

# A Report on the Use of Orthomolecular Therapy in a California State Hospital

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## Introduction

For persons who do not understand the social service profession and the need for helping professions to work together, perhaps this report comes as a surprise. It *is* not meant to be such. Rather it is shared to encourage others to observe their surroundings, to question what they see, to explore and to clarify and then to implement their discoveries and findings.

In moving to California, this writer accepted a Psychiatric Social Worker position at a State Hospital for the Mentally Ill. A golden-brown hue apparent on many of the patients who had spent years within the State Hospital system was observed during the first few days of employment. Thinking the "tan" was attributable to the famed California sun, it became somewhat puzzling to realize that many of these men were rarely in the sun. Was something *else* causing this golden or yellowish-brown skin coloration? Was a metabolic disorder possible? Since this writer possesses a nutritional background and previous experience with children afflicted with phenylketonuria, this seemed possible.

Personal investigation into medical and scientific journals gradually unfolded various ideas, one of which was the adreno-chrome-adrenolutin theory, Hoffer, Osmond and Smythies<sup>1</sup>; Lea<sup>2</sup>; Osmond and Smythies.<sup>3</sup> A whole evolution of thought

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and preponderance of evidence supporting a biochemical abnormality followed. Contacts with persons involved with megavitamin therapy were also soon made.

With a fund of knowledge and mounting interest, nothing remained but to attempt implementation of treatment. This writer need not detail here the long and frustrating months which followed. Eventually, however, permission was secured for a "treatment project"; the request for research being rejected as "it (vitamin therapy) has already been proven not to work".

## Project Design

Permission for six patients to participate was granted by the hospital's medical director and thus six very psychotic patients were selected. Of these six, three were diagnosed as schizophrenia, paranoid; two as schizophrenia, chronic, undifferentiated and one as schizophrenia, schizo-affective. Each was making very minimal if any progress under the traditional phenothiazine and psychotherapy regime. In actuality, all were too disoriented and agitated to participate in the latter.

Three of the men were in almost constant restraints or seclusion of one kind or another to avoid harming themselves or others. Five were presently hospitalized for approximately one month and one for seven months. Average previous hospitalization numbered three and for an approximate length of eight and a half months.

Ages ranged from 20 to 34 years, with the average being 24 years.

Each patient was given the Hoffer-Osmond Diagnostic Test (H.O.D.). Scores were appreciably higher than the normal cut-off point, the highest beginning total score being 199 and the lowest being 70, Kelm, Hoffer and Osmond.<sup>4</sup> The mean was 144.5.

In addition to the regularly prescribed tranquilizers, each patient was started on niacin 500 mg-tid-pc. and ascorbic acid 500 mg-tid-pc. This amount was doubled the following week. Each week thereafter the vitamin dose was increased by one gram of each, to a total of six grams of ascorbic acid per day and a maximum of 15 grams of niacin. One patient received the maximum of 15 grams of niacin. Another received 12 grams daily, two 9 grams and two 6 grams.

### Patient Progress

Each patient made significant progress. Clinically the patients became more manageable. They were less agitated, less hostile and less aggressive. Each, in varying degrees, began to talk and socialize more with others. Fewer indications of incoherence, hallucinations and delusions were observed. The patients themselves reported feeling less tired, less afraid of others, more able to concentrate, read and speak. They stated they felt "less jumpy inside" and overtly demonstrated a more relaxed appearance and calm behavior.

Much of what the hospital personnel, the patient and his family observed were further noted on appreciable drops in the H.O.D. scores. The average total score dropped to a mean of 4.8 over an average hospitalization period of 2.5 months. Four were discharged with no tranquilizers and two were still being maintained on tranquilizers when discharged. Doses of the latter were much smaller, however, and six months after discharge

only one remained on a small amount of tranquilizer.

Five of the six original participants continued their mega-vitamins and have remained well. That is, they reportedly have been free of symptoms of schizophrenia, are gainfully employed and are getting along well with their family and community, Hoffer.<sup>5</sup> The sixth man failed to take the niacin and ascorbic acid and has been re-hospitalized three times in the last ten months, has not been able to secure and hold a job, and has had trouble both within his family and community.

### Project Continuance

As a participating patient was discharged from the hospital, another person was given the mega-vitamins. During the ensuing months there was some small expansion of the project, and 24 additional patients successfully completed the Orthomolecular therapy.

Procedures followed the above, the basic difference being that the last ten patients were started on niacin—1 gram-tid-pc. and ascorbic acid—1 gram-tid-pc. The niacin was increased by 1 gram-tid each week until a stable level of behavior appeared to have been attained. The ascorbic acid was held at three grams per day. Results were basically the same for these 24 patients as noted above for the original six. Another 14 patients also started but failed to complete the therapy. Reasons for the disruption included:

Discovery of medical problems (one).  
Administrative transfer to another hospital unit (six).  
Discharge from involuntary hospitalization by the California Superior Court (one).  
Emesis and inability to obtain niacinamide (one).  
Transfer to a private psychiatric facility

(two).  
Change of unit physicians and subsequently discontinuing the vitamin therapy (three).  
As far as is known, 11 of these had at

least a temporary exacerbation of symptoms, 10 of whom remain hospitalized at this writing. Progress of the remaining three persons *is* not known.

### Summary of Results

Of the 30 male patients who participated in the Orthomolecular approach to schizophrenia (Hoffer<sup>6</sup> and Pauling<sup>7</sup>), 29 were receiving tranquilizers at the start of their treatment. At discharge, 27 were on no tranquilizer and were able to maintain themselves adequately on the niacin and ascorbic acid. Three received a much lower amount of tranquilizer than that required without the vitamins. Maintenance dose or the amount of vitamins at discharge ranged from a total daily amount of three grams to 15 grams for niacin and three to six grams of ascorbic acid. The median for niacin was nine grams daily.

