins could work.

Thus Prof. Leland C. Tolbert and colleagues, Department of Biochemistry, Medical University of South Carolina, Charleston, have shown that ascorbic acid shares with Haldol, a well-known and effective tranquilizer, the

ability to block dopamine receptors. A favorite theory is that dopamine and its receptors are involved in the etiology of psychosis chiefly because most tranquilizers are dopamine receptor blockers. They conclude "ascorbic acid might have a role in regulating dopaminergic transmission and could be of therapeutic value in disorders involving functional dopamine excess."

Ascorbic acid is, of course, nontoxic compared to Haldol which, like all tranquilizers, causes serious side effects in many patients.

Another research group, H. Mohler and colleagues, reported in *Nature*, volume 278, pp. 563-565, 1979, that nicotinamide had benzodiazepine-like activity. They did this study in the Pharmaceutical Research Department, F. Hoffmann-LaRoche & Co. Ltd., Switzerland, makers of Valium and Librium. These are diazepines. They found that nicotinamide had properties in common with benzodiazepines in its action on spinal cord activity, its anti-conflict, anticonvulsant, anti-aggressive, muscle relaxant and hypnotic action. It was very potent as are the diazepines. But a lot must be given to get small amounts into the brain. If anyone develops a way of getting it into the brain more effectively much lower doses will be required. As with ascorbic acid, nicotinamide is relatively non-toxic compared to Valium.

Workers Alexander Schauss and Barbara Reed are the advance group of workers with criminals. They are the equivalent in the social sciences to the neuropharmacologists in the laboratory sciences. Their reports will be the first of a large number which will appear in a few years.

In this special issue we honor these contributors by presenting their data, but we also wish to honor the pioneers who began to work in this field over twenty years ago, and especially my sister, Mrs. Fannie H. Kahan, who until her death last December was Managing Editor of this Journal, for her dedication to this newer psychiatry, her skill and experience in writing, and her continuing direction of this Journal for over ten years have been invaluable in preparing the

way for modern Orthomolecular scientists.

I will pay particular attention to a series of three reports put together in 1975 into one publication "**Schizophrenia and the Law**" (Available from the Canadian Schizophrenia Foundation, 2229 Broad St., Regina, Saskatchewan, S4P 1Y7). Each report was her account, written in a reporter's style, of a schizophrenic charged with homicide or other serious offence. They were found not guilty because they were insane according to the Criminal Code of Canada. I was one of the psychiatrists called by the defense for every accused. Fannie Kahan researched the material very carefully, consulted with me, lawyers, or the judge, and had access to the records of the trial and to the clinical records made available to me by the defense. I recommend that every interested person obtain this report.

The first case was Victor Hoffman who murdered every member of the Peterson family at home except the baby. He had admitted himself voluntarily May 29, 1967 to the Saskatchewan Hospital in North Battleford where he was given twelve ECT, tranquilizers, occupational therapy and psychotherapy. He was discharged July 26, 1967 on tranquilizers. His father was told he was "not too bad." Because he was so sleepy he stopped his medication August 8, 1967. About one week later he obeyed the Devil and murdered the Petersons.

He was found not guilty and is now a patient in an institution somewhere in Canada. On January 10, 1969 he wrote to his lawyer, "I am going to tell you something. The North Battleford Hospital reduced my resistance for acting out in violence. Before I went to the North Battleford Hospital, I was always tempted to kill but could always put it out of my mind." There is evidence that tranquilizers reduce a patient's ability to resist violent impulsive acts.

The second case was a young man who had first been treated as a child. Eventually he killed a farmer's son and seriously wounded the farmer, his employer.

The third case illustrates very clearly the effect of perceptual abnormalities in producing abnormal behavior.

None of the three patients had ever been given Orthomolecular treatment. I have treated about a dozen patients with a serious propensity for violent acts. One had shot his rifle at his parents, but missed them both. After treatment they became normal. It is highly probable that some, if not all, of these patients described by Fannie would not have become murderers or abducted police had they been given Orthomolecular treatment.

Another important aspect of these cases was that jury, judge and lawyers all appreciated straightforward medical testimony, free of psychiatric jargon. The results of the HOD test (Hoffer, Kelm and Osmond [1975]) and EWI test (El Meligi and Osmond [1970]) were allowed as evidence in court. None of the cases were appealed.

Now that I have outlined some of the pioneer work, on to the current exciting developments in this field. Before closing I wish to recommend Prof. L. Hippchen's excellent volume, "**The Ecologic Biochemical Approaches to Treatment of Delinquents and Criminals**" (1978).

REFERENCES

- HOFFER, A., KELM, H., and OSMOND, H.: *Clinical and Other Uses of the Hoffer-Osmond Diagnostic Test*. Robert E. Krieger Publishing Co., Huntington, NY., 1975.
- EL MELIGI, A. M. and OSMOND, H.: *Manual for the Clinical Use of the Experiential World Inventory*. Mens Sana Publishing, Inc., New York 1976.

Editor's Note

In the Editorial in Volume 8, Number 1, we referred to only two colored vitamins, riboflavin and B-12, but unfortunately did not include folic acid which is also strongly colored, being more of a pure yellow than is riboflavin.