Orthomolecular: The Optimum Treatment for Schizophrenia

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Schizophrenia is one of the most important chronic diseases. It does not kill as many people as cancer or heart disease, but in another sense it does terminate the life every person is entitled to - a life which is relatively free from pain and is normally productive. The person with schizophrenia should be able to achieve whatever he or she could as if they had never been ill, once they have recovered from their acute illness. But this does not happen. The natural recovery rate is probably less than 25%, and the addition of any or all of the tranquilizers when used alone does not yield any better results. In 1850 Dr. John Conolly reported a fifty percent recovery rate. He used decent, humane care, good food and shelter. I have yet to meet a schizophrenic who recovered from drugs alone who is practicing medicine, law, piloting an Air Canada jet, running a bank, or doing any of the many skilled jobs upon which our society must depend.

For this reason, the stigma of mental disease has remained strong in spite of best efforts to convince the public that it is a disease like others. In my opinion, the stigma will dissipate only when the results of treatment are as predictable and as effective as are the treatments for the majority of other chronic conditions. We are ready for this now, but it has been impossible to persuade the psychiatric profession that it would be better for everyone if it would start to use treatment which is more effective than is the treatment of arthritis, or the treatment of cancer.

It is ridiculous to ask for ever more research funding simply to find the elusive perfect tranquilizer and to spend a lot of money testing these drugs for the drug companies. We should be working on behalf of our patients, and not on behalf of the drug companies persuaded by the massive drug advertising campaigns, the major post graduate trainers.

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We should use what is known while at the same time trying to perfect and to develop new treatments. Governments should demand from their public health departments that they seek out and use the best possible treatment as a way of reducing disease costs. All the genetic research will yield little of value in the immediate future. We have known since 1940 that schizophrenia has a major inherited element, that genes are involved. What is the immediate value of looking for the gene when we ignore millions of schizophenic patients around the world, condemned to permanent incapacity, in hospitals, inadequate homes, and finally on the streets? What is the value of searching for the perfect xenobiotic? So far in the vast field of medicine there are no xenobiotics than do more than alleviate a few symptoms and often at a major price to the patient. Diseases are caused by deficiencies, by nutrient dependencies, by toxicities, by biochemical abnormalties. They are not caused by a deficiency of xenobiotics. Schizophrenia is not due to a deficiency of Haldol or any other tranquilizer.

The latest trend in medicine is to talk about "evidence based" medicine, meaning using the treatment which is the most effective at the least cost. This movement is especially powerful in the United States, driven by the escalating costs of treating disease. If this new principle were applied to the treatment of schizophrenia, there would be no doubt whatever that orthomolecular treatment would be the treatment of choice. The cost of using any other treatment is two million dollars per lifetime for every schizophrenic because they do not become well, while the cost of orthomolecular treatment is infinitesimally small compared to this since the majority of acute patients will become well.

This journal was founded over 25 years ago to provide a forum for the discussion of schizophrenia since no other journals would carry this type of information. I have dedi-

cated my professional career toward this cause and will continue to do so. I and my colleagues have presented the clinical data over and over, and even though we were the first physicians in North America to run double blind comparison studies - and on schizophrenic patients - the vast monolithic psychiatric establishment has wilfully blinded itself to these facts and continues to pay their supreme accolades to ever more and newer tranquilizers, which are generally not much better than the first ones which came out in the mid Fifties. I will therefore continue to publish clinical data to demonstrate that schizophrenic patients can get well, and to prove that they deserve a chance to achieve this objective. This thought came back this afternoon after I had seen eight schizophrenic patients, one after the other. I had not selected them. The appointments were set up by Fran, my secretary, and I did not know until this morning who I would be seeing. Here are their case histories.

