## **Treating Chronic Schizophrenic Patients**

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#### Introduction

Treating schizophrenic patients to recovery can be as easy as giving them one vitamin for a few months, or as difficult as spending 25 years using a total comprehensive program which includes medical treatment (psychiatric), shelter, nutrition, and tender and loving care by family or by others equally motivated to do so. All these treatment components are equally important.

If you are familiar with my reports to the literature you might think that I consider nutrition and the use of supplements the only important variables. About sixteen percent (88) of my reports deal with treatment of schizophrenia and other conditions, and in these I write primarily about nutrition and vitamin supplements. In this report I will demonstrate the vast importance of all components and illustrate this by the treatment response of two chronic schizophrenic patients who were considered the most intractable and least likely to improve patients, of the more than 5,000 I have seen. I will describe their present condition after many decades of treatment.

The components of an ideal treatment program include: (1)Shelter; (2)DUSSP - Decency, Understanding, Support, Safety and Privacy; (3) Psychiatric treatment; (4) Orthomolecular treatment. These are not listed in the order of their importance. They are equally important. They are listed in the historical order that treatment developed. The effect of each component on the response to treatment varies with the adequacy of these factors. Thus treating schizophrenic patients in a very good home will be more successful than treating them on the grates of the streets of Toronto or New York.

#### Shelter

Shelter obviously is absolutely essential for every person, and the amount of 1.3A-2727 Quadra Street, Victoria, BC, Canada V8T 4E5

attention that must be given to shelter depends upon the conditions of the environment. It varies from the homes in mild climates in which many of us live, such as my home in Victoria, British Columbia, to the rigid environment around the bodies of our astronauts when they travel in space. People are prepared to pay enormous sums of money for what they consider to be the ideal shelter, travelling first class, living in very expensive homes, staying in five-star hotels, living in areas surrounded by many other people who help them look after their interests, and in geographical areas surrounded by tight borders guarded by their best military means.

Our psychiatric patients have been denied the absolute need of shelter from the times when they were banished from their community, in places where they were handcuffed to trees in the forest, when they were forced to wander about on the streets (as they often were), when they were incarcerated in foul dungeons and herded into inhuman wards given less attention than farmers give their animals.

About 150 years ago the first good mental hospitals were built. Dr. J. Conolly in England was superintendent of a hospital which provided proper shelter. He reported a fifty percent recovery rate. The Dorothea Lynd Dix hospitals were built in the United States and one in Toronto. They were substantial structures which provided the better elements of shelter. But as the era of profound pessimism spread into our psychiatric system by 1900, these hospital were allowed to degenerate into foul prisons. They were called asylums but they did not offer any asylum, let alone proper shelter.

When I first studied the Saskatchewan Hospital at Weyburn, Saskatchewan with Dr. H. Osmond as its clinical director, I was appalled at what I saw. This hospital, built many years before to house 1,200 patients, had closer to 2,500 patients crowded into

many wards. One huge open ward contained about 80 female patients, most of whom would not keep their clothes on. Therefore the temperature was kept at 80°F so that they would not get pneumonia. There were no rooms, there was no privacy. There were holes gouged in the cement floors and they used hoses to wash off these unhappy, desperate women. Dr. Osmond described the situation in this way: "If one wanted to build a hospital in which you would admit healthy normal people in order to send them out months later psychotic you would construct and operate a building such as the one we had at Weyburn. Today this is no longer tolerated and we do not permit these structures called hospitals or wards to so flagrantly abuse our human rights for shelter. But on the other hand the importance of shelter is vastly underrated and our patients are allowed to wander the streets with no shelter, no privacy, no place of their own except boxes over city grates, street corners, shrubbery in city parks, run down and broken shelters, inadequate nursing homes and so on."

The efficacy of any treatment regimen is directly related to the adequacy of shelter, but I do not think the relationship is linear. The optimum level is reached when it is approximately what an average family has, excluding those families that are on welfare or on very low incomes. Increasing the standard above that will not increase the efficacy of treatment very much. The relationship is curvilinear. When one plots level of shelter against efficiency of treatment it will rise sharply from zero (on the streets, chained to trees) to the average level and after that it will rise gradually reaching its maximum.

Between 1955 and 1967 I treated my patients in the University Hospital, now called Royal University Hospital at Saskatoon. I had been one of the advisors to the Chair and Professor of Psychiatry before the wards were built. We were given the outside dimensions and had to design the interior. This was the best psychiatric ward in the province with a large ratio of staff, nurses, psychologists, social worker, aids and medical staff to patients. Our budget was at least four times the average budget per patient for our two mental hospitals, about 80 dollars per day (Remember this was between 1955 and 1967). A research study, by my Assistant Director of Psychiatric Research, Dr. C. Smith<sup>2</sup> in cooperation with the Chair and Professor, of the treatment results of our ward at Saskatoon and the nearest mental hospital at North Battleford showed that the results of treatment were about the same.

Between those heady years when tranguilizers became available and 1967, the race was on all across North America to see which hospital could empty itself the quickest. This process was called deinstitutionalization and was supported by every group or agency interested in the welfare of the mentally ill. A rallying cry was used. The worst home in the community is better than the best psychiatric ward. Governments loved it because they were promised that total cost would go down. It was assumed that the dramatic response to these new drugs was in fact a cure and that the patients would not ever have to come back again. Our superintendent at North Battleford, Saskatchewan, proudly showed us a chart showing the dramatic decrease in the total population of his hospital, year by year.

