

THE VITAMIN B-3 THERAPY:

A SECOND COMMUNICATION TO A.A.'s PHYSICIANS

FROM BILL W.

February 1968

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Note: This is a second printing of 5,000 copies - June, 1968

THE B-3 THERAPY:

A Second Communication

and Progress Report

(As of January 1968)

Dear Physicians:

Two years ago, I mailed you a brochure concerning the Vitamin B-3 therapy - "A Promising Treatment for Schizophrenia and Its High Relevance to the Treatment of Alcoholism." The basic pioneering work of my research friends, physicians Drs. Abram Hoffer* and Humphrey Osmond* in the field of serious schizophrenia was outlined, and emphasis was laid on the probability that B-3 would be highly effective with many alcoholics suffering the less serious and formerly undiagnosed forms of this malady - the large incidence of which had been revealed among their hospitalized alcoholics.

You will be interested to learn that in the interval since my first letter there has been a great expansion in the use of B-3, which now includes several thousand individuals, several hundred physicians and over 100 institutions.

During the first half of 1966, B-3 purchases at two pharmaceutical wholesalers appeared to be coming largely from individuals. Then many of these individuals began to tell their own physicians about B-3. For example, one Eastern wholesaler reported that in January, 1966, he had received only 31 orders of B-3, (500 tablets, 500 mg. each). Only three of his purchasers that month were doctors. Six months later - June 1966 - this same wholesale outlet reported orders of 652 containers of niacin and nicotinamide. About 25% of this amount had been ordered by physicians.

In the calendar year 1966, the Eastern wholesaler alone reported 5,100 orders for B-3. His sales in the first half of 1967 ran at the average rate of 650 orders monthly, and have probably exceeded 9,000 for the full year. A Western wholesaler has had just about the same experience. Hence the combined sales of these two outlets alone have approximated in 1967 18,000 containers (all of these the 500-tablet size - 500 mg. each).

Making allowance for additional outlets, it seems reasonable to suppose that total niacin sales for the year 1967 have amounted to 24,000 orders of 500 tablets, 500 mg. - as compared with almost none in 1965.

Beginning in the summer of 1966, a new growth factor entered the B-3 therapy field. By this I mean institutions, such as general hospitals with psychiatric departments, mental hospitals, rehabilitation centers for alcoholics, veterans facilities, A.A.-managed "drying-out" places and A.A. connected places for hospitalization.

During the first half of 1966, only two institutional users were reported: Guest House, a rehabilitation facility for alcoholic priests at Lake Orion, Michigan, and the North Nassau Mental Health Center at Manhasset, L. I., N. Y.

Dating from mid-summer 1966, more and more institutions put in an appearance as niacin and nicotinamide buyers. Two wholesalers report that, as of January 1968 their lists include over 100 such facilities. This rapidly accelerating interest has been most surprising, considering the institutional apathy and lack of knowledge which had been the rule for many years past.

* Dr. Abram Hoffer - 800 Spadena Crescent E., Saskatoon, Sask., Canada.

* Dr. Humphrey Osmond - N.J.I.N.P. - Box 1000, Princeton, N. J.

The astonishing expansion in the use of B-3 that has taken place in only two years becomes even more striking when we consider that there has been no public advertising at all (since B-3 is non-proprietary). Niacin costs the average massive user only about ten cents per day.

This phenomenon is scarcely the expression of a passing fad, nor is it due in any large measure to personal influence on my part. Since there are only 1500 of my original brochures in circulation, it seems probable that a large majority of the present users have never read it.

Further evidence that the vitamin is being bought on its actual merits is shown by the very large numbers of reorders reported by wholesalers. For example, a check back by one firm revealed that 70% of his purchasers in all categories were reordering regularly.

While the foregoing figures do not of course establish the scientific merits of the B-3 therapy, they do nevertheless strongly suggest that thousands of people are now receiving large and continuous benefits.

Certainly a considerable test of the Vitamin B-3 therapy is going on among American and Canadian physicians and institutions; the B-3 treatment has been lifted out of its long-time obscurity and is now being given a fair and sustained trial in its several treatment uses.

Treatment interest in the vitamin has already extended far beyond schizo tendencies in alcoholics. Therefore this presentation will also try to acquaint you with the newer possibilities that have unfolded — both in emotional and physical areas of illness. In consequence it is hoped the material shown herein will be found by many of you to be of much wider use and interest than was the content of my earlier "Communication."

This report is private and not intended for public distribution. Nor is this project a function of A.A., as such, or of its World Service Headquarters.

Please, therefore, address any correspondence concerning B-3 to Bill W., P.O., Box 451, Bedford Hills, N.Y. 10507 — where I maintain an information service for this work.

Because of A.A.'s tradition of no controversy, non-endorsement and anonymity at the public level, I shall be most grateful for the cooperation of all readers in avoiding any public mention of my part in the B-3 undertaking.

Devotedly yours,

Bill W.

P.S. In addition to the physicians who report in coming pages, there are also many AA doctors who have written of their successful results with B-3 therapy but whose reports could not be included because of space limitations. This background information has been most helpful in preparing a second "Communication" and I wish to thank them for their effort and enthusiasm.

P.P.S. The information center which distributes this publication is a nonprofit venture supported by a few of my friends. Our budget is therefore small, and the demand, largely from physicians, for additional brochures is now becoming so great that it seems right to let our readers know that the cost to us — in terms of printing, postage, wrapping, and general overhead for servicing — will run at about \$1 each for the 5,000 copies of this, our second production.

However, there will be no objection if readers care to make additional reprints of those parts of this monograph which are especially interesting to them, provided that such copies are clearly marked "Not For Public Distribution."

PROMISING EVENTS IN THE B-3 FIELD

(1966-1967)

Ever since 1952, my research friends Drs. Hoffer and Osmond have been trying to achieve clinical acceptance of their work on serious schizophrenia which was described in my first "Communication."

Until two years ago their basic research information was generally ignored by the medical profession at large; this, despite the publication of two double blind studies, 30 papers and several pamphlets and books. Nor would any U. S. university or institution send an investigator to Saskatchewan, where the original work had been done, for a firsthand appraisal. Widespread indifference, and sometimes hostility, was the state of affairs. Such a response to new findings is not unusual; the history of medicine is replete with examples of this kind.

It is therefore extremely pleasing to report that, in the last 24 months, a rapid and promising change has taken place; change which is now leading to a great deal more independent testing and public information.

Let me illustrate some of the newer developments:

The chain reaction of B-3 use among A. A. members came first. It was probably triggered in 1965 when I recommended the vitamin to a few friends I knew to be continually plagued by depression, tension, anxiety and lack of energy. Those who received marked benefits from B-3 made conscientious efforts to brief fellow sufferers. For example, the large present consumption of B-3 in California can be readily traced to an original handful of A. A. enthusiasts.

A Texan member who learned about the massive niacin or niacinamide therapy from another A. A. was dramatically and rapidly relieved of a chronic depression. He then prepared 1000 mailing pieces on the subject and sent them to many physicians and hundreds of A.A.s in his area. The eastern wholesaler soon received large numbers of B-3 orders from Texas, and most of these continue to be repeated.

