A Report on a Twelve-Month Period of Treating Metabolic Diseases Using Mainly Vitamins and Minerals on the Schizophrenias

Purificacion L. Verzosa, M.D.1

DURATION OF WORK
October —December, 1974 January-April 10, 1975 June 15-February 29, 1976

PLACE: Outpatients at the residential clinic of the author

NUMBER OF PATIENTS INVOLVED: 219

BREAKDOWN AND CLASSIFICATION OF DISEASES

I. The Schizophrenias

Classification	**Total**	**Recovered**	**Under Treatment**	**Discontinued**
Borderline	33	25	3	5
Acute Ss	32	23	6	3
Chronic Ss	48	16	21	11
Ss under drugs	9	3	4	2
Total	122	67	34	21
Percent		55	28	17

[1] **Philippine Schizophrenia Foundation, Inc. 26 llang-llang, Quezon City, Philippines.**

II. Patients with Neuropathy

Hg and lead poisoning	2	2	0	0
Pellagra	8	5	3	0
Women on birth pills	6	4	2	0
Retarded or slow-learning children	10	4	5	1
Cerebral palsy	1	0	10	
Total	27	15	11	1
Percent		56	41	5

III. Miscellaneous Illnesses

Arthritis	13	8	5	0
Allergy	8	3	5	0
Psoriasis	2	0	2	0
Adults with anxiety, neurosis, or obsessive compulsion	12	8	4	0
Various metabolic disorders	26	17	9	0
Hypoglycemia	9	9	0	0
Total	70	45	25	0
Percent		64	36	0

CLASSIFICATION OF THE SCHIZOPHRENIAS, BY SEX

Male	47
Female	75
Total	122

CLASSIFICATION BY AGE

6-11	1
12-19	42
20-29	42
30-67	37
Total	122

Patients, acute or chronic, who have sought one or more psychiatric treatment before the megavitamin therapy:

Male	22
Female	24
Total	46

OTHER TREATMENTS GIVEN

1. Tranquilizers and/or antidepressants were given to most of the acute and chronic cases.

2. ECT was given to five patients as follows:

M.D.	7 times
N.V.	3 times
A.V.	8 times
J.L.	12 times
E.C.	6 times

3. Lithium therapy - given to one patient. He recovered.

4. Of the 122 schizophrenics, only eight were hospitalized for a duration of six days to 45 days. All recovered and they are still feeling well.

Background

My knowledge about schizophrenia being a biochemical disease started in 1974 through communications with Dr. Elizabeth L. Rees, a child psychiatrist whom \ have known for more than 15 years. She has a clinic in San Francisco and practices Orthomolecular psychiatry, not only for children, but now for adults as well. Through her I was able to get the following books:

1. **How to Live with Schizophrenia,** by Hoffer and Osmond (1975)
2. **The Schizophrenias: Yours and Mine,** by Pfeiffer, Ward, El Meligi, and Cott (1970)
3. **Orthomolecular Psychiatry,** by Hawkins and Pauling (1973)

After reading the books, I enrolled at the Huxley Institute for Biosocial Research (HIBR). I then started receiving the **Journal of Orthomolecular Psychiatry,** the Newsletter, and literature regarding this field of medicine and science. I have at present a complete issue of all the Journals since the Institute started in 1969.

Next, I ordered the Hoffer-Osmond Diagnostic Test kit *[see* Hoffer et al., 1975), HOD test. As the name indicates, it was perfected by Dr. A. Hoffer and Dr. H. Osmond who, for about 15 years, gathered data through interviews with their patients. They came to the conclusion that it was better to ask the patients by this system than by probing the patient with so many questions, especially if the patient was disturbed or very ill. This is being used extensively in the United States and Canada. A broader test was also developed by Dr. M. El-Meligi which is called the EWI or Experiential World Inventory. This consists of two parts of 200 questions each, or a total of 400 in all. I have just started to use it for patients who I suspect are drug addicts. This is not only beneficial and helpful for the diagnosis and prognosis of schizophrenia; it is good for all people because it helps in the prophylaxis of a mental or emotional disease from 14 years old to adults. It indicates the alcoholics and drug addicts who are schizophrenics.

Start of the Practice

I met a Jesuit priest, Fr. Agostino Cerutti, who works at the Lady of Peace Guidance Center in Escolta, Manila. I lent him my book **How to Live with Schizophrenia,** by Hoffer and Osmond. Later, he called me up to ask if I could take in his patients who go to see him for counseling. He said that surely a lot of clients are schizophrenics. I had two cases before this, a school teacher and a librarian, and both recovered well with megavitamins. The first referral of Fr. Cerutti was a 17-year-old high school student who had been "unmanageable" according to her parents. She had been ill for two years and had been to two psychiatrists.