1. Mrs. C. Born 1932, first seen September 1987

After seeing a psychiatrist for 2.5 years for her depression she was confused about what treatment she should be following. She had heard of hypoglycemia. She first became depressed in 1953 following the birth of her first child. In 1962 she was given 4 ECT and following that took the antidepressant phenelzine. Every time she went off this antidepressant her depression recurred. She was in hospital ten days in 1985, again in January 1987 for 21 days. She told me she had been diagnosed manic-depressive because her first bout of depression had been preceded by a manic episode, but she had not had any since then. Her main complaint was fatigue to the point she could do only her housework and cooking. Anything more was impossible. She was also anxious and very worried about her weight, 135 pounds. Her best weight had been 120 pounds.

When I first saw her, she told me she had heard the voice of her son in 1986 for the ten days she was in hospital, and again the next admission. She was worried about people staring at her. When very depressed she was also very paranoid, thinking the public was holding things back from her. Her memory and concentration were poor and she blocked a lot. I diagnosed her schizo-affective[1].

She was started on a sugar-free diet with niacinamide 1 g TID[2], ascorbic acid 1 g TID, pyridoxine 250 mg OD, zinc gluconate 100 mg OD, while continuing her phenelzine 15 mg TID, haldol 4 mg HS and serax 87.5 mg PRN. By December 1987 she was much better. She then told me I had treated her brother for alcoholism many years earlier by having him experience the psychedelic reaction to LSD in Saskatoon, and that he had remained sober until he died in 1985.

For the past few years she was been more or less well, developing a few symptoms when under severe pressure but usually able to deal with family pressures effectively. She is coping with her husband's retirement, with the need to move into a different home, but she does not require any more psychiatric attention than most of the patients I have seen with anxiety or depression. She is seen about four times each year for the nine years she has been under my care. She had her last of four admissions in 1987 and has not needed to go to hospital since then.

2. Mr. H. Born 1927, first seen June 1993

He came to see me June 1993 with his wife and brother. He had been seriously confused for the previous three months. I was not able to obtain the history from this patient as he was in a mental fog and seemed unaware of what was going on. His brother and wife gave me his history. He first became sick at age 27 and was admitted to hospital. Twenty-one years later, 1975, he became sick again and had needed repeated admissions from that time until his last one in 1986. His family did not know what medication he had been on, nor how long he had been in hospital on these admissions. At that time he had auditory hallucinations and was very paranoid. After his last discharge he was maintained on tranquilizer medication, but in spite of this had begun to deteriorate again over the previous year and especially over the previous three months. He had about six series of ECT during his career as a chronic schizophrenic. He admitted he was hearing voices, believed that everyone was staring at him. He was very paranoid, believing there was a plot against him. He often spoke to his wife about the telephones being tapped. His

memory and concentration were very poor. He also suffered mood swings. He weighed 250 pounds, being 5’11" tall.

I continued his medication as follows chlorpromazine (CPZ) 900 mg OD, lithium carbonate 900 mg OD, perphenazine 32 mg OD, procyclidine 15 mg OD, l-thyroxine 200 mcg OD and nifedipine 20 mg OD. To this I added a sugar free diet, niacin 1 g TID and ascorbic acid 1 g TID.

July 28, 1993, he had lost three pounds and his wife noted some evidence of his previous personality emerging. I decreased his CPZ to 700 mg OD. September 2 I decreased it further, to 500 mg. He was more alive, more active and more cheerful, but he still heard the same voices. November 4th I increased his niacin to 1.5 g TID and decreased CPZ to 300 mg OD. By December 9th he had lost 13 pounds and his blood pressure had started to come down.

January 19, 1994, he developed chills and fever from a bladder infection, was admitted to hospital in a confused state, and later was transferred to the psychiatric ward. There they would not allow him to take any vitamins[3]. He was discharged February 2, 1994. He had begun to deteriorate rapidly in hospital and was started on resperidal. I saw him February 10, 1994, stopped the resperidal, decreased his lithium carbonate to 600 mg OD, trilafon to 16 mg OD and kept his CPZ at 200 mg OD. March 22, 1994, I increased his niacin to 2 g TID and he was off lithium. By April 28 he weighed 223 pounds and was going on walks three times each week. June 9, 1994 I reduced his CPZ to 100 mg OD. A few weeks later he became nauseated and I increased it to 125 mg and added folic acid 5 mg TID. October 27 I decreased his CPZ to 100 mg every second day. December 15, 1994, he was still showing major improvement after each visit. His weight was 207 pounds.