Another example: About 18 months ago I spoke to an old A. A. friend in the New York area who had endured years of acute depression. B-3 completely relieved his condition. He began to recommend the vitamin in a semi-organized fashion by actively searching out fellow A. A. sufferers. They in turn described the benefits they received to still others. In consequence my friend now estimates that some 400 people in his vicinity are now using B-3. His observation is that about 3 out of 4 who have tried the vitamin are getting worthwhile effects and that, in many cases the results have been astonishing.

So it is going, country-wide. The same phenomenon is beginning to repeat itself among A.A.s overseas. In Norway, Holland, Finland and Germany, England, Australia and South America, the B-3 therapy is now underway.

First Mental Health Center to use B-3. About March 1966, psychiatrist Dr. Dave Hawkins, Director of the North Nassau Mental Health Center at Manhasset, L. I. read my first "Communication" and it caught his interest. Employing more than a dozen psychiatrists, the Manhasset operation is of substantial size.

Dr. Hawkins and his colleagues adopted the pragmatic approach to the B-3 therapy. Because of the safety of the vitamin, they felt there was nothing to lose by trying the Hoffer-Osmond treatment upon their schizophrenics, and alcoholics with schizophrenia. Numbers of these alcoholics were sober in A. A. but miserable. Many others, though trying hard, were too emotionally ill to achieve continuous sobriety through A. A., nor indeed by any other approach.

Niacin or niacinamide was also given to numerous alcoholics who had not tested schizo, but who nonetheless were suffering the more ordinary varieties of depression, tension, insomnia, anxiety and exhaustion.

The net results of more than two years of B-3 experience at the North Nassau Mental Health Center are surprisingly good, indeed amazing: these will be detailed by Dr. Hawkins in his section of this

presentation. There is little doubt that he has created a highly effective treatment model — one that could easily be given a trial by innumerable other mental health centers throughout the world.

In January 1967, the North Nassau Mental Health Center and Brunswick Hospital sponsored a meeting at Amityville, L. I. Informal reports were presented by a dozen psychiatrists who had been using B-3 for significant periods of time. An expert discussion of "HOD" testing was also given by psychologist Dr. El Maligi of the New Jersey Institute of Psychiatry and Neurology.

Reports covering some 1200 cases of schizophrenia and alcoholic-schizophrenics were presented to the considerable audience of physicians and social workers. The favorable results of the B-3 therapy upon a large majority of these patients were impressive.

Dr. Russell Smiths' 20 month research on 507 alcoholics — fully covered by him in this report.

First A. A. Facility to use B-3: In early 1966, a copy of my original brochure on B-3 had reached an old friend, Mr. Austin Ripley, director of Guest House, Lake Orion, Michigan. This is a center for the rehabilitation of alcoholic priests. It has an enviable record of 82% recovery among 500 Catholic clergymen treated over a period of years.

Mr. Ripley immediately dispatched one of his medical staff to see Dr. Abram Hoffer at the University Hospital, Saskatoon, Saskatchewan, and another visited Dr. Humphrey Osmond at Princeton, where he is Director of the Institute of Psychiatry and Neurology for the State of New Jersey. Both Guest House physicians returned with positive reports and recommended that the B-3 therapy be added to the Guest House treatment program. All priests were first "HOD" tested and then placed on 3 grams or more of B-3 daily. This procedure has continued ever since. The HOD had shown that the alcoholic priests were 40% perceptually affected.

Mr. Ripley also began writing to former "graduate" patients, priests who had remained sober by means of Guest House plus A. A., but who continued to suffer much emotional instability. One of these, a Jesuit I shall call "Father Joe," was a striking case in point.

Father Joe, a Ph.D., professor of philosophy at Fordham University, had a lifelong depressive history. In spite of two years sobriety in A. A., he found to his consternation that his depressions were far worse, and almost continuous. Quite unable to teach most of the time, his life work was threatened.

Over two years ago, Dr. Hawkins gave him the HOD test and found his score to be highly abnormal. Niacin, 3 grams daily, was prescribed. This helped, but Father Joe remained far from well. The dose was then raised to 6, and finally to 9 grams, where it has since been maintained for over a year. On these higher doses he recovered completely; and has experienced an immense release of energy.

In late fall of 1966 Father Joe persuaded the president of Fordham to personally sponsor the appearance of Drs. Hoffer, Osmond, Hawkins and other physicians at a panel meeting before an audience of several hundred interested doctors, social workers, nurses, parents of schizophrenics and students. The audience reaction, as revealed in the question period, was exceedingly good. This made Fordham the first American university to place the B-3 therapy on public view.

Working closely with Dr. Hawkins, Father Joe next started a Schizophrenic Anonymous group in the New York area. This included both non-alcoholic schizophrenics and A. A. members suffering the malady. This original group expanded so rapidly that it was forced to break up into two groups, now consisting of over 60 members each.

Of the several "SA" groups now operating in the United States and Canada, these two, like the effective ones elsewhere, are based on the model of the first fully successful group started by Dr. Hoffer in Saskatoon. The headquarters of Schizophrenics Anonymous International is located there. (Box 913 — Saskatoon, Saskatchewan, Canada.) S. A. Groups such as these may finally develop everywhere as a means of after-care rehabilitation for serious cases of schizophrenia. Please note Father Joe's description of "S. A." in a following section.

The 1966-67 period has been marked by several more noteworthy events:

A popular book entitled "How to Live With Schizophrenia"* was authored by Hoffer and Osmond. It is designed for the use of doctors, schizophrenics and their families. The first printing of 5000 sold out rapidly and the second is going fast.

The American Schizophrenia Foundation continues to enlarge its activities, and now maintains an information office at 230 Nickels Arcade, Ann Arbor, Mich. 48108, from which books, pamphlets, literature, and a monthly news bulletin are distributed. A list of physicians willing to take schizophrenic referrals is available. This facility is also forming local Foundation Chapters in the U. S. and Canada to raise funds for further research and education and the public response is already encouraging. The Chapters are largely composed of the families of schizophrenics.

Increased publicity on B-3 therapy. During the past two years, physicians working with B-3 have been asked to make many presentations at medical gatherings, and hospitals. Mounting public interest has already prompted several national TV and radio programs on this subject. These activities have stimulated a very large number of inquiries, some from physicians and psychiatrists, and many from distraught families. As of this writing, Drs. Hoffer and Osmond have received about 3,000 pleas for information and help. Other psychiatrists have also been deluged with calls for assistance. Dr. Hawkins has had to add several more psychiatrists to his staff to handle the increased patient load at the North Nassau Mental Health Center.

Use of B-3 in Relative Hypoglycemia (low-blood sugar). It has long been known that there is a large incidence of hypoglycemia among alcoholics. Because of its ability to help maintain proper blood sugar levels, B-3 is becoming a valuable treatment adjunct for this condition, a knowledge which may be a great boon to alcoholics who do not have schizophrenic tendencies. This illness will be discussed further on, quoting medical sources.

Niacin and the Heart. Ten years ago Dr. Edwin Boyle — a physician specializing in heart and circulatory ailments read a paper by Hoffer and Altschul announcing that niacin in large doses could safely lower blood cholesterol. Since then, he and his colleagues at the Miami Heart Institute have used niacin on some 1000 cases of elevated blood fats and cholesterol, all of them coronary patients. Of 160 of these coronary cases that Dr. Boyle has kept on niacin and under special observation during a ten-year period, only 6 have died, against a statistical expectation of 62 with conventional after care.