The parents came to see me with the girl one evening. I gave the HOD test to the girl. I told her to answer it according to how she felt that day. Then I shuffled the cards and told her again to answer it according to how she felt at her worst. There were two different scores. Anyway her score that day was also high. She seemed malperceptive, depressed, and paranoid. I explained the theory of biochemical individuality and what nutrition does to a person if she is malnourished. Her parents accepted my explanation well. This is the most important and tedious part of ortho-molecular therapy which a doctor has to do for each new patient and family.

Since the only available vitamin B3 at that time, November, 1974, was the 100 mg nicotinic acid, I had to administer to the patient the first dose. I do it in my

clinic in order to observe its side effects of flushing and itching. I gave bananas to take with the niacin tablets. I allowed the patient to go home when the flush started to fade. Then I wrote a long list of how to administer the vitamins starting from a minimum dose sufficient for a week until the patient returned to my clinic. After two days the mother called me to report that O.T. was quiet, and slept very well, and that she could eat. When they came after one week the girl, to my surprise, came right to me and embraced me. It was very touching. She said that she had never felt better in her life. Since she was 14 years old, she said, she could not understand what she felt and neither did anyone else. This has been the comment of many patients who recovered. Her HOD test showed a lower score, but still not a normal one.

Since I work with teachers and students, I tested a great number of them in the school where I work as a part-time physician. Some of the girls and teachers had high scores, and their answers were confirmed by individual interviews. For those who needed help, I contacted their parents and explained to them what was wrong with their daughters. Almost all parents confirmed that the girls were quarrelsome, irritable, nervous, suspicious, etc. They did not know that their children were having difficulty sleeping and feeling weak. This is a project of the psychologist in the school and myself—a prophylaxis for mental and emotional breakdown in the latter life of the student. Although Dr. Hoffer said and, it is true, according to my observations now, that 30 percent of borderline schizophrenics automatically get well even without medication, it is rather risky not to pay attention to the nutrition and health of a person if there is a tendency to become disturbed and, particularly, if there is a genetic predisposition.

From the success of the patients first referred to me by Fr. Cerutti, you can see how many patients have come to me within 12 months as per my records. When a patient get well, another patient is usually brought by her to me. The most important is to set an appointment with the patient for the first interview in order to have the opportunity to explain about the disease so that he or she will have an understanding and acceptance of it.

From the data I have enclosed, one can see that 46 percent of the patients who came to me had been ill previously and had sought help once or more often from psychiatrists, counselors, priests, and even faith or spirit healers and exorcists.

Method of Diagnosis

I require and encourage the patient to come with a companion. It is a must for successful therapy. A patient who is sick, even though not emotionally, needs assurance and support from someone.

1. Physical examination is" important particularly for hyperpigmentation of the forearms, knees, and legs and at the back of the neck. Lesions or dermatitis are sometimes present indicating diagnosis for pellagra. One should not confuse this with acne, pimples, or blackheads in adolescents. Pellagra dermatitis is not easily mistaken. Besides, with acne and pimples, niacin will not be able to cure these lesions. In pellagra the disappearance of these skin lesions is very fast and remarkable with the megavitamin treatment.
2. Blood pressure is taken as well as weight and pulse. A very high blood pressure is a contraindication to niacin because it is a vasodilator. Niacinamide is not so much a vasodilator.
3. I make the patient write if he can, and if he wants to, a few sentences of what he feels, when he started getting sick, and what treatment has been done for his illness. They reveal many symptoms which can help you deal with the illness, especially for supportive therapy later on when they feel better. Uncovering is useless and unnecessary, and sometimes the patient or the family resents being asked to tell about their family life.
4. Give the HOD test to the patient and the companion/s who are willing to take the test. I tell the companion that from

the test he or she can help the patient better by understanding his feelings, moods, and suffering. Sometimes the mother or the father is also sick as diagnosed with the HOD test. If so, the therapy is more effective because both of them will have to take the medication. 5. Giving a name or diagnosis of the sickness is important. Sometimes, if the patient is chronic, he or she already has an inkling of the sickness. For example, my first patient said that she had read about the disease somewhere, although the first doctor did not tell her. Some were also given the diagnosis by a psychiatrist. If I see that the patient does not seem to accept the word "schizophrenia," I tell her and write in the treatment sheet that there is a name to the sickness. Dr. Glen Green calls them "Subclinical Pellagrins." I give this name to patients with pigmentations at the back of their neck and arms. For those whose skin is clear I tell the patients that they are suffering from a metabolic malperceptive disease. This was coined by Dr. Bella Kowalson. They are happy to know that they are sick with something, and they look forward to getting well. The malperceptions are the first to disappear in this illness. In chronic cases we find mostly paranoid delusions and depression.

