

Diagnosing Schizophrenia: Past, Present and Future

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Introduction

The first clinical description of schizophrenia appeared about 1800. The name had not been invented but the psychosis was clearly described. This does not mean that it had not existed before then (the Bible contains reference to psychotic behaviour that could be labeled schizophrenic) but it does mean that it was very rare and that it became increasingly common over the last century of industrialization. There is evidence that in peoples not exposed to modern industrialization the incidence of schizophrenia was much less and the severity of the condition is less in underdeveloped countries. A recent survey of several countries showed (1) the incidence was the same (2) but that the severity was much greater in countries such as Canada and the United States compared to Bangladesh.

Superintendent Dr. John Conolly

Dr. J. Conolly¹ in his extraordinary book of 1830, *Indications of Insanity*, described insanity (this was a diagnosis) as a disease characterized by perceptual changes and thought disorder. The cases he described are clearly schizophrenic but some manic depressives must also have been included, as is common even today. In our book, *How to Live with Schizophrenia*,² we described how perceptual changes combined with thought disorder can account for psychotic behaviour. I like the description given by Conolly of a woman who was deeply depressed and believed that her husband was dead. She knew he was dead because she could see his ghost sitting on the bough of a tree outside her window near the hospital. Her husband was told of her delusion and offered to go in to show her that he was not dead. He was advised not to do so

as this would shock her. When no one was around he went in. She looked at him, swooned, got up and said "Let's go home John". Her perceptual distortion of something she saw in the tree was corrected by the real perception of her husband, and that cleared her psychosis. Another example is the case of a patient who found that food tasted bitter and concluded that he was being poisoned. This was a common delusion when I started in psychiatry nearly 50 years ago. I have seen similar cases when the taste misperception arising from a zinc deficiency led my patient to believe he was being poisoned. An explanation helped him get rid of the delusion, combined with giving him zinc to restore his sensation of taste. Conolly did not claim priority in his description. The idea was then current for at least the previous 100 years. Neurologists writing about the brain described psychosis as seeing through a distorted mirror.

Hoffer-Osmond Diagnostic Test

We came to the same conclusion, beginning in 1952, from our studies with the hallucinogens such as mescaline, Lysergic Acid Diethylamide (LSD), adrenochrome and adrenolutin. No one having experienced these reactions will deny the strong effect of perceptual changes on thinking, feeling and behaviour. These drug induced perceptual changes made us more aware of the need to question patients more carefully about their experiential world, and eventually led to the Hoffer Osmond Diagnostic Test (HOD),³ and later the more sophisticated Experiential World Inventory (EWI) Test.⁴ These tests were not welcomed by psychologists or psychiatrists because they were too simple and could be done by secretaries, nurses, anyone, even by patients and their families, and are too easy

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to interpret. They have been used with excellent results by general practitioners and by chiropractors.

With these tests it is possible to examine very quickly the changes in perception, illusions and hallucinations as well as thought disorder, and mood changes. The scores correlated very significantly with clinical diagnosis especially when the diagnostician knows the patients well. A study done by David Hawkins many years ago compared the HOD scores with the admission and the discharge diagnosis. The diagnostician did not see the results of the HOD test. There was a much closer correlation between the discharge diagnosis and the HOD test. I have found it very valuable and patients find it acceptable and useful. Normal controls have very low scores, schizophrenic patients on the average score about 65, while a mixed batch of other psychiatrists' patients score around 30. They contain a number of schizophrenic patients not yet diagnosed who will become clearly so later on.

After isolating the mauve factor,⁵ kryptopyrrole, from the urine, we found that high HOD scores correlated with the presence of this chemical. Thus we found that three ways of looking at the patients also correlated: (1) our clinical diagnosis; (2) HOD test scores; (3) Presence of kp in the urine. This is very powerful evidence that we were detecting a homogenous group of patients characterized by perceptual changes and these changes must remain a primary focus in establishing the diagnosis.

Dr. Eugene Bleuler

In 1911 Dr. Bleuler⁶ wrote his very influential book, *The Group of Schizophrenias*. This was translated⁷ into English about 1940 and completely altered the way patients were diagnosed in English speaking countries. Before this work, manic depressive psychosis was split off from schizophrenia. The modern term is bipolar psy-

chosis which is more neutral and conveys less stigma. Manic depressives have violent mood swings from manic to depressed behavior. When they are manic no one can tolerate their behavior and they quickly find themselves in hospital, and when they are depressed they can not stand their depression and much more readily seek help. Often in the manic state they are convinced there is nothing wrong and refuse to enter treatment. Manic depressive patients do not deteriorate to the same degree as do schizophrenics. In between these extremes of mood they are normal.