Dr. Boyle states that more alcoholics die from cardio-vascular catastrophies related to abnormal fat metabolism than from all other causes combined. He also says that "from the strictly medical viewpoint, I believe all patients taking niacin would survive longer and enjoy life much more."

Scientific Validation Studies on B-3. The National Heart Institute, of the Institute of Health (U. S. Public Health Service) has recently initiated a study on 8500 coronary survivals. Four drug treatments are being compared to establish which is best for reducing recurrences of heart attacks. N. H. I. has selected niacin as one of the 4 most promising drugs available for prevention of cardio-vascular disasters which afflict 7 out of 10 white male professional people. This multi-million-dollar study in 55 leading heart centers in the U. S., Hawaii and Puerto Rico, assumes the safety of and potential benefit of massive niacin dosage.

In 1966, the National Institute for Mental Health finally made an on-the-spot investigation of the Hoffer-Osmond claims in the field of serious schizophrenia. In 1967 the authorities set aside \$350,000 to be spent in the next few years upon an independent study to determine the actual worth of the Saskatchewan findings. This appropriation has recently been increased to more than \$500,000. It is worthy of note that the cooperation of Hoffer and Osmond has been requested. An authoritative evaluation is now underway — a development long hoped for.

Other potential values of B-3 have emerged in the treatment of LSD and STP psychoses, senility, juvenile delinquency, severe malnutrition and joint dysfunctions.

* The publisher is: University Books, New Hyde Park, N. Y. Price: \$5.95.

SAFETY – DOSAGE – SIDE EFFECTS

As of this date, thousands of individuals are receiving treatment via the large dosage B-3 therapy. Several hundred physicians and psychiatrists, and more than one hundred institutions, are now exploring the use of massive B-3 therapy in the treatment of schizophrenia; alcoholics with schizo-tendencies, hypoglycemia and other metabolic disturbances.

It is increasingly clear that B-3 is becoming a valuable adjunct to the treatment of alcoholism, because such a large majority of problem drinkers are beset with these conditions which, since they can cause depression, anxiety, tension and exhaustion, often make it difficult if not impossible to achieve sobriety. Large numbers of sober alcoholics suffering from these same symptoms can also be greatly benefited.

Then, too, as it becomes more widely known that niacin acts as a safe preventive for coronaries, or of recurrences of them, the prospect for the use of B-3 therapy should become almost unlimited.

This state of affairs has aroused a certain amount of concern among certain physicians and medical groups. They object to the pragmatic treatment approach now in such wide use. They currently state that no top level, independent scientific evaluation has ever been made of the treatment results in these new areas, nor of the theoretical considerations involved. More importantly they raise the question whether vitamin B-3 in massive amounts is actually safe, when given continuously for years on end.

For these reasons many doctors are inclined to oppose the attitude of "let's try massive B-3 and see what happens." Certainly these are valid questions which deserve reasonable answers – particularly those questions addressed to the safety problem. Let us look at some of the answers:

It does not yet seem generally known that during the last twenty-five years the administration of massive doses of B-3 has been going on throughout a large cross section of patients, and that none of them have evidenced any serious or sustained damage to the observing physicians.

Most of the evidence of the long-time safety of B-3, rests upon the experience of Kaufman in arthritis, Hoffer and Osmond in schizophrenia, and Boyle in cardiac and circulatory ills. Kaufman began large doses of B-3 in 1941, Hoffer and Osmond in 1952, and Boyle in 1957. Kaufman's experience covers 1,000 cases, Hoffer and Osmond have treated over 1,000 cases, and Boyle 1,000. This is a total of over 3,000 patients. Many of them have used niacin and nicotinamide in these heavy doses during periods now ranging from five to twenty years.

Hoffer, Osmond and Boyle have repeatedly tested these patients on long-term B-3 usage for damaging side-effects and have found none. The late Professor Rudolf Alschul, has written an exhaustive monograph, covering niacin and niacinamide.* He concluded that vitamin B-3 is a very safe medication indeed. In fact over 300 papers have been published dealing with the clinical use of niacin. It is so safe that even with the F. D. A. present policy regarding drugs, B-3 is a non-prescription substance.

As reported previously, the National Heart Institute's Coronary Drug Study on 8500 coronary cases selected niacin as one of four drugs to be used in determining which was most effective in preventing recurrence of coronary attacks. Certainly this wholesale application in the sensitive areas of coronary disease, bespeaks no serious concern on the part of the Institute about dangerous side effects.

The consumption of B-3 has risen to a probable 1,000,000 (500 mg.) tablets per month, over the past two years. Neither from the thousands of A. A.'s using B-3, nor from their physicians, have I received any report whatever of irreversible serious consequences.

* "Niacin in Vascular Disorders" published by C. C. Thomas, Springfield, Ill.

Dosage and Side Effects

As we have observed, the total experience with B-3 therapy has been very extensive. From this experience, there has arisen a considerable medical literature on the subject of dosages and upon the management of certain disagreeable side effects. Because this information is scattered through a wide array of medical papers it may be helpful to summarize the main features of these reports. The material presented below has been prepared in collaboration with Drs. Boyle, Hawkins, Hoffer, Osmond and Smith, and they vouch for its accuracy.

The usual dose of niacin or nicotinamide is three grams daily — two 500 mg. tablets after each meal. Obviously the aim of massive doses is not merely to repair a dietary vitamin deficiency. It is believed that these large amounts are the raw material, from which the body can manufacture certain other substances that it lacks for the remedy of the various ailments in which B-3 is effective.

For the most part, however, the chemical behavior of vitamin B-3 is still speculative and theoretical. Just how, chemically, niacin (though not nicotinamide) does reduce blood cholesterol levels and improves circulation, why B-3 can often remedy arthritic conditions and why, in hypoglycemia, it can check the abnormal drop of blood sugar, are little understood features of the vitamin. Treatment results show that B-3 does all these things, but the biochemist still has to tell us precisely how. Since B-3 is one of the safest medications known, there seems little need however to wait upon ultimate explanations before giving it a trial.

Though three grams daily is the usually prescribed intake, there are variants above and below this amount which should be noted.

In some cases of serious and chronic schizophrenia, the three-gram dose is of little effect. Sometimes six grams, nine grams or even 12 grams work very well where the lower dosage has failed. During the past two or three years, Hoffer, Hawkins, Smith and several others have used these extreme amounts with excellent results, and have observed little or no side effects.

There is additional evidence of non-toxicity. In tests on animals no toxicity appeared until five grams were given for each two and two-tenths pounds of body weight. On this basis, an adult human should be unaffected up to 250 grams daily. Dr. Hoffer once had a patient who tried suicide with 50 grams of niacin. Some indigestion was the only observable result. The same amount of aspirin would have been far more toxic.

Fortunately, extreme doses appear to be needed only by serious schizophrenics, and alcoholics in the acute withdrawal stage — classes of patients to whom large quantities of tranquilizers are continuously given, notwithstanding the demonstrable toxic effect of most of these substances.

The next practical question is: which form of B-3 (niacin or nicotinamide) should the physician recommend?