The communities had become aware of the desperate condition of the patients in mental hospitals and demanded that the psychiatrists do a better job.<sup>3</sup> The invariable response of every superintendent to every hospital was that they were short of money and if the community would give them more staff, more doctors, more nurses, more social workers and aids, they would then do a much better job. I became very dubious about this automatic response especially after the results of the Colin

Smith study became known. I decided to test it in a crude way on my own.

In 1967 I resigned my two positions from the university and government and entered private practice with admitting privileges to the local general hospital in Saskatoon. A company announced they were building a new nursing home in the city for the physically handicapped. I approached a friend involved with this company and asked whether I could be allowed to admit patients to his nursing home. They would be chronic schizophrenic patients from the United States and Canada who had failed to respond to any previous treatment. I had been treating these patients at the University Hospital with some success.4 The nursing home was to be built following the model of motels then very poplar. Each patient would have his/her own room. There would be one nurse in charge, no other professional workers, but it would provide the usual amenities of nursing homes. The place was bright and clean with a large central living area where patients could meet. They all ate together in a large dining room. The cost was 20 dollars per day, ie. 25% of the cost at the hospital. I would be in charge of treatment and would give ECT if needed and order the medical treatment. There was no compulsion, patients were voluntary and could leave any time they wanted to. The difference in costs represented the difference in the number of staff. The quality of the food was the same but my patients at the nursing home did not receive any psychotherapy from nurses or other staff. I saw them several times weekly. The nursing home agreed and I was able to treat about 100 patients over the next eight years.

I then compared the outcome of my treatment at the hospital and at the home and found that it was the same. The additional shelter care given at the hospital which cost four times as much did not improve the efficacy of my orthomolecular treatment. I found to my surprise that the

mix of young schizophrenic men and women in a nursing home with chronic invalids who were mentally normal or senile, was very good. My young patients added life to the institution. They volunteered to help in pushing wheelchairs, talking to and serving the mentally normal but invalid patients. Only one chronic schizophrenic patient who was also an alcoholic would not cooperate. Nor would his father support what I was trying to do, even though his mother tried very hard to get him to stop drinking. His father did not support my advice that he must not drink. He was discharged back to Ontario. From this I concluded that although shelter was very important one did not need to go to extremes to break the community to provide adequate shelter and that more important than shelter alone was the addition of the correct orthomolecular treatment.

### DUSSP - Decency, Understanding, Support, Safety and Privacy

These are all essential to build and maintain self respect and morale. Patients are sick people, and they must be treated with decency and respect if we want them to recover. All the elements of DUSSP improve the patients' natural recovery possibilities. The best example was the hospital in England supervised by Dr. Conolly and the Dorothea Dix hospitals in New York State and Pennsylvania. I read some of the annual reports from these hospitals. They reported a 50% recovery rate of these insane patients. They had no medication, no psychiatric drugs. I assume they provided good food not yet damaged by modern technology. All they had was shelter and DUSSP. It was common in these hospitals to have Saturday night parties attended by patients and staff together. Just these two elements of the treatment process alone allowed half the patients to recover. I think that schizophrenia has a high natural recovery rate if people are allowed to use their natural recovery processes by providing the

elements of good treatment. To put the situation into perspective: the best recovery rate today with the most modern tranquilizers and other drugs is under 10 percent. By recovery I mean they are well enough to earn a living, to engage in normal activities and to pay income tax. On modern drugs it becomes impossible to pay income tax.

Patients receiving optimum treatment using these two aspects of treatment alone should expect about a 50 percent recovery rate. This probably will not be permitted in industrialized societies but may still be common in undeveloped countries. Perhaps that is why their patients are not as sick and have better recovery rates.

The efficacy of any treatment regimen is directly related to the adequacy of DUSSP.

#### **Psychiatric Treatment Including Drugs**

The first psychiatric treatment which had a short term beneficial effect on a small proportion of patients who had not been sick too long was medically induced convulsions. The first was insulin coma and the second electroconvulsive therapy, ECT. In 1950 insulin coma was well on the way out but ECT is still used and in many cases is still very helpful. Chlorpromazine was first used in France and from there swept around the globe. Since then new drugs have been developed and every decade new drugs are proclaimed to be better and freer of side effects. I call them essential evils. For many patients they are essential during treatment but I always aim to get them off as soon as it is possible. They are evil because of the dangerous side effects, because the most modern drugs are addicting, and patients seldom are able to work as long as they have to take these drugs. They are very helpful crutches but not as safe as crutches which only become a weapon when someone threatens to use them as such.

In 1952 I first heard about a drug in France which had remarkable properties in

treating psychotic patients. It had just become available in the United States, a transplant via Canada from Rhone Poulenc of France. The Canadian representative tried to peddle it to United States companies starting from the largest and working his way down to the least significant. He was rejected by all the companies with the exception of the last, a one product company whose medical director had the vision to realize the importance of this product. Chlorpromazine in Canada became thorazine in the United States. That company today is one of the largest.

We had not yet formulated the adrenochrome hypothesis nor its offshoot, that vitamin B<sub>3</sub> might be therapeutic for schizophrenia but I could not obtain any chlorpromazine until the Canadian subsidiary of Rhone Poulenc made it available commercially. That was the first major tranquilizer, discovered by the French surgeon Henri Laborit, and tested by French psychiatrists. Dr H. Lehmann in Montreal soon confirmed the European reports as did the medical director of the United States company. They both submitted papers at about the same time. Dr. Lehmann reported his clinical observation on five manic depressive patients and the other physician reported on a much larger series of schizophrenic patients. Dr. Lehmann's paper was accepted immediately while the other paper was sent back for some revision. Dr Lehmann's paper appeared first and he became known as the father of the tranguilizers in North America; no one now knows who the other doctor was, a friend of mine.