Schizophrenics also have a mood disorder, usually depression but rarely mania or mood swings, but they are not as regular and in between they are still schizophrenic. In Europe, for many years a patient was not diagnosed schizophrenic until he had been ill for at least 17 years. If he recovered after the 15 years he was re-diagnosed as something else. We still have, to a small degree, a hangover of that silly idea in the APA diagnostic classification for schizophrenia.

Until Bleuler these patients were called dementia praecox, a term still in common use when I started in psychiatry in 1950. A literal translation means parboiled dementia referring to young patients who became ill never to recover, and who went down steadily as they deteriorated. It may well be that the deterioration was not due to the illness by itself but to the way in which they were treated. Conolly found that fifty percent of his patients recovered, using shelter, food, decent care, humanity and respect.

The hospitals at the turn of the century were rapidly deteriorating to the slums so well described between 1950 and 1960. Any normal person incarcerated in these huge institutions would inevitably deteriorate. In 1955 at the Saskatchewan Hospital at Weyburn, Saskatchewan, one of the problems facing Dr. H. Osmond was that in their huge, completely non-livable wards

the female patients persisted in tearing off their clothes and tearing them up. Administration was worried about the high cost of buying new cheap dresses for these wards. The medical staff had concluded that this was a symptom of chronic schizophrenia. When they were given better quality dresses, more cheerful and stronger, the rate of destruction almost vanished. Administration was pleased at the savings. This habit was a result of the way they were cared for. It was not a symptom of schizophrenia.

The American Psychiatric Association Diagnostic and Statistical Manual DSM-IV⁸

This is the modern Bible for American psychiatrists. The APA Manual states that before the diagnosis can be made two or more of the following must be present for at least one month: (1) delusions; (2) hallucinations; (3) disorganized speech; (4) grossly disorganized or catatonic behaviour; and (5) negative symptoms such as flattening of affect. If the condition is present one day and less than 30 days it is called a brief psychotic disorder. (Why not call it a brief schizophrenic episode?). If during the illness there is one episode of depression or mania or both, it is called schizo-affective. But if the delusions are prominent it is called a delusional disorder even if hallucinations are present. APA recognizes psychotic episodes caused by drugs, etc. They are more properly drug induced schizophrenic episodes, e.g. induced by LSD or mescaline.

If one studies the description in the APA manual it is clear that ten different psychiatrists examining the same patients will come to widely varying diagnostic interpretations including bipolar, and borderline personality disorder. The problem with the APA classification is that it is descriptive but not consistently so. The Conolly classification is much more appropriate as it considers the main characteristic of brain function. Conolly includes all hallucinations as signs of perceptual dysfunction. He

includes all delusions as evidence of thought disorder. The diagnosis can not be made depending on whether one ranks the delusions as very serious or less serious. A delusional disorder according to Conolly is simply another case of schizophrenia. APA does not recognize illusions as evidence of perceptual dysfunction, and yet these are much more common in early cases than they are in late stages. If the ten psychiatrists were trained in the Conolly definition they could agree with a high degree of concordance about the diagnosis. I will show later that the Conolly description isolates a group of patients who are also characterized by the HOD test and by the urine test for kryptopyrrole. This is a homogeneous group with a predictable pattern of symptoms and signs, of response to orthomolecular therapy and with respect to outcome.

The Perceptual Model of Schizophrenia

This was the model described by John Conolly which we have adopted as the most practical and useful model. He described it as a disease of perception combined with an inability to judge that these perceptual changes were not real. I have already given a few illustrations. A biochemical dysfunction in the brain may influence the action of neurotransmitters to produced these perceptual changes. The best known examples are the LSD reactions experienced by so many of our population, usually when they are young. They are classed into two categories, hallucinations and illusions. An illusion is a distortion of what is really present and witnessed by other people there at the same time. Two people may be looking at the same picture. To one there is nothing unusual but the other may suddenly see it alive, moving and may be drawn into it. These latter changes are illusions.

Hallucinations are events or things experienced that no one else at the same spot experiences. Examples are voices and visions. All the senses may be affected.