In most cases, niacin would be the preferred medication, provided the user can tolerate it. This is because niacin has the ability to keep blood cholesterol down, thus lessening the possibility of coronaries or recurrences thereof.

About 80 percent of those trying niacin can achieve a dose of three grams daily with no more inconvenience than a few days of rather heavy flushing. This is a normal reaction which finally wears off entirely and seldom recurs, except when the niacin is discontinued for a time and then resumed. Even so, the flush on these occasions is not equal to the original one.

In about 10 percent of those trying niacin, there is very persistent flushing, and rashes may appear, particularly in allergic type people. However, most individuals of this class can eventually take niacin, if they start out on a much smaller amount, say 250 mg. after each meal, and gradually work up to a full daily dose of three grams. A glass of cold milk at the close of each meal will ordinarily overcome the difficulties. The omission of hot beverages and hot baths until tolerance is reached will also minimize these annoyances.

There is also an additional resource against flushing which ought to be mentioned. This was discovered some years ago by Dr. Theodore R. Robie, a New Jersey psychiatrist, who has been treating schizophrenics with niacin, and with great success, for the past eight years. He finds that 4 mg. of Periactin will sometimes help reduce the flushing.

There are some people, however, who are simply unable to tolerate niacin at all. These can be switched to nicotinamide, which does not flush. The occasional nausea and stomach upset which sometimes occurs with both substances can be minimized by taking them with cold milk and by using antacid. In occasional cases of ulcerous bleeding, B-3 may have to be discontinued if it causes too much additional acidity.

Nicotinamide appears to be equally good so far as mental and emotional difficulties are concerned, and it does work well in arthritis. But it should be remembered that if the switch to nicotinamide is made, then the insurance against heart difficulties that niacin affords will be lost.

In choosing between niacin and nicotinamide, there is still another factor that needs to be considered. When a schizophrenic patient starts the B-3 therapy, it is often better to begin with nicotinamide. If given niacin, the flushing experience may frighten him into discontinuing it, especially if he is given no prior explanation. If his reaction has been at all marked, he may then refuse to take even nicotinamide, no matter how strong the persuasion. Other individuals who are not schizophrenic, but have severe emotional symptoms, may also react in the same way. It may be better to start this type of patient on nicotinamide first, and then switch to niacin for its additional benefits, particularly in the over-forty age group.

In addition to the disagreeable though harmless side effects, there are others still to be considered.

For example, rare instances have been reported where palpitation followed the ingestion of B-3. Dr. Boyle suggests that the procedure of taking B-3 after large meals and with cold milk (preferably skimmed) will usually eliminate this reaction. In a few cases, edema, usually swelling in the ankles has turned up. People with diabetes should start treatment gradually under medical supervision since the ability of B-3 to alter blood sugar levels would sometimes necessitate additional regulating of insulin dosage. Both Dr. Boyle and Dr. Hoffer report however that if precautions and progressive dosage are observed, most diabetics can safely obtain the benefits of B-3.

Another question often asked is whether niacin or nicotinamide interferes with other medication being given. According to the physicians who have had the longest experience, B-3 does not adversely affect any other treatment — save one exception which Dr. Boyle discusses further on. Neither does it have to be withheld from persons in poor general health.

B-3 heightens the effectiveness of tranquilizers. Here the result is clearly beneficial. If tranquilizers must be given, then lesser dosages will be just as efficient. This has been found to be of great advantage in treating D. T. patients. B-3 not only reduces the psychotic period, it also diminishes the need for tranquilizing agents.

Here are a few typical examples of mistaken "side effects." Three of our A. A. physicians at first thought they were observing various dangerous reactions. One of them assumed that a patient's eyesight had been adversely affected by B-3. The actual trouble turned out to be measles. While taking B-3, another patient contracted hepatitis and the B-3 was promptly ordered discontinued. Hospitalized, he made an excellent recovery from his contagious hepatitis. Only then was it revealed that the patient, a B-3 enthusiast, had been taking his three grams of the vitamin daily all during his illness! He had smuggled the tablets into his ward. A third A. A. physician was sure he had clinical evidence of liver damage. But this proved to be an appearance only which disappeared promptly when B-3 was discontinued. Boyle had long before observed this phenomenon, and thinks it can account for numerous reports in the literature of liver injury. He therefore suggests:

"Niacin and nicotinamide should be discontinued for a week or more before taking a thorough and sophisticated physical examination. This is because B-3 will, in some cases, give a false-positive liver function test, such as elevated S. G. O. T. and alkaline phosphotase. These tests return to normal in hours after the last niacin dose." Liver biopsys have shown normal liver in all such cases," reports Dr. Boyle.

"However, if one is taking a life insurance examination, he may get a black mark from his company on this score — a conclusion by the doctors there that he may find hard to reverse."

There is nevertheless one condition, according to Dr. Boyle, in which there is a marked contraindication. "When an individual is under treatment for high blood pressure and a Reserpine-type medication is being used, then niacin should be taken under careful supervision. If a full dose of niacin is taken, a sudden drop in blood pressure may occur. Therefore it is very important to inquire of each prospective user of niacin whether he happens to be taking a Reserpine-type treatment for high blood pressure. If so, he should not take niacin without medical supervision and should start with progressive dosages."

Finally, it should be observed that a few people — very few indeed — cannot tolerate either niacin or nicotinamide. With them, the consequences are disagreeable, continuous, and cannot seem to be outgrown. So far as the B-3 therapy is concerned, they are simply out of luck. Of course there is nothing exceptional about this. All sorts of harmless medications and foods (aspirin, strawberries, shrimp etc.) will provoke adverse reactions in some people. This is too bad, but certainly nothing to get excited about.

With all these professional assurances of the long-time safety of niacin and nicotinamide, there seems no reason why the B-3 pragmatists should not continue to meet the ever-growing demand for treatment. There seems no good excuse why uncounted sufferers should have to wait years for a complete top level "scientific" evaluation of the B-3 therapy in all its ramifications — however desirable this would be.

Therefore it is good to know that in the view of many doctors, a failure to try this perfectly safe treatment, especially where other accepted methods have largely failed, would actually amount to an unethical attitude.

Note: For the lay reader who may be confused by B-3 terminology:
Niacin and nicotinic acid — are identical substances.

Niacinamide and nicotinamide — are also identical terms.

In these pages they have been used interchangeably by the reporting doctors.

A PRELIMINARY REPORT ON MASSIVE NIACIN
THERAPY OF ALCOHOLICS IN MICHIGAN

by

Russell F. Smith, M.D.

Medical Director: Michigan State Boys' Training Schools, Whitmore Lake, Michigan;
Consultant: Brighton Hospital, Detroit, Michigan; Guest House, Lake Orion, Michigan;
Special Health Care Consultant to Michigan State Department of Social Services

A complete evaluation of our clinical experience to date with massive vitamin B-3 therapy administered to alcoholics will soon be published. Our study has not only brought to light another valuable clinical application of massive niacin therapy, but also insights into the fundamental dynamics of the alcoholic disease. The impressive reports of the work already done with B-3 in schizophrenia in no way prepared us for the results encountered in our alcohol series.