Chlorpromazine has antihistaminic properties. These antihistamines were made in Italy by a chemist Dr. D. Bovet, who received the Nobel Prize for his work in chemistry. The first antihistamine is the common drug benadril, now available over the counter. The rest is history. The need for this type of drugs was great, the potential for profit was immense, and the com-

bination of need and greed soon propelled this and similar drugs onto the market. They were very successful in controlling psychotic behavior. It was assumed that this meant that patients were also recovering from the illness, but from the beginning farsighted psychiatrists realized that patients who took these drugs paid a major price.

In the 1950s, Dr. A. Meyer-Gross, author of an impressive text on psychiatry, claimed that these drugs merely converted one psychosis into another. However, they were necessary. The ill-conceived deinstitutionalization became possible because these drugs cooled the symptoms and made patients' behavior more tolerable to the community even though they did not get well. This began the revolving door process where psychiatric hospitals became first-aid stations for refuelling the patients with drugs, much as cars get refueled at gas stations.

The first drug, chlorpromazine, marked the new paradigm of treatment using powerful drugs that were not narcotics. But they were not curative and the race was on to find better compounds that would be more effective and less toxic. This search still continues. The modern drugs are effective with fewer milligrams of chemical per day and they have different side effects. But the efficacy of the new class of drugs is really not much better than the efficacy of the old drugs, Dr. F. Geddes (British Medical Journal, 2000; 321: 1371-6) analyzed 52 therapeutic trials involving over 12,600 patients. He found that compared with conventional drugs at a moderate dose, atypical antipsychotics caused fewer side effects but had similar effect on symptom reduction. In a recent report<sup>5</sup> it was shown that over a two year period schizophrenic patients treated with these drugs suffered a 35 percent readmission

The main advantage of the newer atypical drugs is that one has more choice.

Of course this also applies every time any new drugs come onto the market. There will always be patients who do not respond to older drugs but who will respond to newer ones. Dr. Geddes recommended that the conventional drugs should be used as the initial treatment. I see patients who do well on chlorpromazine and do very badly on any of the new drugs. Whereas the old drugs such as haldol caused extrapyramidal side effects which were easily controlled by other medication, the newer drugs are less prone to do so but have major effect on obesity, on disturbance in blood sugar levels, and in causing brain damage with long term use. There is one side effect that worries me more and more. I am not, in principle, opposed to using drugs especially as part of orthomolecular treatment. In orthomolecular therapy we use the drugs to obtain control of "hot" symptoms of psychosis. I am very concerned about the increasing number of chronic patients who are tranquilized with the new atypical drugs who do not get well, and I shudder to think what they will be like 20 years from now. I am very worried abut the difficulty in taking patients off the new drugs compared to the conventional ones. In orthomolecular therapy it is always the objective to have patients drug free without any relapse, and this was not very difficult. As soon as the patient had shown major improvement the amount of medication was slowly decreased. It there were any sign of recurrence of symptoms the dose was increased again for awhile and then the process was repeated until most patients were drug free or needed so little medication that there were no side effects. The usual response was relief as the drug effect wore away, but if the patients still needed the medication it would become more noticeable after one or more weeks. It was never noticeable the first day after the medication was stopped. But with the atypical antipsychotics it has become an enormous problem. For example with risperidone it is not too difficult to reduce the dose from high levels to more moderate levels, but when one gets down to lower levels even a 0.25 milligram decrease may cause a surge of symptoms. These drugs behave as if they were addicting drugs. With the addicting drugs such as heroin, as soon as the dose is decreased there is a marked relapse. It takes much longer to reduce the medication and when it is down to 3 milligrams daily I can not decrease the dose by more than 0.25 milligrams. I never saw this with the conventional tranquilizers. The question that puzzles me is whether these drugs also are attracted to the addictive centers in the brain that bind morphine and heroine. Haldol was conceived by splitting the morphine molecule into two and preparing a structure very similar to one of these components. But haldol is not nearly as addicting. The atypical anti-psychotics however do differ from narcotics because one does not have to increase the dose to maintain the same level of control. If one takes much more than the recommended level there are major major side effects and no increase in therapeutic power.

I would not object to these addictive properties if patients on the new atypical psychotics were able to function normally as they can with orthomolecular therapy. But fewer than 10 percent of patients on drugs alone are able ever to pay income tax from earned income. I am also very concerned about the long term effects of brain damage, which according to some studies becomes progressively worse with increase in dose and duration of treatment.

## **Tranquilizer Psychosis**

Tranquilizer drugs must be used as crutches. If they are made part of the permanent program they become the problem. They produce a tranquilizer psychosis and they make schizophrenic patients sick.

In a recent report Madsen et al.<sup>6</sup> found a significant association between the amount of tranquilizers taken over years

in grams and cerebral cortex atrophy. The estimated risk of atrophy increases by 6.4% for each additional 10 grams of tranquilizer drug (in chlorpromazine equivalents). Gur<sup>7</sup> et al reported that tranquilizers increased subcortical volumes in schizophrenic patients. These changes were not present in patients not on this medication. They suggested these changes were in response to receptor blockade and could decrease the effect of treatment. In other words, these drugs damage the brain and decrease the odds these patients can ever recover. Are we preparing the ground for the next major pandemic of illness with millions of chronic schizophrenic patients becoming more and more brain damaged as they are forced to remain on their tranquilizers? When it is fully upon us, what are we going to do about it?

This diagnosis fits the American Psychiatric Diagnostic Classification. <sup>10</sup> 292.11 applies to sedative, hypnotic, anxiolytic psychosis with delusions. 292.12 fits sedative, hypnotic, anxiolytic psychosis with hallucinations. The Merck Manual lists antipsychotic drugs under the heading antianxiety drugs or anxiolytics.