When these occur they must be accounted for. Judgement comes into play. An example is what happened to one of my patients over 34 years ago. He was walking downtown in Regina one afternoon when suddenly he saw the heavens illuminated by a brilliant light and he heard a voice boom at him "You have syphilis and the only way you can be cured is to have intercourse with a virgin". He judged that this was the voice of God and therefore had to be obeyed. Walking in front of him he saw a young woman and he began to chase her. He promptly wound up in the psychiatric ward where the next day he told me what had happened. The vision and the voice were the perceptual changes. The judgement, which was wrong, was that it was God. The result was psychotic behaviour. Had he concluded that the illumination was fantastic and that he was imagining the voices he would not have reacted as he did and he would not have been psychotic. It is the combination of both sets of symptoms, perceptual and thought disorder that creates the schizophrenic condition.

The Schizophrenic Syndrome Mental State

The diagnosis may be suspected from abnormal behavior but is difficult to establish until the patient is prepared to talk about the perceptual changes and the way s/he responded to them. This means obtaining the mental state. I like Dr. Karl Menninger's outline for assessing the mental state. Karl gave me one of the few remaining copies of his diagnostic manual in 1953 personally autographed. Dr Menninger divided the mental state into four main characteristics

- 1) *Perception*—Illusions and hallucinations, visual, auditory, taste, smell, and touch.
- 2) *Thought*—content and process. Process means the ability to construct logical sentences and to speak in a comprehensible manner. Content has to do with what is being thought or discussed. Both may be disordered. Content disorders are paranoid

ideas, ideas of references etc. Content disorders are mutism, blocking, where ideas disappear from the mind, too rapid speech, disorganized speech, and so on.

- 3) *Mood*—manic, hypomanic, normal, mildly depressed, severely depressed. Mood may also be flat and inappropriate

- 4) *Behavior*—This may be classed as appropriate or not appropriate, and under each category it may be too fast (agitated, etc.) or too slow (sluggish, etc.)

It is easy to do a proper mental state and even simpler when one uses either the HOD or the EWI test to help. Patients are not terrified of talking about their perceptual changes if the physicians is not frightened of them. Many psychiatrists who do not really understand how anyone can have these changes are too often very fearful of them and will not ask their patients about them.

The first two sets of symptoms are the most important in establishing the diagnosis. Depression is very common as well and may be agitated (often confused with manic behaviour) or depressed or flat. Behaviour is the outcome of the interplay of all of the first three sets of symptoms. Some psychiatrists over-emphasize the mood symptoms and ignore perceptual and thought disorder changes. They are most apt to diagnose them as one of the mood disorders, bipolar for example. Or they may pay attention only to the abnormal behavior and ignore perception and thinking and will call their patients borderline personality disorders.

What is a Syndrome?

This is a constellation of symptoms and signs which have been recognized to point to a certain condition or organ. For example if the patient has fever, pain in his chest, worse on breathing, he has pneumonia, or more accurately the pneumonia syndrome. This is useful for it points in the direction one should investigate further. It does not tell the diagnostician what has caused that pneumonia. For this, further

tests or investigation is needed. Eventually it will be one of a number of pneumonias such as bacterial, viral, cancer or tubercular. Once the correct diagnosis is made specific treatment can be started. If the patient complains of loss of weight, excessive thirst and weakness, and acetone in his breath and urine he has the diabetes syndrome. Again one will have to investigate further to determine what has happened. At one time pneumonia was the only diagnosis. Only after the causes were discovered was it possible to subdivide it and to treat it more rationally.

In psychiatry we are still in the pre-rational stage of diagnosis. All psychiatric diagnosis is descriptive and has almost nothing to do with cause, nor does it have much to do with treatment. Thus of the approximately 50 different diagnostic terms (with code numbers) for disturbed and sick children, no matter what the final code or word is, the modern treatment is the same—ritalin—and lip service to psychotherapy.

Bleuler's term "the group of schizophrenias" has nothing to do with cause. It too is entirely descriptive. But over the past hundred years smaller subgroups of the vast schizophrenic population have been recognized and removed from the group and also removed from psychiatry. In 1900 the differential diagnosis of the insane, the patient with dementia praecox, was syphilis of the brain, pellagra, scurvy. Soon syphilis was recognized by serological tests and vanished from mental hospitals with the introduction of antibiotics. Later pellagra was recognized as a dietary deficiency and it was removed as well. Before this was done as many as 1/3 of all admissions to some southern mental hospitals were pellagrins said to be schizophrenic. This disappeared when vitamin B₃ became available and later was added to flour. The scorbutic psychosis also vanished with our knowledge of scurvy and vitamin C and even dementia praecox disappeared by calling it schizophrenia.