Treatment

1. I have mimeographed copies of a diet for Good Health which a patient must follow. In it are the "do's" and "don'ts" on what one has to eat and drink. As soon as the patient gets better, he or she can eat little by little the things that were previously not allowed.
2. I outline what the patient should do from the time she wakes up until she sleeps, starting with an early exercise, even just walking and bathing and recreation. He or she must sleep not less than eight hours a day.
3. I give a list of supplementary vitamins and minerals if needed, as well as tranquilizers which is a must before bedtime for disturbed patients. Young patients do not usually need tranquillizers and will not like them unless they have been drug addicts or alcoholics. Detailed instruction is given on the administration of the megavitamins which have to be taken always with the meals.
4. The next appointment is made at a time convenient for all. Before patients leave, any doubt or questions about anything has to be answered so that they can go home assured of the treatment and of getting the instructions correctly.

Medication

1. Niacin or niacinamide, a daily dose of 2-3 g a day and up to 10 g. I have indeed given as much as this amount to some patients. The dose is pushed every week or every other week depending upon the progress of recovery of the patient. Then the dose is again tailored downward to get the maintenance dose which the patient has to continuously take for one year. I have given as much as 3,000 mg or 3 g of Pyridoxine HCI and 80 mg of zinc.
2. Ascorbic acid—3-10 g daily.
3. B-Complex vitamin, giving a stronger dose of B6, Pyridoxine HCI.
4. Alpha tocopherol or vitamin E—200-800 units daily.
5. Vitamins A and D for allergic and asthmatic patients.
6. Zinc, calcium, or yeast tablets, according to the patient's needs.
7. Tranquilizers, or stimulants, or anti-depressants.
8. A series of ECT, unilateral or bilateral.
9. Lithium carbonate if the patient is very depressed.

Results

General results: The effort of telling the patients and the family the diagnosis is surprisingly salutary in almost every instance. The patient's response to the revelation of the disease, or indifference at the beginning, indicates considerable relief especially when assured that the disease is curable. Somehow, some of the patients have heard or read about their illness. My assurance, frankness, and honesty help the patient cooperate

in taking the medication. Most patients and their families have been greatly confused by evasive, vague, and often conflicting statements from previous doctors, whereas this approach is beneficial and helpful, relieves the family considerably of their misapprehension and guilt, and leads to an optimistic outlook. Since vitamins are cheaper than tranquilizers, this is another optimistic acceptance by the family of this therapy.

The use of the HOD test is satisfactory to both the patient, the family, and myself. It gives us a feeling of confidence to a certain degree, and the nature of the illness is monitored by an objective means. Often, during the next visit, a patient would ask for the cards and would say, "I feel better than when I came here first, I would like to see if my feelings are correct." When a person wants to get well, he is honest with himself and answers honestly, too. It is indeed very gratifying to the patient and the therapist to see the improvement through the personal appearance of the patient and confirmed by the HOD test. In the very chronic schizophrenics, where malperceptions have already disappeared and they have developed a high degree of delusions and depression, they will refuse to take the test. One can grasp the nature of the disease in the past through the history. In this case, I have to gain the confidence of the patient so that he will believe in the nature, cause, and treatment of his disease. Giving books and short literature about this disease has helped a lot of the patients and their relatives.

There have been mild side effects of high dosage of vitamin B3. With the niacin, some have flushing and sometimes itching. The flushing varies according to the individual and upon what they have eaten. To minimize or allay this, I give Periactin 4 mg a half hour before giving the niacin. In general, the sicker the patient, the less the flushing. After three or four days, there is no more flushing. Some patients claim they like the flushing; it gives them a comfortable warmth. Another way of minimizing the flush is to give the niacin in small doses at the beginning and gradually increase the dose until you reach the maximum amount needed. Niacinamide does not give the flush. It sometimes gives an uncomfortable nauseating sensation which can be minimized with sodium bicarbonate. If so, I withdraw the niacinamide immediately, resume to give niacin or a combination of both niacin and niacinamide gradually. I have very few cases who complained with this discomfort. If one drinks cold water or milk with the vitamins, the side effects are minimal. Sometimes, I combine both the niacin and niacinamide. I have given as much as 10 g of niacin to some patients with no side effects. The young patients who weigh 100 pounds or less have been maintained on a $1^1/_2$ to 2 g dose a day of niacin.