Tranquilizers thus convert a natural psychosis to an iatrogenic psychosis, the tranguilizer psychosis. (Table 1, p. 31) They convert hot into cool symptoms which are much more tolerable and allow the patient to be cared for at home, to be discharged from hospitals too soon, and to make available the city streets for their care and shelter. The objective of therapy should be to cure the patient in the sense that one cures diabetes. That is, to remove symptoms and signs, to make it possible for patient and family to get along reasonably well, to permit the patient to get on in the community properly housed and reasonably comfortable, and to pay income tax. I estimate that fewer than 10 percent of all schizophrenics treated in North America ever achieve this state of well being with or without tranguilizers when this is the only treatment.

There is another serious problem. Since these drugs produce a different type of psychosis any improvement caused by the use of supplements and diet will not be evident. As long as the dose of drug remains high any benefit from the orthomolecular treatment will be masked. Niacin does not treat tranquilizer psychosis. Therefore in any double blind design which maintain drugs at their original therapeutic level they will not see the improvement

unless and until the amount of drug is reduced as the patients begin to recover. The investigator will then conclude that there has been no response to the vitamins. It must be stated repeatedly that the drugs are to be used carefully with the objective of getting patients down to very low, nontoxic levels or off completely.

This, then, is the dilemma. How can one benefit from the moderate improvement induced by the drugs and at the same

Table 1. A Comparison of schizophrenia and the tranquilizer psychosis.

Symptoms/signs	Schizophrenia	Tranquilizer Psychosis
Perception	Voices Visions Illusions	Same, to a lesser degree
Thought Disorder Content	Paranoid Delusional Ideas of reference, etc	Not as intense
Process	Blocking Memory Concentration	Not as intense Same or worse Same or worse
Mood	Depression Agitation Anxiety	Same Less Less Apathy, disinterest
Behavior	Hot <sup>8</sup>	Cool <sup>9</sup>
Physical Toxicity	None	Tardive dyskinesia Nausea Weight gain Impotence, and many others.
Brain damage	Early, none Late, slight	Yes. Severity related to lifetime dose in grams

time prevent one from becoming psychotic from the drug? The usual way is to withdraw the drug, but in most cases the original psychosis recurs and this process is repeated over and over. Or one can very slowly decrease the amount of drug, but in most cases the same disease recurs. There is no escape because when the drug dose is so small that the side effects are gone, its therapeutic effect is also gone.

#### **Orthomolecular Psychiatry**

Orthomolecular psychiatry does provide a third pathway, a pathway toward health. Nutrients have no side effect in the recommended doses. They gradually start the process of real recovery in most cases, but they do so slowly. It takes a least two months before they begin to take effect. But once they are effective the disease seldom recurs as long as the nutrients are taken. This means that one can combine the therapeutic effect of nutrients which is slow but enduring with the rapid therapeutic effect of the drugs, and as the patients begin to recover the amount of drug is slowly decreased until the dose is nil or so close to it that there are no side effects. I have several patients on haldol 1 milligram daily and they remain well on this very small dose. Xenobiotic psychiatrists provide the schizophrenic patients with two choices, remain psychotic without drugs, become psychotic with drugs. It is not surprising so many patients have to be forced by legal sanction or by parenteral administration to take drugs. They do not like the tranquilizer psychosis and often will go to any lengths to be freed of it.

Schizophrenic symptoms can be divided into two sets: (1) those that force patients into hospital; (2) those that permit patients to live in the community. The first set of symptoms are what I call hot symptoms and the second set are cool symptoms. Hot symptoms include severely abnormal or criminal behavior such as shooting people at random, burning down

buildings, shouting at people in the streets, running around naked, talking about severe paranoid ideas, severe depression or mania. These are symptoms which any normal society cannot tolerate. Cool symptoms are equally devastating to the patients but are much more tolerable in the community. They include moderate depression, paranoid ideas that are not shared, hallucinations that are kept secret. An example is the man who had been sick in his parents farm home for two years. He sat quietly in the kitchen and did not say a word for the whole time. His family was able to tolerate this abnormal behavior. However one day he began to hop on one foot and did so for three days. On the fourth day he was admitted to the psychiatric hospital. Tranquilizer drugs decrease the intensity of the hot symptoms and convert them into cool symptoms but they in essence do not cure the basic biochemical process which keeps on operating as intensely if more quietly than before. They convert the one-foothopper-patient back to his original quiet non talking patient.

The efficacy of any treatment regimen is directly related to the skill and experience of physicians using standard treatment. Drugs are essential but their negative aspects must be reduced and their essentiality enhanced.

### Orthomolecular Treatment - Nutrition, Supplements

The hospitals 150 years ago used good nutrition because they really had no option. They served good food to their patients to provide enough calories and those diets were much more apt to provide the important nutrition than are today's high calorie diets. I would guess they were given whole wheat bread rather than white bread because it was cheaper.

The pellagrologists in the United States were the first to use vitamin supplements when they got access to vitamin B<sub>3</sub>, the anti-pellagra vitamin. Some years

up to one-quarter of the admissions to United States southern mental hospitals were pellagrins but they could not distinguish many of them from schizophrenic patients until the pure vitamin was made available. If a patient recovered in a few weeks on vitamin B<sub>3</sub> they labeled them pellagra, and if they did not they were labeled schizophrenic. This prevented them from realizing they had a potentially very valuable treatment for schizophrenia. Under my direction in Saskatchewan we were the first research group to study the therapeutic effect of niacin and niacinamide on schizophrenic patients. By 1960 we had completed six double blind controlled trials, the first in psychiatric history. Since then every investigator who repeated our work using our method for treatment found the same recovery rates. This vitamin is now one of the standard vitamins used by orthomolecular physicians to treat their schizophrenic patients. But other nutrients have been found to be very useful including pyridoxine, vitamin C, and for many, zinc.12,13 Medical treatment also includes the optimum and skillful use of drugs as described for psychiatric treatment.