Traditionally, psychiatry had to deal with some of the worst illnesses, and as soon as a treatment became available these illnesses were removed from their domain to become part of general medicine. This will eventually also happen to the rest of the schizophrenic population.

Causes of the Schizophrenic Syndrome

I do not use a duration factor in establishing the diagnosis. If the symptomatology is present even for one day, as for example after having taken LSD, that individual had the schizophrenic syndrome caused by the LSD. I will not discuss causes such as deliria during fever, toxic reactions to drugs, chronic infections of the brain, brain tumors or epileptic arrhythmias. I will discuss the much larger group considered to have an unknown etiology but which has been shown by orthomolecular psychiatrists to be caused by a number of well known factors operating in other medical diseases as well.

Although these are all causal factors, by themselves they are not sufficient to create the schizophrenic syndrome. In order for this to appear, that person must have the ability to produce enough adrenochrome from the adrenalin.^{9,10} The causes I list here are major inciting factors but if the ability to make adrenochrome is not present other syndromes will be produced.

*1) Of Vitamin B₃ Origin.¹¹⁻¹⁴—Deficiency—*The classic nutritional deficiency disease, pellagra, is one of the schizophrenia syndromes. The best proof was the difficulty of mental hospital psychiatrists in determining whether their patients were pellagrins or schizophrenic.

*Dependency—*A dependency is present when even the richest diet in this vitamin will not provide enough to for an individual to remain healthy. This is one of the common causes of schizophrenia. It may be congenital, or may develop as a result of very severe and prolonged nutritional and psy-

chological stress, but may not always become a schizophrenia syndrome. These patients will require gram doses of niacin or niacinamide, perhaps for life, to remain well.

2) *Pyridoxine Dependency*– When there is a defect in the vitamin B₆ metabolism there may also be a deficiency of nicotinamide adenine dinucleotide (NAD) yielding the schizophrenic syndrome.

3) *Cerebral Allergies*– It is difficult for a psychiatrist to accept the fact that allergic reactions to foods can be a cause. But after seeing one schizophrenic patient become normal after a four or five day water fast, it becomes very plausible. I fasted over 200 patients many years ago while practising in Saskatoon. They had not responded well enough to the vitamin therapy. From this group over half became well after the fast and remained well as long as they avoided what they were allergic to. About half the children I see with behavioral and learning problems have one or more food allergies, usually milk and sugar, and they do not recover until these are identified and removed. Since 1955 I have seen over 1500 patients under the age of fourteen. Food allergies also play a role in mood disorders. One of my patients had been depressed for 20 years. She had not recovered with any of the drugs, not after electroconvulsive treatment or after being in a mental hospital. But four days after she went off dairy foods she was well and has remained well. A schizophrenic patient I had treated for many years with no response was sent to spend the rest of his life in a mental hospital. While there he could not pass urine and was sent back to City Hospital. But there was no physical reason. He agreed to do a four day water fast. By the fifth day he was well, completely free of hallucinations and his paranoid delusions. He was given one glass of milk. For the rest of the day he was very ill with severe nausea and vomiting and diarrhea. The following day I told him he was allergic to milk. He surprised me by replying he

had known it all along. When I asked him why did he then continue to eat dairy products. He replied that if he got well he would be discharged and would have to look for a job and become responsible for himself and that he could not face that prospect. He added he did not want to see me any more. He obtained another psychiatrist, went back into his psychosis, was readmitted to the mental hospital where he died two years later of acute leukemia. About half of the chronic population have one or more major food allergies.

4) *Mineral Deficiency*– e.g. zinc - A few patients with schizophrenia have been reported where the disease subsided after zinc levels were restored. A zinc deficiency often distorts one's sense of smell and taste and this may lead to the paranoid delusion of poison in the food. Many children are deficient in zinc, especially if they are milk allergic. Milk inhibits the absorption of zinc.

5) *Heavy Metal Toxicity*– e.g. copper and lead.

6) *Hormonal Imbalance*– as in Addison's disease or cortisone psychosis.