Response to Treatment

The majority of patients improve significantly. If the onset of the disease is recent, or if it has started in adult life, the response is dramatic. If the onset of the illness was before age 17, the response to the treatment is slower or more complicated. Some patients are too ill or regressed, and they need more help. If they are very much disturbed, I do home visits which is more advantageous and convenient on the part of the family because of the diet than putting the patient in the hospital. After the patient recovers from severe depression or thought disorder, medication can be resumed normally again in a few days. When a patient is unmanageable, hospitalization is necessary, but it need not be prolonged.

I measure the improvement or recovery of my patients from their appearance. They arrive at the clinic smiling, with signs of vigor or strength, and behave normally. They talk and relate to us, the family included. The patients describe their well-being, better appetite, natural sleep without any tranquilizers. They are now optimistic and already have a plan of what they want to do. This again is confirmed by the HOD

test. They are ready to go back to school or to their work.

I do not do any psychotherapy or inquire about anything that could have caused the illness. How can one talk to blank walls? They cannot even describe the peculiar discomfort they are suffering from. It would be unkind to disturb their very disturbed thought. When the patient, however, has responded somewhat to the treatment, I do not need to ask what he or she likes to do. Through their own initiative they might have a plan for themselves. This is the first time I do counseling or supportive therapy. Another measure of the improvement of some patients is their awareness of the minor discomforts that they feel, like "my leg is heavy," "I seem to drag when I walk," or "I have butterflies in my stomach." These are minor ailments compared to the vast discomfort that they suffered. Their awareness helps their further recovery. Their metabolism changes to a normal state. The malper-ceptions disappear. The last to disappear are the delusions. Sometimes the delusions may not be forgotten especially if the patient has been sick for a long time, has seen so many doctors, and has been so confused and unbelieving. In this case, a good therapist who has a good rapport with the patient is needed.

Economics

The megavitamin therapy for schizophrenics is quite economical. In Manila the druggists carry 100 mg of nicotinic acid at 4 centavos a piece. Ascorbic acid costs less than 5 centavos for the 500 mg last year, and it has doubled this time. From the basis of the cost of these two basic vitamins at a dose of 30 tablets of nicotinic acid and 6 tablets of ascorbic acid, the patient would be spending PI.80 a day. Tranquilizers cost 10 times as much, and often when patients are not disturbed any more, they resent taking these drugs. In the United States and Canada they make as high as 500 mg and 1,000 mg per tablet of the niacin or the niacinamide. We do not have niacinamide in the Philippines except those that are incorporated with some B-complex preparation like Theragran, Beminal, Duplo B, etc. Tranquilizers are not much needed with the megavitamin therapy inasmuch as the vitamins themselves, besides being energizers, have some tranquillizing effects.

I have a supply of niacin and niacinamide, B6, vitamin E, and other vitamins and minerals which I get directly from the U.S. and Canada. The cost including freight and customs tax is even cheaper than what we can buy here locally. In the near future we shall have doses of these vitamins which will be tableted by a local druggist.

Discussion

The improvement rate is surprisingly high considering the fact that some of my patients have already been sick for a long time and had previously sought extensive treatment elsewhere.

The new approach to schizophrenia brought many unexpected benefits to both patient and the family, aside from the fact that the patients get to know that the illness is specially diagnosable and that it could be treated on rational grounds. They are relieved that the illness after all does not lie within the frightening and guilt-provoking "nameless" category. The almost universal relief upon disclosure of the diagnosis was followed in some instances by the concern of the family because of its genetic implication, and the fact that the disease is curable. When the patient improves, the first thing the parent would ask is that if it is hereditary, how could it be prevented? I tell the patient that this disease is like diabetes or heart disease, and that with prophylactic measures like other metabolic diseases there is no reason why a person will become a schizophrenic. I have read this theory in all the books regarding this disease. In fact, the goal of the Orthomolecular therapists is to wipe out schizophrenia by the year 2000 if only precautionary measures with good diet and a prophylactic dose of niacin (100 mg) are given to children, and bigger doses to

adults as well. The theory that supports this is that some people are born vitamin B3 or B6 dependent as distinguished from diseases with vitamin deficiencies.