The efficacy of any treatment regimen is directly related to the skill and experience of physicians using orthomolecular therapy. The following summarizes my views of the efficacy of the four treatment modalities:

#### **Response to Treatment**

Shelter and DUSSP:	<b>50</b> %
Psychiatric:	10%

#### Orthomolecular:

(a) Early cases:	90%
(b) Late cases:	75%

## Relative Importance of these Four Components

The best results will be obtained when all four components are used at optimum levels. The first two modalities need not be set at such a high standard that no community can afford to provide them. The most efficient treatment program will recover most of the early patients and save their communities about 2 million dollars for each patient over their projected 40 year life span of illness. The most expensive and least productive will be using only the psychiatric component for there is nothing as costly as not allowing patients to recover.

### Mary-A chronic schizophrenic woman also considered retarded, and one of the sickest patients at the Saskatchewan Hospital

In 1953 I decided that one of the best ways was of studying this disease would be to have a schizophrenic patient in our home. We had moved to Regina in 1950 and lived in a small house, a two-story with three bedrooms upstairs and daytime quarters downstairs. I talked this over with my wife, Rose, and she agreed that we could try. Our idea was to take a patient out of the mental hospital in Weyburn and move her into our home where she would work with us as a maid. It would have been simpler to hire a maid who was not sick. We would pay her the going rate which then was \$40 per month. I spoke to Humphry Osmond and he agreed to find a woman patient who might be able to work for us. I told him I did not want a simple case, but one of their most difficult patients. I wanted a patient who had shown that she was not going to respond to any treatment. After awhile he found a woman I shall call Mary. She is described in our book *How To Live with Schizophrenia.* By having her live with us, I could study her behavior first hand and at the same time could provide a decent home for her, good food, and an income.

Mary, born in 1922, was admitted to this mental hospital when she was 17. She was pregnant, diagnosed retarded and schizophrenic. A test found her to have an IQ of 25. This shows how unreliable IQ tests are for very sick patients. She had reached only grade four in a class for mental

defectives. In the hospital she slept in a ward with 100 other women. She did not know what it was to have a place of her own, to keep her personal possessions, a mirror, a handkerchief, and she had to stand in line for one of four bathrooms. She was described in the clinical notes as impulsive, suspicious, quick tempered and often difficult to control. She was often restrained by staff using heavy sedation. She was depressed and heard voices.

She grew up with psychiatric treatment at this hospital. Every new treatment "was given her starting with camphor injections to induce convulsions, then metrazole, another way of inducing convulsions, and later ECT. Whenever she became very disturbed she was given a small series of ECT as this was the only treatment that would settle her. Often during her rages she would smash every window in sight. But gradually she calmed and eventually was assigned to help Dr. Osmond and his wife in their house which was located on the grounds of the hospital. Dr. Osmond selected Mary.

She came to our house in Regina where Rose and I lived with our three children, ages 7, 5 and 3. We had three bedrooms upstairs. The two boys shared one room, our young daughter and Mary were to share another. Rose's and my family probably considered us crazy to take such a patient into our home.

Mary arrived at our house a pale, dark-haired, frightened woman who was very quiet. She loved children and she had become a very good house cleaner. She was willing to do housework with Rose. She knew how to use the vacuum cleaner, how to dust, wash and polish floors, and she was willing to work and was very efficient. Rose, with infinite patience, began to teach her simple things she would need to know to get along in the city after she left us. She had never seen a bus, did not know how to use the telephone, knew nothing about money, how to shop. She was alienated

from her family. The first month we survived but it was very difficult, as Mary had developed many habits in the hospital that would create many difficulties for her in any home.

I paid her \$40 per month, giving her \$10 in cash and depositing the rest into a bank account I had set up for her. Each month I would show her how her account was building up. She tried hard and was willing, but she was depressed and one day tried to kill herself. I had just come home around 4:00 pm very tired from my work at the hospital, and as I walked into the house I heard our son Bill shout downstairs. "Mommy where is the electric light cord. Mary wants to kill herself." Bill was engrossed listening to Roy Rogers, a very popular radio cowboy feature, and was too busy to find the cord for Mary. I ran upstairs and found Mary starting to strangle herself with the cord. I took the cord away, took her into the hospital deciding that the experiment was over and that I had failed. I gave her some medication and one ECT to help her sleep. The next morning I told her that I was sending her back to the mental hospital.

She was more composed, apologized and said that she wanted to try again. I changed my mind, gave her one more ECT and took her back. Then I started her on niacin 3 grams daily. I had wanted to study her behaviour for awhile before starting the vitamin.

She lived with us for two and a half years. At times the situation was very difficult as she would become disturbed, would become irritable and angry, but she improved and I considered she was ready for discharge into the community. It had never been our intention to have her with us forever. During the time with us our children became very fond of her and she of them and we got along very well. There were interesting episodes. I remember one time when we were sitting around our table at dinner. Mary sat on my right, Rose at

the other end and the children on the sides. As we were eating Mary suddenly said, "No Dad, I cannot come." I realized she was responding to her voices and asked her "Who are you talking to?" She said her father was calling her from the grave. I said "Mary, tell him that you are busy". I was very amused at the reaction of our children to my response.