In March 1995 I stopped all tranquilizers. He was nearly normal according to his wife and his brother, and I concurred. By June 15 he was symptom free. The voices were gone, his memory was much better, and he was on nutrients only. He was busy helping his wife. September 14, 1995, he was well. He was cheerful, joked, had resumed painting with oils, something he had done before he became ill. His wife was delighted that she had back the husband she had known, who could now be a helpmate around their place and not just a burden. He is well, that i.e. free of signs and symptoms, gets on well with his family and with the community, and would be working if he had not been so badly damaged by his illness and inappropriate treatment he had received for such a long time. It was very exciting to see this chronic schizophrenic gradually come back to a full and productive life.

3. Miss K. Born 1954, first seen July 1979

When I first saw her in 1979 she complained that for the past year she had suffered from severe episodes of anxiety, which she had been able to control until one month before I saw her. Her physician gave her medication but it left her very tired and sleepy. She thought the doctor had given it to her to make her an addict. She told me she had taken LSD twice, the last time two years earlier. She denied any perceptual changes except hearing herself think occasionally. Her thinking was paranoid and she had been depressed in the past.

Her parents told me her personality had changed and she left home at age 18, quitting school two months before graduation from high school. She then went through a series of bad relationships with several men. She lived with one who abused her for two years and beat her. She had several miscarriages. Her behaviour was strongly condemned by her parents and the church to which they belonged, and they had practically disowned her because they considered her a loose woman who could not be helped. At the time I did not think she was schizophrenic, and suggested she continue with the program of nutrition and vitamins she was already taking.

I saw her again in February 1980 when she was depressed. This time she saw visual hallucinations in a picture hanging on the wall, and heard voices. She had been admitted to hospital in December for ten days and was started on haldol. Because she had no money she had been unable to continue with her vitamin program from December. I rediagnosed her as schizophrenic[4] and started her on niacinamide 1 g TID, ascorbic acid 1g TID, pyridoxine 250 mg OD and a zinc

preparation 10 mg TID while continuing the haldol 4 mg OD. By March 1980 she was less stiff and jerky, more alive, and had more initiative. In April her mother reported she was beginning to see her daughter's previous healthy personality emerge. September 2 to September 29 she was in hospital because her mother could not cope with her. She had had severe reactions to the haldol including spasms, and marked limb tremor. In hospital I gave her seven electroconvulsive treatments (ECT). She was discharged free of medication to stay with her sister. Her relationship with her parents was much better. They were beginning to see her as having been very sick, rather than very bad.

In April 1981 I started her on amitriptyline 25 mg and perphenazine 2 mg HS. By June she was only on the antidepressant plus her vitamins and she was normal. She was working.

In July 1982 she had a severe cold lasting several weeks and began to deteriorate. I admitted her to hospital July 15th to 22nd. She had been living with a man and she was pregnant. Her baby was born in January 1983. She continued to be seen at irregular intervals, usually requiring some adjustment in her medication.

For the five years beginning in 1980 I saw her 30 times, for the next five years 37 times, for the last five years 13 times, and for the last three years twice each year.

In 1986 I started her on nozinan and gradually increased the dose until she was well on about 300 mg daily. July 24 1995, she accidently took an overdose. She had taken her HS medication, awakened during the night and took another 100 mg of nozinan. She became frightened and called 911 and was admitted. When seen September 14th she was well again. Her daughter was doing well, going to school. She had been able to look after her child for many years with the kind and dedicated support of her parents and family. Whenever she was too tired, her child would move in with her parents for a few days to give her a rest.

I saw her daughter as a patient when she was nine years old. She had been experiencing auditory and visual hallucinations for two months. The voices varied from a mumble to calling her name. The voice would sometimes order her to "Come here", and she was very afraid of this. She located this voice either outside of her head or in her head. She also had shadow illusions and in shadows saw a person. She felt unreal as well. She was moody and irritable, cried a lot, but was a good student. I started her on a sugar-free, dairy-free diet, with niacinamide 500 mg TID and ascorbic acid 500 mg TID. Since then she has been well but has needed amitriptyline 25 mg HS PRN.