Differential Diagnosis or The Flight from Schizophrenia

The word schizophrenia has remained very unpopular with the public and with psychiatry. It has the stigma of all diseases which are untreatable, not quite as bad as leprosy, certainly now worse than syphilis. For this reason and because psychiatrists know that they can not get them well with tranquilizers alone, it becomes a last ditch diagnosis. Political reasons also play a role. I ran into this problem when I was directing the double blind experiments at the Munro Wing, General Hospital, Regina, Saskatchewan. The medical staff agreed that all patients diagnosed schizophrenic would be entered into this trial unless the treating psychiatrist had very good reasons for not allowing them to be treated in this study. At the time we started this study I had found what proportion of all admitted

patients had been so diagnosed. But to my surprise once the study got under way there was a sudden scarcity of patients. I could not understand this at first but eventually realized that the staff did not want their patients to be used, did not want to tell me this and simply used other diagnosis like manic depression or inadequate personality. However as the study continued these patients were eventually readmitted and this time the symptomatology was so clear they could no longer avoid making the diagnosis and suddenly here was an influx of patients.

For example, a young female patient was being given intensive psychotherapy by a young resident. One day I examined her and while talking to her noted she was continually looking up at the corner of the room behind me. I asked her what she was looking at. She replied she saw her sister perched in the corner, near the ceiling. I told the resident about this. He promptly diagnosed her schizophrenic and shipped her to the closest mental hospital. Before he made the diagnosis he had considered her only an anxiety state but once he realized her diagnosis, he was no longer interested. Schizophrenics respond as poorly to psychotherapy as do those with anxiety states.

Diagnosis today still depends more on the orientation of the psychiatrist than it does on the nature of the disease. One of the criteria is the duration of the illness. This I consider highly illogical. Another is the response to a particular treatment. Many years ago a psychiatrist told me in no uncertain terms that every patient who responded to lithium must, without any doubt, be manic depressive. He could not accept the view that even schizophrenics with mood swings could respond to lithium. This means that if the psychiatrist wishes to use lithium for his patient he will re-diagnose him manic depressive, even if he shows a lot of thought disorder and many perceptual changes. The lithium may control the mood swings but does little for

the other manifestations of the disease. The diagnostician may find the behavior the most troublesome aspect and therefore declare the patient to have a borderline personality. In the past ten years there has been a major increase in the number of borderline personality disorders (BPD). I do not think there has been a real decrease in schizophrenia but there has been a real increase in the new diagnosis.

Several years ago a young woman came to see me. She was troubled and angry. She told me that a few weeks before she had become very psychotic and agitated and had started to trash her apartment. She became so fearful of what she was doing that she left her husband and home and lived on the street for seven days. Eventually she was admitted to hospital. After three days she was told by the psychiatrist that she was not schizophrenic, that she was a borderline personality disorder and that since there was no treatment for this condition she was being discharged. On returning home she read the APA manual. She told me that she was not BPD, but schizophrenic. She suffered many hallucinations and a good deal of thought disorder. I started her on orthomolecular treatment and within a year she was well and still remains well. Had she not started on this treatment for her schizophrenia the odds are that she would have remained on the streets and met the probable fate of so many of our discharged patients. The streets have become the new mental hospitals of the community.

What is Wrong with Not Diagnosing Schizophrenia?

I consider the word schizophrenia just as awkward and unattractive as dementia praecox. We need another term which more accurately points to the cause of the syndrome, but this does not mean that we should run from the disease by refusing to call it what it is. No matter what the word is, the usual stigma which is associated

with any non-treatable and feared disease will envelop it until the public realizes that there is a successful treatment. Until then, even if we call it ABC this will soon convey the same fear and stigma. Psychiatry has tried for a century or more to deal with this stigma by changing the word but not the reality of the disease.

The first mental hospitals were called asylums. This was an honest, useful word and conveyed that here was a place of refuge where patients could be cared for. John Conolly's hospital and the USA's Dorothea Lynde Dix hospital of the late 19th century were asylums. Half of their patients recovered. But by 1900 society had gotten tired of paying for the costs of these hospitals and had decreased their budgets, driving them into slums.

For the next 50 years an admission to these slum hospitals was as life sentence. People were better off in prison, for at last there was a termination of their sentence in most cases. After that they were called mental hospitals. Following that shift they were simply called a name based on the region in which they existed, i.e in Saskatchewan the two hospitals were called Saskatchewan Hospital North Battleford, and Saskatchewan Hospital Weyburn. When the public hospitals began to treat patients in psychiatric wards the same stigma went along. At the Royal University Hospital in Saskatoon these patients were housed on the fifth floor, wings D and E. These wards soon were known as 5DE and patients anywhere else in the hospital were fearful of being admitted there.

The stigma followed the word and it will not leave until society knows that schizophrenia is a biochemical disease, that is as readily treatable as are most physical conditions if the treatment is started early and employs orthomolecular methods. We need John Conolly's hospitals using modern diagnosis and treatment. The effect of not diagnosing schizophrenic properly can be catastrophic to patients, their families and society.