These results are all the more remarkable because of the handicaps given niacin by the mechanics of our study. To eliminate certain research problems, our series was loaded with hard core, treatment resistant, difficult alcoholics. The criteria used to classify patient responses to niacin were made rigid to simplify evaluation. Our original intent was merely to sample niacin's effectiveness and to determine if further work in this area was justified. The study was designed to gain maximum information from minimum effort. In a word, further work with niacin definitely is in our opinion, worthwhile.

We are now able to report 507 alcoholics treated from six months to one and one half years with niacin, and with niacinamide in the few cases where niacin could not be tolerated.

Of these 507 patients, 103 were classified as excellent results, 240 good, 98 fair and 66 poor. On an average of 6 grams of this well known, common, cheap vitamin a day, 87 percent of our group of hard core treatment resistant alcoholics derived benefit. Even more unexpected was the 20 percent of this group who maintained complete abstinence where this had been impossible before, despite frequent and often excellent therapy.

Comparing these results with other therapeutic agents, commonly used in the treatment of alcoholics, B-3 far surpasses them in effectiveness. This comparison becomes even more impressive when we also remember that many drugs today used in the treatment of alcoholism have a high potential for abuse and for suicide. When the niacin therapy is used instead, these serious risks become virtually non-existent — a great advantage indeed.

This dramatic response led us to speculate as to niacin's action in the alcoholic. Other observations commonly reported by our patients further stimulated our interest. Many who failed to sustain complete abstinence reported unusual responses to alcohol during intoxication and withdrawal. Many reported that while taking niacin at this large dosage they experienced decreased tolerance to alcohol and found sustained drinking difficult to achieve. Others were observed to have a marked decrease in expected withdrawal symptoms as demonstrated by far less needed medication than had been their previous experience. Many others reported better sleeping habits and the absence of previous periodic mood swings from agitation to depression. Such reports certainly suggest an important role for niacin in the processes responsible for alcohol tolerance and withdrawal.

Our opinion to date is that niacin is effective and safe, and with increased sophistication could become a highly useful therapeutic tool in the treatment of alcoholism. These results make us feel that more rigidly structured studies should be carried out along with basic investigations to discover niacin's implications in the underlying alcoholic process.

Initially two patient groups were selected for this study. A third group was added shortly afterward, primarily because of patient demand for niacin therapy.

The first two groups were selected because they constituted a hard core of alcoholic patients well known to us. Selection on this basis was for several reasons. (1) These patients had demonstrated repeated resistance to all usual forms of therapy. All had been hospitalized frequently, had experienced many treatment attempts, and treatment failures. Therefore we felt that any improvement would be easily detected. (2) Because of previous failures on supposedly effective drugs, we felt the placebo effect here would be negligible. (3) Since this group was well known to the study observers, good rapport had already been established, as evidenced by their repeatedly returning for treatment even in the face of failures. Since each patient's previous behavior was well known to us, we felt our clinical observations would be valid appraisals for our purposes.

The first of the two initial groups was made up of alcoholics frequently rehospitalized over a long period of time at a specialized care facility which has an excellent reputation for successful treatment of a majority of its patients. The second group was composed of an out-patient practice made up primarily of patients given up as hopeless, by other care units. Thus, by self selection we had available a highly resistant group of alcoholics who were using, or had available to them, all the recognized treatment techniques, and whose histories were long, well documented, and well known to our observers. Under these conditions we felt that most variables would remain constant since no change in therapy was made except the addition of niacin with as little explanation to patients as possible. Each patient's own history and past performance was considered a sufficient base line control for the aims of this investigation.

The third group (from another facility), actually volunteered because of their unanimous interest in the B-3 treatment. This group shared, with the two previous ones, long and well documented histories and ease of follow up, and had a common vocational and professional link. These patients were diagnosed earlier, treated longer, and followed more closely than any other group of alcoholics known to us. Unlike the first two groups studied, the severity of their alcoholism was generally less. So this was a group of very well motivated and well documented patients and they also represented nearly the entire spectrum of the alcoholic disease. It was possible to use this particular group of patients as controls that had less social and physical involvement in their alcoholic problems than the first two study groups.

The techniques employed in the administration of niacin and follow up were slightly different in each group. Although massive B-3 had long been offered by a few psychiatrists as a valuable adjunct to the treatment of schizophrenia, it was felt that in these particular alcoholism studies no attempt at correlation with schizophrenia would be attempted. We had observed that during detoxification, many alcoholics often manifested temporary perceptual aberrations, therefore we felt that the HOD test for schizotendencies might register the alcohol toxicity as well, and so would not be a reliable index of schizophrenia.

Because no comprehensive studies of B-3 treatment for alcoholics had ever before been made, it became necessary to develop new criteria for the evaluation of our own results.

Since our observers were specialized professionals in the alcoholism field, with five or more years of experience, we believed the use of clinical observations would be valid. The evaluations reported here are the collective opinions of the many people involved. Rapport between patients and observers was uniformly good. This was evidenced by their long contact in a therapeutic setting, this despite their previously poor response to treatment. With such excellent and prolonged communication, the use of subjective responses proved to be valuable and reliable.

Our results are reported here in four response categories, poor, fair, good and excellent.

1. Results were considered poor if objective improvement was not seen, and subjective improvement was not reported.

2. Fair results, by our criteria, consisted of reported substantial subjective improvement without observed objective change.

3. The good result group included those who had reported good subjective response coupled with observed objective improvement.

4. To be considered an excellent result, dramatically good subjective and objective responses were necessary. To further qualify in this last category, abstinence had to be sustained for the duration of the study.

Positive subjective responses to niacin were specifically defined. Feelings of increased well being, improved energy output, or stabilization of mood were considered fair subjective responses. Reported improvement in memory function, learning ability, problem solving, or coping ability were considered good subjective results. Unsolicited comments of some patients concerning improvement in arthritis, musculo skeletal disease, angina, senile memory defects, and certain other unrelated conditions, although encountered, were not considered in cataloguing responses.

Objective changes in patient behavior while on niacin were considered and noted. These included: reduction in the amount of medicine necessary to control withdrawal, reduction in necessary medication during post withdrawal, improved sleep habits, improved appetite, improved inter-personal relationships, improved job performance, and longer periods of successful abstinence. In our "excellent" category, not only was complete abstinence required, but also a discontinuance of all other forms of drug therapy, for the duration of the studies.

The following table and observations represent the outcome of our study of 507 alcoholics who took niacin from 6 to 20 months. The average treatment time of this group was ten months. Doses were begun at 3 grams daily and adjusted by tolerance and response up to 20 grams. This study group was taking, on the average, six to eight grams of niacin daily at the time of evaluation.

It should here be noted that the originally proposed study group comprised 651 alcoholics. Naturally there was some attrition – some patients were lost in follow up, there were prison sentences, some refused to cooperate, several died, etc. However, 507 remained, and these were evaluated as follows:

	Poor	Fair	Good	Excellent	Total
Outpatient Group	18	70	109	42	239
Hospital Group	40	19	111	46	216
Sanitorium Group	8	9	20	15	52
Totals	66	98	240	103	507

The above results demonstrate a significant effect by B-3 on the alcoholic disease process. Considering the type of patient involved, the results are even more impressive. Most dramatic are the number who have maintained continued abstinence from alcohol since beginning niacin therapy. This nearly 20 percent response was hardly expected from a group of known long-standing treatment failures. The result is even more impressive in the light of the knowledge that this same group has been able to discontinue all other medication. The number who have demonstrated observable objective change is also remarkable, although somewhat less dramatic.