The interval of visits depends upon the degree of illness of the patient. It is usually at seven to 10 days intervals for the second or third consultation. After this, if there is marked improvement the interval is lengthened to two weeks. After three months the patient comes once a month. There are some cases, of course, where it is necessary that the patient comes every week for as long as two months. The average recovery is three months, after which we see each other every month, or every other month, or communicate just by letters or telephone calls. Follow-up is necessary so that the patient continues to take the proper doses. I have had two patients who unknowingly or experimentally, even with my warning, abstained from getting the vitamins. It did not take a week before they felt weaker, could not sleep, and became nervous. When they resumed medication they became well again. If a patient does not take the medication he might even get worse and the recovery might even be harder and longer.

No two patients are alike. They are all interesting, and each case is a different one. Since there are several kinds of schizophrenia depending upon the cause, such as allergy to the CNS, secondary allergenic to food, the simple cases or metal intoxication due to mercury or lead, or due to a zinc deficiency, as I reported in the tabulated form, the treatment for each patient is different. I have documented the history of most of my patients. They are indeed good subjects for study in conjunction with the literature and books that are continuously publicized by the Orthomolecular scientists. The doctors in this field assure all of us that "with the continuing research as to cause and treatment of all the metabolic diseases, including emotional and mental disease, and they have arrived at many favorable results and conclusions, there is no reason why a patient should remain sick even if he has been ill for a long time."

SUGGESTED READING LIST AND REFERENCES

ABRAHAMSON, E. M., and PEZET, A. W.: Body, Mind and Sugar. Holt, Rinehart and Winston, New York, N.Y., 1951.

ADAMS, R., and MURRAY, F.: Megavitamin Therapy. Larchmont Books, New York, N.Y., 1973.

COTT, A.: Controlled Fasting Treatment of Schizophrenia in the U.S.S.R. Schizophrenia 3, 2-10, 1971.

COTT, A.: Orthomolecular Approach to the Treatment of Learning Disabilities. Schizophrenia 3, 95-105, 1971a.

GREEN, R. G.: Subclinical Pellagra (its diagnosis and treatment). Schizophrenia 2, 70-79, 1970.

HAWKINS, D. R., and PAULING, L.: Orthomolecular Psychiatry. W. H. Freeman and Company, San Francisco, California, 1973.

HOFFER, A., KELM, H., and OSMOND, H.: The Hoffer-Osmond Diagnostic Test. Robert E. Krieger Publishing Company, Huntington, N.Y., 1975. HOD Test Kit available from: Behavior Science Press, P.O. Box A.G. University, Alabama 35486.

HOFFER, A., and OSMOND, H.: How To Live With Schizophrenia. University Books, New Hyde Park, N.Y., 1966, 1975.

LILLISTON, L.: Megavitamins-A New Key To Health. Fawcett Publications, Inc. Greenwich, Conn., 1975.

PFEIFFER, C. C, SOHLER, E. H., JENNEY, M. S., and ILIEV, V.: Treatment of Pyroluric Schizophrenia (Malvaria) with Large Doses of Pyridoxine and a Dietary Supplement of Zinc. J. Orthomolecular Psychiatry 3, No. 4, 292-300, 1974.

PFEIFFER, C. C: Observations on Trace and Toxic Elements in Hair and Serum. J. Orthomolecular Psychiatry 3, No. 4, 259-264, 1974.

PFEIFFER, C. C, WARD, J., EL-MELIGI, M., and COTT, A.: The Schizophrenias: Yours and Mine. Pyramid Books, New York, N.Y., 1970.

RANDOLPH, T. G.: Domiciliary chemical air pollution in the etiology of ecological mental illness. Int. J. Soc. Psychiatry 16, 243-265, 1970.

RANDOLPH, T. G.: Clinical ecology as it affects the psychiatric patient. Int. J. Soc. Psychiatry 12, 245-254, 1966.

REES, E. L.: Clinical observations on the treatment of schizophrenic and hyperactive children with megavitamins. Orthomolecular Psychiatry 2, 93, 1973.

REES, E. L.: Discussion. 3rd Annual Meeting, Academy Orthomolecular Psychiatry, Detroit, Michigan, 1974.

BILL, W.: The Vitamin B3 Therapy. Bedford Hills, N.Y., 1968.

WILLIAMS, R.: Nutrition Against Disease. Pitman Pub. Corp. New York, N.Y., 1971.