Schizophrenia diagnosed early is very easy to treat with orthomolecular therapy. Family physicians or general practitioners are in the best position to do so since they see them first. Dr. Max Vogel, an excellent orthomolecular physician from Calgary and Dr. Eric Paterson, in British Columbia, diagnosed many of these patients early and treated them successfully without needing to refer them to psychiatrists. If the diagnosis is long delayed because of the factors I discussed here, proper treatment will start late. Chronic patients respond less well and less quickly to treatment. If every patient were diagnosed early there would be no need for psychiatrists since no chronic patients would be allowed to develop. Schizophrenia should vanish, as has pellagra. Diagnosing late destroys patients and their families and greatly increases costs to the community.

When schizophrenia is not diagnosed, psychiatrists and general physicians will no longer be able to recognize it, much as today they cannot recognize a case of pellagra if they should see one. This will further entrench this illness diagnosed under a large variety of other terms and gradually build up the chronic population in our society of untreated and eventually untreatable patients with schizophrenia. Each missed diagnosis will cost their society over two million dollars over their lifetime.

Abuse of Psychiatric Diagnosis

1) *The labels keep changing.* There is no stability in psychiatric diagnosis. It varies over time in the same person and varies tremendously among different psychiatrists even when they have all examined the patient the same day. In my opinion the diagnosis is more dependent on the orientation of the diagnostician than it is on the clinical pictures presented by the patient. Early in our research in psychiatry in Saskatchewan I asked my chief research psychological Dr. N. Agnew to examine the literature to find out whether there was any

test that we could use to help use diagnose and evaluate progress in patients. After several years and much effort he concluded this could not be done because psychiatrists had not agreed to use uniform criteria and no test could be used to define what remained indefinable. That led Dr. Osmond and I to develop the HOD test.

The subgroups of schizophrenia used by Bleuler are excellent descriptive terms but have no value in determining treatment and prognosis for every patient with this disease may surfer any and all of these forms over time. They shade from one to another depending upon how long they have been sick, and how and where they are being treated. I stopped using these terms decades ago because they had no value to our research nor to the patients treatment.

Nor was the main diagnosis stable over time. Dr. Pietrowski and Dr. Lewis¹⁵ showed that half of the patients admitted with the diagnosis of manic depressive became clearly schizophrenic over the next 15 years. They concluded that the diagnosis could have been made accurately at the time of the first admission if the diagnostician had taken into account the presence of perceptual symptoms. The disease had not changed its stripes, the name applied to it had.

2) *The diagnostic fields keeps expanding with each revision of the APA manual.*

In a recent book *Making Us Crazy*¹⁶ two Professors from the University of California describe the social impact of the APA system of diagnosing. Their conclusions are summarized on the front cover as follows:

“Deciding what we consider sane and normal, and reflecting the prejudices and values of each generation, it’s not surprising that the DSM has become a battleground. What goes in it, and what stays out, is of monumental importance.

Now, mental health professionals must label their clients as pathological in order for them to be reimbursed by their insurance companies. Suddenly, a woman seek-

ing help in coping with an unpleasant boss is defended as clinically depressed, or a housewife who voices concern about her shopping sprees is labeled bipolar.

This disturbing trend toward making us crazy when we are simply grappling with everyday concerns has even worse public implications. The DSM is used to assassinate character and slander the opposition, often for political or monetary gain. None of this misuse bodes well for the future of mental health. Even children are being overdiagnosed and given drugs they don’t need. The DSM is not scientifically based reference work it purports to be, but rather a collection of current phobias and popular mores.”

Walker,¹⁷ a psychiatrist and neurologist, is also very critical of psychiatric diagnosis. In his preface he writes, “Unfortunately, correct diagnosis and treatment have become all too rare in psychiatry today. Far too many patients—perhaps the majority—are simply being labeled as “hyperactive” or “depressed” or “anxious” and then handed prescriptions for drugs that mask the symptoms rather than treat the disease. Why has this happened? Because psychiatry has become almost completely dependent on one manual, the Diagnostic and Statistical Manual (DSM), a “cook-book” listing of symptoms that has replaced the science of deductive differential diagnosis.”