I consider the daughter well, i.e. free of schizophrenic symptoms and signs, and getting on well with family and community. Mother is much improved, a single mother on pension support. Her illness, the pregnancy, and later the need to bring up her child, prevented her from taking further training and from working. The need to remain on the high dose of tranquilizer prevents her from functioning at a fully normal level. I expect she will be working within a few years.

4. Mr. E. Born 1929, first seen October 1989

In 1987 he was admitted to hospital with severe anxiety and paranoid ideas. He was diagnosed psychotic. For the year before he saw me he had been hearing voices which he found comforting but which his wife found very disturbing. It was difficult to talk to him because he was very hard of hearing as well. He had been alcoholic for fourteen years but had been abstinent for the previous ten years. I started him on niacin 1 g TID, ascorbic acid 1 g TID, folic acid 5 mg BID and thiamine 100 mg TID, the last one because of his history of alcoholism.

Since then I have seen him on average eight visits each year for the past five years. Over the years he has become free of depression, his paranoid ideas have decreased, and the voices have become much less disturbing. At the last visit he told me that he believed he was now on top of the voices, that they were no longer dominating him as they had in the past. I see him more often than many of my patients because he has insight that he must not talk about his experiences to anyone else, and he finds great relief in being able to talk to me about them. I consider him much improved.

5. Mrs. W. Born 1934, first seen October 1981

Her chief complaint when I first saw her was hearing voices.

She had become sick for the first time at age 19, troubled by her auditory hallucinations. She was treated in Seattle, later in Vancouver in the mental hospital for one year, and received insulin coma and ECT. Six years later she was admitted for the second time to Riverwiew Hospital for eight months and again in 1972 for four months. She had a fourth admission in 1977 for four months and two more in 1977 and 1979 at the Eric Martin Pavilion in Victoria. The voices were always present and she was convinced that spirits were talking to her. For many years she had been given injectable tranquilizers, every two weeks. The first time she saw me she described her voices, saw visions and could visualize spirits in her own mind. She was very suspicious, with blocking. Not surprisingly, her mood was depressed and she had made one suicide attempt in the past.

I started her on niacinamide 1 g TID, ascorbic acid 500 mg TID, pyridoxine 250 mg OD, zinc sulfate 220 mg OD, and maintained her on the tranquilizer and the antidepressant. October 1982 she was nearly normal. March 1983 the voices had returned. She had been off her tranquilizers for awhile. She then resumed the drug and started a secretarial course. I added niacin 1 g TID and kept her on imipramine 75 mg HS. She had to be admitted to hospital October 7 to 12, and again from October 18 to 26, 1984, because her thinking had become very bizarre and she was disoriented and agitated. There were no further recurrences.

She was well most of the time but would sometimes under stress hear voices again. She lived a normal life and travelled a lot. She was admitted August 23, discharged August 31 1987, to readjust her medication, and readmitted the next day. After this discharge she was under the care of another psychiatrist[5] until November 10, 1993, when she was referred to me again. During May 1993 her son was involved in a car accident. Her daughter went to Australia to look for work and she missed her terribly, and the voices had become very strong. She had been in the Eric Martin Pavilion May 25 to October 6, 1993, and was given resperidal but this was very toxic for her, and when I saw her she was on perphenazine 8 mg and was well. The voices were in the far background.

March 1994 her son married and she had found this stressful. She looked well, seldom heard her voices, and did volunteer work with schizophrenic patients. I added zoloft, which did not help, and later prozac, which did help. December 19, 1994, she was symptom free. I stopped the prozac.

September 14, 1995, she was unhappy over a misinterpretation with her son but this was readily overcome. She was on perphenazine and the vitamin regimen. She had just returned from a visit with her daughter in Australia and was was very happy that her daughter had found good employment and was happy there.