In comparing the previous hospitalizations, the 30 men had an average of 3.43 hospitalizations totaling 10.47 months. When considering that seven had never been hospitalized psychiatrically before, the average increased to 4.48 times and 13.65 months for the remaining 23 patients. The present hospitalization had a total mean stay of 3.6 months. The average time on the mega-vitamins was 2.67 months. The median age at discharge was 26 years.

At discharge, 19 were released to themselves, some of whom rejoined their spouse or family. Seven were discharged to their parents and four were placed in a board and care facility.

At this writing, 28 have contacted or been contacted by this writer one or more times since discharge. Of these, 20 state they have continued the mega-vitamins and two remain on a small amount of tranquilizer. Of the eight who no longer take the vitamins, six have been re-hospitalized from one to five times in the past ten months. One committed suicide and one has maintained himself on phenothiazines. Of these eight, three reportedly

were taken

off the mega-vitamins by their physicians. Nineteen of the above are gainfully employed, five are in board and care facilities, two are retired, one is presently hospitalized and one is deceased. Of these 28 men, five are receiving welfare assistance, a considerable decrease when compared with the welfare subsistence on which 18 depended before their last hospitalization which offered them Orthomolecular therapy for the first time.

### Discussion

Among the very positive comments to be made following this 10-month project is that the Orthomolecular therapy significantly helped a small number of patients who were disabled by some form of schizophrenia or niacin-dependent disease (Hoffer<sup>8</sup>) and hospitalized at the state hospital. Less important but also significant is the writer's greater appreciation, respect and understanding of what the person afflicted with this condition experiences.

Most helpful along this line was the H.O.D. test, mentioned above. Not only did this clarify many of the typical symptoms of schizophrenia but it aided communication with the psychotic person and helped to establish trust. For many it gave them an opportunity to discuss their fears and misgivings. This latter frequently followed initial denial of many symptoms until a very significant one was mentioned. An example of this was one patient who had "none of the symptoms" until queried about what he saw in the mirror when he shaved. Excitedly and with great concern he related how he had not found his entire face for over two years—one part or another was always missing. From there the entire atmosphere was different and he was able to talk for perhaps the first time in a long while.

Also considered beneficial was an open and rather thorough discussion of schizophrenia with the patients, its symptoms, treatment and prognosis. Diet, with its

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elimination of sugars, sweets, wheat and carbohydrate products, and stimulants (Abrahamson and Pezet<sup>9</sup>; Meiers<sup>10</sup>) was also discussed, with many actually searching out the protein products while still hospitalized and receiving an institutional diet. Those who followed the dietary guidelines seemed to make more rapid progress than those who gave it little attention.

Among drawbacks to be noted would be the inconvenience of the large number and size of vitamin pills taken by the patients. Also, it was very difficult for some of the men to "give up" their former sick behavior. Depression and "crazy" acting had become part of their life-style. To feel good, to think clearly and/or to be able to relate successfully to others was a new and difficult experience for many.

It was also felt, that three of the fourteen patients, noted not to have completed the project, reached a plateau. After initial clearing of their confusion and some improvement in behavior, little additional improvement was observable. It was felt an absorption difficulty may have been encountered. Injectable vitamins (Hoffer<sup>11</sup>) were not available.

Another factor of interest was the flushing from the niacin and/or the lack of it for many patients. The possibility of the vasodilatation was explained to the patients prior to commencement of the first dose, Hoffer.<sup>12</sup> The vitamins were also given after meals and with cold milk as needed, Bill W.<sup>13</sup> Some experienced no flush during the entire course of treatment. Others experienced a flushing sensation for the first two or three days. Several very fair-complexioned men experienced flushing for a longer period of time. None, however, reported any great discomfort and no medicinal counteracting agent, such as cyproheptadine, had to be given, Robie.<sup>14</sup> Several very ill individuals experienced no flushing until the fourth or fifth day of therapy. This was then usually of a more mild nature.

Although the H.O.D. test was used diagnostically and as a means to guide treatment, it

was frequently felt to be time-consuming. The patients were usually acutely psychotic when first given the test. This meant that many had to take it in sections because of their agitation. Many had to have the cards read to them because of an inability to read, as "the words would not stand still." Others had to have the cards repeated several times because of an inability to concentrate and frequent preoccupation with their own thoughts. Noting this fact may be chiefly the result of the assumed pressure of having to assimilate this project and its testing into regular full-time responsibilities. The value of the test was obvious.

A discouraging aspect of the project was the poor reception by many of the hospital personnel. The security and complacency in tradition were apparent. The program director, who gave permission for the project, experienced many uncomplimentary comments from his fellow psychiatrists. He remained firm, however and encouraged its use. Several physicians did accept information about the Orthomolecular approach but more often than not the offer was refused. Several physicians also placed patients on 100 mg. to 300 mg. of niacin and ascorbic acid. When no improvement was noted within two to four weeks, they boastfully made it known that the "Vitamins did not work for them." Results were seen by the physician who agreed to work with the project following Drs. Hoffer and Osmond approach, Hoffer.<sup>15</sup>

### Conclusion

Although this report is not held to be a research report, it is a summary of how some patients were significantly aided in regaining their health and well-being. It is the writer's hope, therefore, that readers of this report once again realize that professional and lay people alike must help in abolishing the dread condition presently known as schizophrenia. Indications of physiological etiology and control of this devastating condition by means of

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orthomolecular psychiatry are strong. It seems to promise healthier lives and brighter, more productive futures for both patients and families alike.

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