Mary had been trained in the mental hospital to wash dishes but she was not very careful. She washed very well but broke a few dishes nearly every day. This bothered me because of the noise as I was trying to read or write and also because we were poor and could not afford to buy new dishes. I could not tell her not to break the dishes as she did not do this deliberately. Eventually I asked her to wash them very quietly as I was trying to work and noise interfered with what I was doing. To wash without making noise meant she had to wash much more slowly, and thereafter no more dishes were broken.

We decided that Mary had been sheltered long enough, that she was ready to go into the community, that she had improved. She no longer heard any voices, her thinking was clear, she was not paranoid and she had learned how to survive with a normal family. She became very fond of us and we of her. I got her a job at the General Hospital in Regina on their cleaning staff. We helped her find a light housekeeping room where she would have to make her own breakfast but would get her other meals in the hospital cafeteria. We knew that it would be very difficult for her and kept close watch over her. Every week we would take her a load of groceries to make sure she had enough food and would invite her over to our house for meals. Because she could not tell time and she was very much afraid she would be late for work in the morning she got up at sunrise, went to the hospital and sat there waiting patiently until she was able to start her shift. Gradually she became more confident and things began to work out well.

In 1955 we moved to Saskatoon to the new University Hospital. Mary also moved and for a few months stayed with a niece. She was given a job in the cleaning department at the hospital. By this time she had reestablished a connection to her family. After that we helped her find an apartment. She stayed with the University Hospital until she retired and was one of the most reliable and best of the cleaning staff. In our book, How To Live with Schizophrenia,15 we wrote "Mary is now one of the senior workers on the hospital cleaning staff and is efficient and reliable. Her income has risen steadily and she is completely independent. She owns her own furniture including a TV set, manages her own money (a remarkable accomplishment when one remembers how incompetent she was with money on discharge from hospital), has money saved in the bank and has a reasonably active social life including boy friends. She is a girl of good moral character and has no difficulty in her relationships with men. She is efficient, self possessed. Mary we know today is a far cry from the frightened, uncommunicative girl who first arrived in Regina many years ago to try to live away from the hospital".

I had my office in the hospital on the psychiatric floor and Mary would come to see me on a regular basis, about every few weeks and more often when she needed advice or help. My main problem was getting her to keep on taking the niacin. She did not like the flush and I did not know then how to moderate it. I remember several episodes that might have made the situation very difficult for Mary. On one occasion she came to my office very unhappy and crying. She told me that one of the medical residents in training had accused her of stealing money from him. I knew that this was impossible since Mary was honest, had never stolen, and even when we left money around the house would never take any. She told me that she

was cleaning in the residents living quarters and as she was dusting the bureau in one of the rooms the resident's purse fell to the floor. She stooped to pick it and as she was putting it back on the bureau he walked in and promptly assumed she was stealing. I concluded he was paranoid. I called the hospital's chief of maintenence with whom I was very friendly, discussed this with him and reassured her. A few weeks later they discharged the resident, but if I had not been there it is possible the hospital management would have believed him rather than her. While she was in Saskatoon she came to our house on Saturdays to clean the house and to help Rose. She came often to babysit for us. She liked coming and we liked having her. It also gave her a chance to interact with Rose and me and with our three children who were growing rapidly.

In 1967 I resigned my two jobs, as Director of Psychiatric Research for the Government of Saskatchewan and as Associate Professor of Psychiatry and went into private practice. I asked Mary if she would like to clean my offices on Saturday afternoons and she again wanted to do that. She came to help me for many years until we moved to Victoria in 1976.

A few years before we moved to Victoria she met John who had worked for the railroad. He was a retired, single, quiet, good man, and they got along famously. They planned to marry and we were looking forward to it, but eventually they decided that they would not but would continue to see each other. Each one maintained their own apartment. They remained a very close couple. Every two years after that they would travel to Victoria for a holiday and we would take them for dinner. By this time Mary was outgoing, cheerful, self-assured and the more dominant of the pair. One evening after having dinner with them it occurred to me that I had saved the Government of Saskatchewan \$750,000 dollars by taking Mary from the

hospital and converting her into a tax paying citizen. I thought that the government would appreciate my effort. I also wondered if it might stimulate them to demand that their psychiatrists do a better job of treating their patients. I therefore wrote a long letter to the Minister of Health. I started out by saying "Dear Minister, I have just saved your government \$750,000" and then told him why. I received a reply several weeks later. He said he had consulted the Saskatchewan Medical Association and the Saskatchewan Psychiatric Association and they had both assured him that my treatment was controversial. He completely ignored the saving of a human life, the saving of an immense sum of money and dismissed the episode simply because he had been assured by two ignorant organizations that my treatment was controversial. Had he asked me I would have told him myself that it was controversial. For the first time I realized that controversial treatment must never be used in medicine and psychiatry. Mary died March 28, 1998, aged 76.

Mary lived in the community for about 45 years and worked about 40 years. During this period she paid income tax. Had she remained sick in hospital she would not have lived as long and would have cost the Government of Saskatchewan at least one million dollars. She was free of symptoms of schizophrenia, she got on well with her family, with the community and paid her own way and contributed to society. She was very fond of animals, had pets in her home. Often she would go to the local animal stores with food to feed their animals. She was kind. I can not recall her ever being angry with us or seeing her angry at anyone. She was, what else can I say, normal.