For the first five years under my care I saw her about four times each year. There were six visits in 1986, and 8 in 1987. When she came under care again I saw her twice in 1993, four times in 1994 and once in 1995. Before going on orthomolecular treatment she had had at least six, perhaps seven, admissions, and had spent at least 28 months in hospital. After starting on the progam she was in for three brief admissions. After she went off the vitamin regimen she was again in hosptial for 4.5 months. Since going back on the program there have been no further admissions.

6. Mr. D. Born 1958, first seen November 1990

Nine years before I saw him, he was diagnosed schizophrenic on his first admission to hospital for six weeks. He had two more admissions after that, the last in May of 1990. Seven years before seeing me he had started himself on inosital niacinate[6]. He told me that under pressure he would hear voices. Sometimes he believed these voices were trying to trick him. He heard his own thoughts all the time and felt unreal. He was paranoid but was aware of it and was able to cope, and he still had to deal with episodes of depression. His dress was quite flamboyant and his language had an interesting schizophrenic flavor.

I increased his inositol niacinate to 1 g TID, adding ascorbic acid 500 mg TID, B-

complex 50 OD, zinc citrate 50 mg OD and continued him on his moditen 5 mg OD. December 1990 I advised him to start niacin as well.

February 1991 he reported he usually took two trips each year to California to try and contact Hollywood stars and to get away from himself, but he had realized this was impossible. June 1991 he was better. The voices were gone but he still heard his own thoughts. December 19, 1991, he had stopped niacin and I advised him to start niacinamide 1 g TID instead.

October 13, 1992, he married a patient he had met while he had been in hospital. He had an incentive job and did volounteer work as a cook. The voices were still troublesome.

November 1993 his marriage was working out well. He was still on small doses of tranquilizers. November 15, 1994, his wife was in hospital. She refused to take vitamins and did not want him to take any.

June 15, 1995, he had a job. His wife was pregnant and he was happy about that. September 14 he was still well and looking forward to his baby. I consider him much improved. He had no longer needed any admissions to hospital.

7. Mr. B. Born 1961, first seen February 1995

Four years earlier, two months after he last had taken hallucinogenic drugs such as LSD, MDA, pot, cocaine and speed, he began to feel unreal. He was in a continuous LSD-like exprience. He had become very sensitive to sound, and found it very difficult living with his family with his three year old nephew. He suffered these LSD-like visual illusions, heard voices, had visual hallucinations and felt dizzy. He felt disconnected from his words, that he was no longer present, and he felt possessed. His paranoid ideas were troublesome but he realized they were not true. In addition he was very depressed and tired.

He had started himself on niacin 1 g TID, ascorbic acid 2 g TID, zinc 60 mg OD and pyridoxine 700 mg OD. I added chlorpromazine 50 mg HS. He could not tolerate the drug and instead was started on oxazepam 30 mg HS. By spring he was much better but later he relapsed and when I saw him September 14, 1995, he was on a plateau. He had severe insomnia and had increased his oxazepam to 90 mg HS. I added niaciamide 1 g TID and perphenazine 2 mg HS. If he could tolerate this it would be increased gradually so that he could relax and eventually get off the oxazepam.

8. Mr. O. Born 1973, first seen January 1992

He became sick in 1989, consulted a psychologist, and was given psychotherapy plus an antidepressant and a tranquilizer. The drugs helped him to control his thinking but he did not feel well. He moved in with his parents and in September was started on long-acting injectable haldol. When I saw him he could hear himself think and felt that these thoughts came from evil entities, mostly from the Devil. They instructed him to hurt himself and other people, but he never had done so. They also advised him to perform certain rituals without specifying what they were. He had violent difficult dreams where he found himself in a record shop surrounded by evil records. He sometimes was convinced people were staring at him and watching him. His thinking was paranoid, there was frequent blocking, and his memory and concentration were poor. Episodes of depression dogged him with suicide ideas.

I started on niacinamide 1 g TID, ascorbic acid 1 g TID, B-complex 50 OD while continuing his long-acting haldol 75 mg every three weeks. March 1992 he was normal and making high grades with his studies. In the fall he entered university. January 30, 1993, his haldol dose was reduced to 30 mg every three weeks. In the summer he took summer school classes.