It would therefore seem that niacin therapy has well demonstrated its usefulness as a therapeutic tool in treating alcoholics in the group just studied. Certainly more detailed and better controlled studies now seem warranted.

Although the primary objective of this paper is not to report individual cases, a great number do exist in this study that are worthy of note. However a few of the more conspicuous will be cited:

1. W. J. a 40-year-old businessman, unable to sustain abstinence for more than a few weeks was gradually raised to 20 grams of niacin a day. He was under treatment for his emotional problems and alcoholism by an area Veterans Hospital. Initially the Veterans Hospital refused his request to provide niacin. However his response was so obvious, even to their psychiatric staff, that this request was subsequently granted.

2. J. F. was a college instructor in English who had not taught a complete term in the last five years. On a dose of 12 grams of niacin daily he has now completed one successful year of teaching.

3. T. M., a 55-year-old accountant, who was plagued by wide emotional swings from mania to depression, had always tried to treat his problem with alcohol. But on a daily intake of 8 grams of niacin he has continued his abstinence, and has been able to entirely discontinue a frightening array of tranquilizers and antidepressants that he had been using alternately.

4. J. N. a 40-year-old painter has a schizoid background and a drinking history dating back to age 11 years. On a dose of 12 grams of niacin, and steadily decreasing amounts of antidepressants, he is now completing the first seven months of sobriety in his life.

We could cite many cases nearly as dramatic as those listed above, but this sample alone gives some reason for our mounting enthusiasm for the use of niacin or niacinamide as an adjunct in the treatment of alcoholics.

Certain striking general patterns have emerged from this study which deserve further clarification. It has been our observation to date that those patients who continue to have serious gastro-intestinal or vascular symptoms seem to derive little subjective and no objective response from niacin therapy. Those patients who have tolerated niacin best seem to fall into the "good" and "excellent" categories above. This clear pattern would seem to suggest wide variations in tolerance, and in possible need, for massive B-3. A possible systemic rejection of niacin or failure to use and remove it from the gut or systemic circulation may also exist.

In our recent study, efforts to persist in niacin therapy despite a continual adverse reaction, produced no beneficial results in such patients. It must be clearly borne in mind that in discussing these particular symptoms we are not referring to the usual initial and expected vascular flushing, and mild G.I. upset due to histamine. We are referring instead to those patients who, after a trial of several weeks seem quite unable to tolerate niacin in large doses. As a result of these observations we think we will be able to predict with some degree of accuracy which patients will respond well to the niacin therapy and which will not.

A very unexpected development was the loss of tolerance to large quantities of alcohol reported by some patients who began to drink again. Many reported being able to drink only roughly one half pint before becoming drowsy, very intoxicated, or falling to sleep. This ability to get a binge under way, even though many patients attempted this several times, deserves further clarification and investigation. Quite possibly, niacin may be intimately involved in the physiology of alcohol tolerance.

Ascorbic acid was not a part of our original treatment plan to test the merits of the B-3 therapy. During the study however, certain patients complained of sustained weakness, dry skin, occasional rashes or odd dietary cravings. Realizing that massive B-3 acts as a drug, and not as a vitamin, and that the high consumption of nicotine and coffee common to alcoholics can also cause increased consumption and therefore depletion of unstored Vitamin C, we tested the urine of these patients and found all evidence of urinary excretion of ascorbic acid, either visually or chemically, had ceased. We placed these particular patients on increasing doses of vitamin C until the excretion was visible. At this point (average dose 1000 mg. daily) all of the above described side effects disappeared. (At the present time the routine treatment of all our patients includes massive Vitamin C.)

One might conclude from this observation that, with increased sophistication in massive niacin therapy, certain imbalances caused by this form of treatment will have to be defined and compensated.

Several conclusions are evident from this preliminary experience with niacin. B-3 therapy clearly produces objective and subjective improvement in most alcoholic patients. Where improvement through niacin therapy does occur, it is frequently dramatic and sustained. Response to niacin therapy seems to be a clear cut matter with little middle ground. And often the response can be predicted in advance by the trained observer. Massive niacin therapy would seem to influence some of the basic physiologic mechanisms that underlie the alcoholic disease itself.

On the basis of our first substantial trial, we are now certainly convinced that the B-3 therapy deserves really serious consideration as an important adjunct to the treatment of alcoholics.

Further extensive investigation is imperative in more detailed and structured clinical trials, along with basic research into its modes of action. B-3 could well be the key with which we can open the door to many of the mechanisms of alcoholism itself.

SCHIZOPHRENIA SECTION

This section deals with B-3 in schizophrenia and with alcoholism complicated by schizophrenia. It also portrays Schizophrenics Anonymous as an out-patient facility of considerable promise.

Within the New York area work in this field has centered for the past two years about Dr. David Hawkins, Director, and a dozen of his colleagues, at the North Nassau Mental Health Center of Manhasset, Long Island, New York. The "SA" groups of this vicinity were originated by Joseph R. - S. J., himself a recovered alcoholic and schizophrenic. These two men have created a successful working model - one that should commend itself for a trial by any mental health center.

As an introduction to Dr. Hawkins' comprehensive paper covering a two-year experience with B-3, I have included a letter written by him to an inquiring physician. Dr. Hawkins' answer was written after a year's use of the vitamin at Manhasset.

The contents of this letter strongly suggest that any mental health center could quickly and easily reproduce Dr. Hawkins' excellent preliminary results by simply adding massive doses of B-3 to treatments already in use.

Three members of the S. A. group formed by Father Joe, have written their "stories" for inclusion here. They were selected out of many similar reports because they were good examples of the effectiveness of the Dr. Hawkins-Father Joe model.

It was originally planned to have a "case history" section, compiled from the hundreds of letters that have been received from AA members during the past two years, detailing their successful experiences with B-3 therapy in the other treatment areas covered in this communication. Unfortunately it became apparent that space and expense would preclude such a section. I would like to thank each of them for their devotion and enthusiasm and for their letters of encouragement and gratitude.

THE NORTH NASSAU MENTAL HEALTH CENTER
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June 1967

Dear Doctor -

As Director of a large out-patient Psychiatric Clinic with a high percentage of alcoholics and schizophrenics, I was naturally interested in the Hoffer-Osmond approach to schizophrenia and I was also interested in what benefit Niacin might be to alcoholics. As a pragmatist I was only concerned whether it was clinically beneficial to our patients. I had no intention of proving anything scientifically, nor am I interested in it now. I was interested in the usefulness of this approach to three patient populations.

1. Alcoholics
2. Alcoholics with schizophrenia
3. Schizophrenics

The alcoholic seemed to clear up faster mentally and emotionally on niacin, and quite a number who had previously been unable to get sober did so after they started on B-3. Some felt no benefit and, therefore, discontinued it. It is quite likely that many who benefited from niacin were actually unrecognized borderline schizophrenics, and when their thinking cleared up they were able to "get" the AA program.

As you know, a reasonable percentage of alcoholics also have schizophrenia although Hoffer and Osmond say 30% in their study. I believe that this figure is too high for the general alcoholic population.