On one of Mary's last visits to Victoria she told us about the time Queen Elizabeth's sister Princes Margaret was in Saskatoon. That was when the name of the hospital was changed to Royal University Hospital. Princess Margaret was being shown the hospital. As she was being escorted through the hospital she saw Mary and a few others of the cleaning staff. Mary was in her pretty uniform. Mary approached her and said something like, "You are so pretty, Dear." The Princess stopped and spoke to her. I thought it was so appropriate that the only member of the cleaning staff to whom Princess Margaret paid any attention was the only recovered schizophrenic patient. She would never have guessed Mary's history nor could she have predicted that it would ever happen had she seen what Mary was like when she was in the mental hospital.

One week in September, 2001, a writer/editor came to see me. He is writing about our early research in Saskatchewan. I was not able to give him names of patients I had seen to respect confidentiality. He therefore ran ads in the Saskatchewan papers and one of the replies he received was from a relative of Mary's, about eleven years younger than Mary. She gave the writer/editor a copy of the letter I had written to her dated August 15, 1996, after we returned from Saskatoon where we had spoken to her.

Mary was given all the elements of an ideal treatment program. It included shelter, which we provided for her and it was equivalent to the shelter my family and I enjoyed. She was treated with respect and humanity and educated so that she could overcome the defects in her experience induced by 14 continuous years in a mental hospital. She was treated with the best of psychiatry then available, two ECT after she joined us, and she was one of the first to be given orthomolecular treatment, niacin and vitamin C. If Mary was able to recover with her chronic history there is no reason why every schizophrenic patient free of organic brain pathology can not recover. By recovery I mean that Mary was free of signs and symptoms, she got on well with her family, which at first meant only my family and later her blood family, she got on well in the community and she worked

full time from 1954 until she retired, and paid income tax.

## Robert - A Treatment Failure from the Best Centers and Psychiatrists

In 1968 I presented a report in New York where I outlined my hypothesis of the mechanism of action of the hallucinogens.<sup>16</sup> In this report I referred to our niacin studies for the treatment of schizophrenia. A few days before this meeting, which was held in the Waldorf Astoria Hotel, I told my good friend John Osmundsen about the meeting and the gist of my report. John was Science Editor for the *New York Times*. He was at the meeting and the following day devoted a major part of the front page of the second section of the *Times* to my report. This unleashed an avalanche of letters to me and to Dr. Osmond, first from the eastern part of the continent and then from the west, until in a few weeks the letters were pouring in from Asia. It was this very large and totally unexpected flood of letters which made it possible for us to create the American Schizophrenia Foundation.

I began to receive phone calls that evening to my hotel in Manhattan. One of the calls came from a man who told me his son was ill, had been ill for a long time, and would I consider taking him on as a patient. I suggested that he should find a psychiatrist closer to his home and that I would be prepared to provide him with information. He subsequently found Dr. Moke Williams, a Florida psychiatrist. But Dr. Williams told him that he could not in good conscious undertake to treat his son with vitamins since he knew nothing about it, but that if he would finance his trip to Saskatoon so he could spend a few days with me he would then take Robert as his patient. Moke came to Saskatoon and we sent a week together. We became very good friends and Moke later became one of the staunchest supporters of orthomolecular psychiatry and one of the leaders in the

movement. He started Robert on the treatment but there was little response. We had little evidence then that very sick and chronic patients would ever respond, but it was worth trying since nothing else had helped Robert. Eventually his father asked me whether I would take him. I agreed that I would if he would bring him to Saskatoon to live in the nursing home to which I was now accepting patients from outside of Saskatchewan. Robert was too ill to travel. I suggested he be referred to Dr. David Hawkins in Long Island who accepted him and gave him a series of ECT. After a few weeks he was brought to Saskatoon by a nurse, arriving September 7, 1971. I was confronted with one of the sickest schizophrenic patients I have ever seen. His thinking was speeded up, at times he was incoherent, erratic, very childish and it was impossible to talk to him. I immediately started him on a program with niacin, other vitamins and the medication needed to control his behavior. He began to respond fairly quickly and in October I was able to tell his father that he had shown some improvement and was no longer creating problems for the nursing staff at the home.

Robert was born April 15, 1940. He was diagnosed schizophrenic in 1955 in Heritage Village in Connecticut. For the next four years he was in a hospital for emotionally disturbed children. From 1959 to 1962 he was at Fairfield hospital but also had admissions to a hospital in White Plains, New York, and later in the Menninger Clinic in Topeka, Kansas, from Feb. 22/1960 to April 14, 1961. From 1962 he was at the Institute of Living in Connecticut for several years. In 1967 to 1969 he was living at a Spring Lake Ranch in Vermont and in 1970 in another hospital in Vermont. In 1971 he was in Coral Ridge Hospital in Florida and later in the National Medical Center in Miami under Dr Moke Williams. Finally he was admitted to Dr David Hawkins' hospital in Long Island before coming to Saskatoon.

In November 1971 after visiting his son his father wrote a letter to one of his friends and said "I have a son who has suffered from schizophrenia from early childhood. He is now 32 years old. During these years, I have had him in the best recommended institutions and with the best doctors in the country. It is only in the last two years, where fortunately I was able to have him under doctors practising this new biosocial approach, that he had made real progress and it has been quite remarkable."

By the end of 1973 Robert was sufficiently improved that I felt he would be able to live with a caring family. I found a fine family who had three sons, two of whom were schizophrenic who had recovered on treatment. They agreed to take Robert into their home. October 15, 1974, his father visited for several days. He then told me that this was the best he had ever seen Robert. Living with this family had been very good for him.