April 1994 I added zoloft 50 mg OD. One month later he was well. September 14, 1995, he was still well. He was cheerful, told me he was completing his university training, taking five full courses. He expected to graduate in the spring. I see him about every six weeks.

Of the seven patients on long term care, four are well and three are much improved. These seven fall within the normal range of our healthy population, but they may require continuing care even if it means one visit per year. I believe many of them are healthier than the average person since they are fol-

Table Summarizing Results of Treatment

Patient	Born	Sex	First Symptoms, Age	Condition
C.	1932	F	21	Well
H.	1927	M	27	Well
K.	1934	F	18	Much improved
E.	1929	M	58	Much improved
W.	1934	F	19	Well
D.	1958	M	21	Much improved
B.	1961	M	30	Sick
O.	1973	M	16	Well

lowing the best principles of orthomolecular nutrition and are taking the supplements they need to stay well. My patients have to be protected from other psychiatrists. If I am not around they will eventually go to other psychiatrists who will promptly[7] remove the vitamins from their regimen, and they will resume their inexorable march downward into total disability. These patients comprise only a small fraction of the 500 chronic schizophrenic patients under my care in British Columbia and a few from the rest of the continent. In an earlier issue I described the outcome of a sample of 27 from this large chronic pool[8].

I have given some detail of the therapeutic program I follow. It includes attention to nutrition to elimate any foods which are harmful to the patient, usually sugar and foods to which they are allergic. It includes the nutrients, which are most helpful in the optimum dose ranges, which is determined by clinical experience, and it includes medication as long as it is necessary. The ultimate aim is to have patients well on nutrition and nutrients alone, or to need such low doses of drugs that they are not incapacitated by the toxic and side effects. To achieve this requires attention to detail and, above all, patience, because chronic patients may need many years before they recover.

Not every patient gets well, and this is a property shared with other diseases. But over 90% of early schizophrenic patients will recover within two years, and better than 50% will recover when they have been sick many years. It is therefore essential that no more patients be allowed to enter the chronic pool. But this is happening on a large scale, as ever more new patients are placed on tranquilizers only and entered into the permanent chronic pool of schizophrenia.

Notes

1. I consider the schizophrenic component the most important, for if it is not treated patients will inevitably deteriorate. For many of these patients not using lithium is no serious barrier to recovery, and most of my patients with this diagnosis eventually do not need lithium.
2. OD means once a day, BID means twice a day, TID means three times per day, HS means at bedtime, and PRN means taken as needed.
3. It is standard policy for all psychiatric wards to promptly discontinue the vitamin regimen of any of my few patients who have to be admitted to hospital. They offer the patients no explantion, or else lie to them that they are dangerous and that they do not help. Invariably the patients come back to me angry at the hospital and wanting to immediately get back on the program. Sometimes relatives sneak the vitamins to them and they take them surreptitiously.

4. She would probably be diagnosed as borderline personality disorder today, BPD, the new euphemism for schizophrenia, but one which does not call for treatment.
5. This meant she would not be allowed to take her vitamins.
6. Inosital niacinate is compound formed by adding two B vitamins together. Each inositol molecule contains six niacin molecules. It was generally available in North America under the trade name Linodil, but the company stopped making it because they did not want to spend the millions needed to get FDA approval. It is back again under different names. It is an excellent preparation, almost free of flushing and can be tolerated by almost every one even when they can not tolerate theother two forms of vitamin B_3. Its main defect is its cost, but it is still much cheaper than the new tranquilizers and antidepressants.
7. Rarely the psychiatrist in charge will permit their patient to stay on the vitamins - usually in response to a very determined patient and family. Most of these patients have been referred to me for consultation only and remain under the care of their original psychiatrist. Often these patients will not tell their psychiatrist that they have been to see me. They are referred by their G.P.
8. Hoffer A: Chronic schizophrenic patients treated ten years or more. *J. Orthomolecular Medicine*, 9:7-37,1994.