At the same time that psychiatrists are fleeing from schizophrenia they are embracing everyone else into their diagnostic code book. Soon every living Canadian will have their psychiatric diagnosis and code number. Very recently Jim Windolf¹⁸ started out his column with the statement, “The experts won’t be satisfied until every last person is suffering from some kind of disease or disorder or syndrome”. He listed the claims made by various agencies as follows:

attention deficit disorder—9.5 million
seasonal affective disorder —10.0million

chronic fatigue syndrome—0.5 million
alcoholics—14.0 million
eating disorder—8.0 million
multiple chemical sensitivity—2.5 million
social anxiety—15 million
depressed—15 million
panic disorder—3 million
borderline personality disorder—10 million
restless-legs syndrome—12 million
obsessive compulsive disorder—5.4 million
sex addicts—10.6 million

Taking overlap into account he estimates that 157 million Americans out of a population of 267.8 million over age 18 are mentally sick or 77 percent of the adult population. And he has not added the schizophrenics unless he includes them into his BPD population. There are probably 5 million. The daily press has also joined the movement to label everything with a unique descriptive term. *The Globe and Mail*, Toronto, for March 26, 1998, reports that a little eight year old girl had a central integrative disorder (CID) or perhaps a “disorganization under stress” disorder (DUSI). I prefer the latter. It sounds more scientific. These labels were applied because under the stress of reading in class she joked and acted silly and later appeared spacey and withdrawn. I suggest that this is similar to labeling a child who refuses to jump on cracks in the sidewalk as a refusal-to-jump-on-cracks disorder (RTJOC). Since these labels have no therapeutic significance why not simply call them children with learning and/or behavioral disorders and get on with the job of finding out why they have these difficulties.

The APA has no legal power in Canada, but it has a tremendous amount of influence via the Canadian Psychiatric Association which is in agreement with their diagnostic code. And Canadian insurance companies demand that we use these diagnostic codes and classifications when we submit reports to them about patients. Even the government of Canada is now demand-

ing that this diagnostic code be used.

3) The Variability of Diagnoses

Psychiatric diagnosis is very variable, depending too much on other factors such as a like or dislike of the patient, on the fashion of the day (today borderline personality disorder is in), on the availability of drugs and the response to drugs. In the South during the pellagra era patients previously diagnosed schizophrenic were rediagnosed pellagra if they got well on small doses of vitamin B₃. The pellagrologists emphasized that there was no connection between the pellagra psychosis and schizophrenia. If they had used much larger doses and been more patient, a much larger proportion of their schizophrenic population would have been rediagnosed pellagra.

During our first double blind controlled clinical trial of vitamin B₃ against placebo in 1952 one of the patients recovered on the vitamin program (we did not then know whether he was on placebo or the vitamin). His psychiatrist who had originally diagnosed him immediately changed his diagnosis, for he said no schizophrenic would ever get well on vitamins. He was discharged without maintenance vitamins and came back again a year or so later. A new psychiatrist promptly rediagnosed him again as schizophrenic, which he was.

Another reason for not diagnosing schizophrenia is the psychiatrist does not want to treat him and may then label him as borderline personality disorder. This ploy has a long history. Over forty years ago a psychiatrist at the Munro Wing labeled his female patient as an inadequate or passive personality because, from her account, she was totally inadequate, was unable to do anything and was totally dependent on her relatives for support and aid. He missed the fact that she was very depressed and did not make any further enquiries. She was transferred to me. I diagnosed her depression, gave her a series of ECT and she became normal. Then it became clear that she

had been the most adequate person in her family and the breadwinner. During her depression she had described herself as inadequate because of the guilt often associated with depression.

The Objective of Diagnosis

The main objective of diagnosis is to determine or predict which treatment will work the best. A homogeneous disease forces a pattern of the symptomatology on the patients, and its prognosis. If we have a treatment for one member of that group, then we can use the same treatment for all members of that group and we do not need to consider each patient as another disease which may require a detailed examination of what needs to be used. Diagnosis is a useful shorthand to designate such a group. But not in modern psychiatry since there is very little association between diagnosis and treatment. Every one of the schizophrenic syndromes is treated with exactly the same set of drugs, usually one or more tranquilizers and perhaps some of the other drugs as well. Modern psychiatric diagnosis is at least 150 years behind the times and takes us back to an earlier epoch when all we had was descriptive diagnosis and prognoses but no treatment.