Alcoholics who end up in psychiatric clinics and hospitals obviously have a much higher rate of schizophrenia than those who merely go to A.A. Among the alcoholics who were clinically "unable to get the A.A. program," or those whose stories are rather bizarre, niacin has apparently been most beneficial.

As everybody knows, the prognosis of patients with the combination of schizophrenia and alcoholism has hithertofore been quite grave. The chances for recovery from schizophrenia while still actively drinking are almost nil; at least in the patients that we see in the Clinic. The chances of schizophrenics stopping drinking while they are still overtly psychotic has been very slim. By treating their schizophrenia with the Hoffer-Osmond approach, and simultaneously pushing them into A.A. our results are extremely good. We have also been seeing a large number of people who have gotten sober in A.A. but are still suffering many symptoms due to unrecognized schizophrenia, and in these cases treating their schizophrenia has been made considerably easier by the niacin approach.

The use of the Hoffer-Osmond approach in treating schizophrenia alone has been the most successful of any approach thus far. There has been a much higher rate of recovery with less suffering and cost, and with less frequent patient visits than were heretofore possible. I have never seen so many patients and their families more pleased and, as the word is spreading, the number of new patients is increasing at such a rate that we have to constantly add new doctors to the staff to handle the ever increasing case load.

I know what the rate of hospitalization and frequency of shock treatments were in the past in a large group of very sick schizophrenics. Since we started using this new approach, we have closed up our out-patient shock unit. Hardly any of these patients need to be hospitalized any more. The few who do are hospitalized voluntarily as an elective procedure. The whole attitude of the patients and their families is so overwhelmingly different that there is practically no comparison with the previous situation.

I would say that as far as straight alcoholics go, we have used B-3 in well over a hundred cases. I do not think the experience with the use of B-3 in alcoholism can be reported in percentages. In other words, it is not like Antibus where you could have a control and a treatment group. I use it clinically in the following ways:

1. Routinely for all alcoholics until they are sober for six months at least. We feel that it helps the patient clear up faster mentally and emotionally.

2. We use it in all alcoholics who are already sober, but who come in because of continuing emotional difficulties. A great many of these clear up on B-3. Of course, a lot of these people are unrecognized borderline schizophrenics.

To date, we have not seen serious side effects from the use of B-3 in any alcoholic, sober or otherwise. Because of our satisfactory experience with it, we are planning to continue using it indefinitely.

Very truly yours,

David R. Hawkins, M. D.
Director

TREATMENT OF OUT-PATIENT SCHIZOPHRENICS & SCHIZOPHRENIC-ALCOHOLICS BASED ON THE MEDICAL MODEL

January 1968

David Ramon Hawkins, M.D.
Director

The North Nassau Mental Health Center
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BACKGROUND:

Biochemical research in schizophrenia has centered around four main areas:

1. Abnormal plasma proteins: As described in the work of Heath, Bergen, Ferguson, Fisher, Turner, Fessel, Frohman, Gottlieb, Haddad, Malis, Sceman, O'Brien, and Marrazzi.
2. Alterations of cerebrospinal fluid glycoproteins: As exemplified by the work of Bogoch, Chistoni, and Zappoli.
3. Abnormal metabolites in the urine: As described by Friedhoff and Van Winkel, and Hoffer and Osmond.
4. Faulty transmethylation of catecholamines: The best known workers in this field have been Altschule, Osmond, Axelrod, Himwich, Kety, Baldessarini, Smythies, and Hoffer.

The pertinent background to the clinical approach to be described began with the reports of Hoffer and Osmond beginning in 1952, describing a new approach to the treatment of schizophrenia. This was followed by the publication of over 200 papers and three books. Of particular significance were the findings of the ten year follow-up studies and the rates of rehospitalizations. (36% ten year recovery rate in the control group as compared to 75% in the treated group). Their recent book How to Live with Schizophrenia, summarizes the history and development of a new and comprehensive concept of schizophrenia. Out of this approach evolved the HOD Test, which has greatly simplified and facilitated the diagnosis and management of patients. With the establishment of the American Schizophrenia Foundation and Schizophrenics Anonymous, new dimensions were added to the understanding and treatment of this illness.

Of all the biochemical approaches to schizophrenia the one that has received the most attention and substantiation has been that of the faulty transmethylation hypothesis. In addition, this hypothesis has most readily lent itself to clinical application and verification. The entire field of biochemical research in schizophrenia has recently been evaluated by Dr. Seymour Kety, Chief of the Clinical Science Laboratory at the National Institute of Mental Health. The conclusion of the review was that of all the biochemical approaches to schizophrenia, a faulty transmethylation underlying schizophrenia is "the most plausible and parsimonious explanation of a wide range of observations in schizophrenia and warrants further evaluation."

CURRENT STUDY:

A. Purposes and Limits:

We began using this new approach to treating schizophrenia in April, 1966. The purpose of this open study was to derive clinical experience and data in trying to help the individual patient using, as a base, a biochemically oriented treatment approach.

B. Patient Population:

1. **Diagnostic Characteristics:** This series consists of 315 consecutive adult patients diagnosed as having schizophrenia, who applied for treatment at an out-patient clinic. The diagnosis was made by psychiatrists with considerable experience in treating schizophrenia, and the diagnosis was confirmed by HOD testing or complete diagnostic psychological test batteries. The records of the patients who had had previous therapy or hospitalizations were obtained and the diagnoses were further confirmed. Any patients in whom the diagnosis was in doubt (such as schizo-affectives with the possibility of manic-depressive psychosis) were not included in the series. Seventy of the 315 patients (22%) had alcoholism as well as schizophrenia. Majority of patients were chronic with diagnosis of either paranoid or undifferentiated type.

2. **Previous Treatment:** Eighty-nine percent of the patients had had previous treatment or hospitalization. Many had had multiple and lengthy hospitalizations of up to 12 years. Almost all had had previous phenothiazine and other drug treatment, often for prolonged periods. Several had had over 100 shock treatments and two patients even had a lobotomy. Previous psychotherapy or psychoanalysis for periods up to 20 years was common. Some of the patients families had spent up to \$150,000 on years of expensive treatment which had been to no avail.

C. Method:

After a diagnostic evaluation by a psychiatrist the patient was given the HOD Test. After the diagnosis was confirmed the patient and/or his family were told that the patient was suffering from schizophrenia. The biochemical theory of the illness was explained to them, and they were advised to read the book, "How to Live with Schizophrenia" in order to increase their understanding of the illness and the treatment approach. Where applicable and possible the patient was also encouraged to attend either Schizophrenic Anonymous or Recovery group meetings. Every patient was then placed on the following combination of medications:

1. Niacin or niacinamide with minimum daily dose of 3 gm. and a maximum dose of 12 gm. The dose was pushed progressively to 12 gm. if there was no improvement on the lower dosages.
2. Ascorbic acid, 4 gm. per day.
3. A phenothiazine drug, which was given for its anti-schizophrenic effect and occasionally for its tranquilizing properties as well.
4. Pyridoxine, 0.2 gram per day for the 1st month, then 50 mg. daily thereafter.