In December 1975, I asked one of the Professors of Psychiatry from University of Saskatchewan to evaluate him. This is what he wrote, "On examination he appears considerably younger than his stated age. He has a flat, inexpressive facies although at time he appears to be grimacing. His speech is confused and rambling. His affect is basically flat but at time is inappropriate. He describes his moods as very high or very low. He feels he enjoys life and that life is worth living. He denies suicidal ideas. His thought content showed some rather vague paranoid delusional ideas in regard to religion. However there appears to be no systematized delusional system. He denies having had any hallucinations at any time. His thought processes show thought blocking, circumstantial and tangential thinking. At times he also showed punning and clang associations. He tried to be abstract in his thinking but tended towards concreteness. His sensorium is intact and there is no confusion. However both his recent and remote memory are very poor. His general

knowledge was very good and his intelligence seems to be in the high normal range. His concentration was very poor. Diagnosis - Chronic Hebephrenic Schizophrenia".

I have entered this report to establish that he was schizophrenic. Many critics do not deny that my treatment works but maintain that I cannot diagnose and that I have not been treating schizophrenics. This is bizarre since most of my patients had already been diagnosed and treated by one or more psychiatrists before I even saw them. However this is one of the minor criticisms of my work.

In 1976 I found a new home for him with another splendid family who agreed to provide him with care. He has been with this family ever since. January 13, 1995, his father died. Robert could not accept this at first but later came to terms with it.

In September 1996 I recorded the following notes: "This is the first time since Robert came under my care that I have seen him as well as he is. There is no indication of psychotic thinking, he did not dip back into past as he always had done before. He was reading a book on Prince Charles when I came into his room and he naturally began to talk about the Royal family. He also had a book on Diana and on the Royal family. He liked Fergie the best. The conversation was rational. He spoke about his sister who had visited him three weeks ago with her husband. He told me for the first time that he felt good. This is an amazing change. Since then he has continued to improve. If he were to be seen by a psychiatrist today who did not know any of his previous history he could not make the diagnosis of schizophrenia."

I will not discuss the program he was on nor the various vicissitudes and problems that had to be met during these past 30 years. He remains on the orthomolecular program and the only medication he is on is chlorpromazine, 300 to 400 mg per day. This is the first tranquilizer to be discovered and in my opinion still one of the

best and safest. Robert suffers no side effects. He fulfills my criteria for recovery: he is free of symptoms and signs, he gets on well with his family with whom he resides, he gets on well in the community, but he does not have to work nor could he. It is too late. He was badly damaged when I first saw him, having been seriously ill for the latter half of his life. He suffered from the effect of his illness not being treated properly, and it has taken many years for treatment to undo the damage and for him to reestablish himself. Had treatment been started when he was 15 years old the odds are he would not have had to endure the pain and psychotic behavior for so many years. He will always need a shelter and kind decent care such as is provided by his present family. Luckily for him his father set up a trust fund for him to make sure he would be looked after as long as he was alive. Robert and I are friends. The family look upon him as a member of the large family. He is very fond of children and he dotes on several grandchildren in the family. When they go on holidays he goes with them. He lives in his own suite, eats with the family. His bed sitting room is surrounded by about 50 books he has bought or had been given to him, and he is familiar with them all.

When Robert was treated with the four components it required 25 years to recover. If any one of these components had not been used there is little doubt he would be as sick as he was when I first saw him, if he were still alive. In his case the superb shelter and care given him by two families who took him in was perhaps one of the major reasons for his recovery. He had accumulated so many undesirable habits over the years before he came under my care and these had to gently changed, erased or modified. This was done by a kind loving and caring family, with all members of the family participating equally. But even that alone, while it would certainly have made him better, would not have allowed him to recover. It required the whole program.

#### Margot Kidder

Orthomolecular therapy is also as effective for other psychiatric diseases such as bipolar, once known as manic-depressive. One of the best examples is the story of Margot Kidder who, after years of failing to respond to one after another psychiatrist in the United States and England, finally recovered when she took treatment into her own hands and began to follow the principles which I have described this report.

Ms. Kidder was awarded the first Margot Kidder Gold Award by the Safe Harbour Project, Los Angeles, on September 20, 2001, for her contribution to the dissemination of information about orthomolecular therapy. This is the message I sent to the meeting:

The general acceptance of great ideas depends upon two major events: (1) the establishment of the new ideas or paradigms, (2) and the hard work of the teachers of the new paradigm. All new paradigms were established by the skill and perseverance of the teachers. We, therefore, must honor the pioneers, some of whom will be at your conference, and the teachers of whom Margot Kidder is one of the foremost. By describing what she had to undergo before she was able to heal herself by the proper use of nutrition, vitamins and minerals, called orthomolecular medicine, she set an example to the world which will not be forgotten. She generated waves across the wide ocean of world opinion which are getting ever larger. And she speaks not only for optimum treatment for people with depression and bipolar disease but also for the most unfortunate of modern patients, the schizophrenic patients who are treated by medication only. I am happy that Margot Kidder is the Honorary Chairperson of the Canadian Schizophrenia Foundation and that she was instrumental in the making of the important film, "Masks of Madness, Science of Healing" available from the Canadian Schizophrenia Foundation.

Congratulations to you and Safe Harbor

Project for creating this Annual Margot Kidder Award for the promotion of alternative and complementary medicine, and to Ms. Kidder for working with you in establishing this major project. I can think of no better person to receive this first award, now that Linus Pauling is no longer available. Congratulations, Margie, keep up the good work.

How many more striking case histories are needed before modern psychiatry starts to listen?

#### Conclusions

Based upon my experience of 50 years studying and treating schizophrenic patients, and using two chronic patients to illustrate what I mean, I conclude that the ideal treatment for this disease consists of the four components described in this report. Omitting any one will decrease the possibility of an adequate response. My second conclusion is that no doctor should undertake to treat schizophrenic patients unless willing to be patient and to work with the patient as long as is necessary.

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