Simplify Diagnosis

Most people can recognize when anyone is psychotic even if they do not know what the psychiatrists will call it. The diagnosis using Conolly's ideas are relatively simple. I suggest that we simplify the entire diagnostic process using Karl Menninger's mental state examination as the basis for this. I think we should scrap the APA Diagnostic Manual. Here is a suggested scheme:

A) Diseases of Perception

Without confusion, disorientation and memory disturbances. This is not commonly seen unless subjects have taken the hallucinogens, such as LSD or mescaline. I

exclude perceptual problems arising from structural or pathological defects in the sense organs such as eyes and ears.

2) Diseases of Perception Combined with Thought Disorder

a) Without confusion, disorientation and memory disturbances: The Schizophrenic syndrome (nutrient deficiencies nutrient dependencies, cerebral allergies); Severe reaction to drugs (e.g. LSD, Mescaline). The word schizophrenia would be replaced by terms such as "vitamin B₃ dependency."

b) With confusion, disorientation or memory disturbances: Infections, Brain damage, Reaction to drugs (e.g. anesthetics, narcotics), Senility.

3) Mood disorders—Without Perceptual Disorder or Thought Disorder.

Depression, Anxiety, Mania, Bipolar

4) Behavioral Disorders

This category includes all individuals who engage in behaviour that is socially harmful and not to be tolerated by society. But this may not be the primary diagnosis since behaviour results from changes in perception, thought and mood. The abnormal behaviour is the syndrome and the causes are any factors which distort brain activity. The causes must be determined so that treatment can be rational. Abnormal behaviour arising from schizophrenia or other psychosis would not be included even though the abnormal behavior would be the first indication that something is seriously wrong. I include two main categories: (1) The addictions—to alcohol, to other drugs, even to sugar, and (2) the psychopaths. The latter may be burned out childhood schizophrenics undetected because the hallucinations present in their early years are no longer present.

5. Children

a) With learning disorders b) With

behavioral disorders c) With both, including schizophrenic and autistic children.

A Causal Diagnostic Scheme

No matter which diagnostic group is considered there are a number of different factors which create it. Thus with schizophrenia there are the dependencies, the deficiencies and the allergies. The most rational scheme would then be to diagnose the basic causes and to sub-divide that into the descriptive terms. Thus one person with a vitamin B₃ dependency will be schizophrenic, another will be depressed, another will have a learning disorder and so on. Critics will complain that one such cause could not possible account for such a diverse expression of syndromes. They haven't learned their nutritional history. The classic disease, pellagra, caused by a deficiency of vitamin B₃ can take on practically any syndrome ever described by psychiatrists. If one suddenly withdrew all the vitamin B₃ from a dozen individuals, there would be a dozen different illnesses. It would be impossible according to psychiatric reasoning to look on all of these as one unitary disease. Yet when the vitamins are replaced every one would once more become normal.

Causal diagnosis	Syndrome
Nutrient deficiency	Schizophrenia
“	Depression Mania, etc
“	Learning disorder
“	Behavioral disorder
Nutrient dependency	
“	Cerebral allergy
“	Hormone imbalance

With this simple scheme, diagnosis would once more become meaningful in ordering the type of treatment that should be followed. I think that this is a very simple, elegant and fruitful scheme. However, the odds psychiatrists would even look at it are less than one in a million. They are

too fond of their convoluted, expansive, useless scheme which they had to learn so painfully, and which never has and never will be of an any value in helping patients become normal.

The final diagnostic solution will be the development of laboratory tests such as the ones used in medicine and surgery and bacteriology. Allergy tests are available and will be used more and more. Assays for vitamins in blood are not very useful yet unless extreme degrees of deficiency are found. Mineral assays are more helpful, both blood and hair analysis. We have the kryptopyrole urine test for schizophrenia which indicates when large amounts of zinc and vitamin B₆ should be used.

Recently Dr. David Horrobin announced that he and his associates had found that the reaction of the skin to niacin was a good diagnostic test for schizophrenia. Many years ago I reported that schizophrenic patients generally flushed much less severely than did people who were not schizophrenic. Many patients did not flush at all for up to one year or more. Usually when they began to flush there was a major improvement in their clinical state. Dr. Horrobin's test consists of a plastic strip containing four cavities each with a different concentration of niacin. This is applied to the arm and left on for 5 minutes. People not schizophrenic will show a reddened area at every concentration but most schizophrenics will not react or only react to the strongest concentration. This report created a lot of excitement when Dr. Horrobin reported it a meeting of biological psychiatrists. We are now waiting for this test to become commercially available. It will be very helpful in separating those with schizophrenia from those with manic depression and from the borderline personality disorder. It will lead to consternation among many psychiatrists, later to denial and finally to grudging acceptance.

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