The patient's illness was approached as being primarily a medical problem with psychological and social consequences. The patients were seen relatively infrequently, on an average of once a month. They were not counseled to stop smoking, but were encouraged to maintain a regular active daily physical exercise program. They were advised to keep caffeine to a minimum and the majority of patients were placed on a hypoglycemic diet. At the monthly visits, dosages of medications were almost constantly changed depending upon the patient's symptoms and degree of improvement. Antidepressant drugs were used where indicated and methylphenidate hydrochloride (Ritalin) was often prescribed for apathy. All patients were, therefore, on continuous multiple drug therapy.

RESULTS:

A. General Results:

The effect of telling the patient and/or his family the diagnosis was surprisingly salutary in almost every instance. The patients responded to revelation of the diagnosis by either indifference or considerable relief. A great many had either known or suspected the diagnosis all along, and were reassured by the doctor's frankness and honesty. Telling the patient that he had a specific illness, which needed treatment, resulted in a high degree of cooperation in taking the medication. Most patients, and their families, had been greatly confused in the past by evasive, vague, and often conflicting statements from previous doctors.

We found that this honest and open approach was beneficial and helpful. It relieved considerable family misapprehension and guilt and led to an optimistic outlook.

The use of the HOD Test was satisfactory to both patient and staff and gave a feeling of confidence that the degree of illness was being monitored by some objective means. We found a surprisingly high degree of cooperation and patient acceptance of the treatment program.

There were only mild side effects from high dosage B-3 treatment. One of these was flushing after taking niacin. We found that in general, the sicker the patient, the less was the incidence of flushing. When it did occur, it was usually controlled by the administration of Periactin, 4 mg. q.i.d., or by switching to niacinamide. High dosage niacinamide in some patients, resulted in a gastrointestinal flu-like syndrome with persistent vomiting. This occurred at higher doses, usually above 8 gm. and was avoided by adjusting the dosage or by switching to niacin or using a combination of both.

B. Response to Treatment:

The majority of patients improved significantly and progressively. Those in whom the illness began during adulthood showed the most dramatic response. If the onset of the illness was before age 17 the response to the treatment was slower and most treatment failures occurred in this group of grown-up childhood schizophrenics. Patients who were either too regressed or ill to cooperate with the medical regimen on an out-patient basis were hospitalized briefly for a short course of ECT. The average length of hospitalization was 6 weeks. The response of these hospitalized patients to intensive therapy is the subject of another study. (Paper was presented at Fordham University Conference on Schizophrenia, January 13, 1968.)

Improvement in the entire group was rated by: 1) the patient's subjective statements, 2) the family's observations, 3) the psychiatrists evaluations, and 4) by a decrease in the patient's HOD score. The overall improvement rate for the 315 patients was 71%. (This includes moderately improved, much improved, and recovered categories.) The greatest response to treatment was made by the patients with alcoholism plus schizophrenia. This was attributed to the fact that the majority of these patients also went to both A. A. and S. A.

DISCUSSION:

The improvement rate was surprisingly high in view of the fact that the great majority of the patients had already had previous and often extensive treatment elsewhere. Very few patients had to be hospitalized and these were the only ones that eventually required electroconvulsive therapy.

This new approach to schizophrenia brought many unexpected benefits to both patient and family, aside from the fact that the patient had a specifically diagnosable, named illness, which could be treated on rational grounds, removed the illness from the frightening and guilt-provoking "nameless" category. The almost universal relief upon disclosure of the diagnosis was followed, in some instances however, by family concern regarding genetic implications. This was handled by explanations based on Kallman's now repeatedly validated statistics, and the families were told frankly what the statistical risk might be in their specific instance. Several patients felt relieved from the cultural expectation of eventual parenthood. Two schizophrenic couples were quite markedly relieved from what they felt was an obligation to reproduce; one identical twin of a schizophrenic patient came in to be placed on the niacin regimen as a prophylactic measure against his developing the illness.

Of considerable importance for community psychiatry was the discovery that infrequent patient visits, spaced at increasing intervals, were quite sufficient for most patients. This treatment approach was found to be extremely economical and within the reach of every family.

The use of the HOD test clarified the diagnosis in many patients in a surprising way. The effect of its use on the staff was to alter and increase their understanding of the nature of the illness. The consistent repetition of the identical multiple perceptual distortions in patients of all descriptions, from all kinds of family backgrounds, diminished enthusiasm for simplistic psychodynamic formulations, especially those interpersonal, intrafamilial or socio-cultural postulations which have become almost cliches.

Some of these formulations assumed a different meaning as they began to appear as the result of or extraneous to the primary disease itself. It was noteworthy that the sexual confusion of many of the patients cleared up considerably, concomitant with the improvement in their schizophrenia, and appeared to be secondary to the disease process itself rather than etiologically primary to it.

Almost all of the treatment failures were either childhood schizophrenics or adult schizophrenics in whom the onset had been in childhood or adolescence. This suggests a possible correlation with Frohman and Gottlieb's work, which showed that the alpha-2 globulin plasma factor associated with an elevated L/P ration in schizophrenia was absent in childhood schizophrenics.

SUMMARY:

Clinical experience with a new approach to schizophrenia based on the medical model has been described in a series of 315 patients. This involves: informing the patient of the diagnosis, educating the patient and family about the illness, use of the HOD Test, daily exercise, and a medical regimen consisting of phenothiazines, pyridoxine, niacin or niacinamide, and ascorbic acid. This proved to be inexpensive, financially possible for all, and patient acceptance and cooperation were high.

Niacin and niacinamide were found to be less effective in adult schizophrenics with childhood or adolescent onset. The overall improvement rate in the 315 patients was 71% and the best response was obtained in the 70 patients with schizophrenia plus alcoholism. Of the patients who are now sober only few failed to show improvement of the schizophrenic process.

The clinical manifestations of schizophrenia abated in our patients in response to a biochemically oriented treatment approach, which considers this illness to be the result of perceptual distortions based on a genetically transmitted disorder.

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A MODEL OF SCHIZOPHRENIC'S ANONYMOUS

by

Father Joe

My speciality is not in psychiatry, psychoanalysis or clinical psychology. I am a professor of philosophy as well as an alcoholic-schizophrenic. Both of my massive illnesses have been arrested through a combination of "AA" -- "SA" -- and the multi-vitamin therapy devised by Drs. Hoffer and Osmond.

Because of intimate and intensively direct experience with schizophrenics who are getting well through this total program, I feel qualified to recommend this model of the SA Group which I started over a year ago at Fordham University. Our sufferers number over one hundred. Of these, ninety percent are firmly on their way to recovery. In this group 30 percent are alcoholic-schizophrenics who are also AA members, and the rest are nonalcoholic schizophrenics.

Since this disease is highly complex and involves the total personality in its physical, psychological and spiritual aspects of living, S.A.'s program of recovery is based on the principles of AA's recovery program -- plus medical treatment and strict adherence to certain simple health rules.

For physical recovery, the S.A. member is strongly recommended to a doctor who fully understands the chemo-therapy program -- Vitamin B-3 in massive doses and vitamin C in massive doses, plus the use of Vitamin B-1, and B-6, and the necessary phenothiazines where medically indicated and prescribed.

From a regular association with his doctor the patient achieves a solid conviction of the physical nature of his disease. Because of his close association with the doctor he readily comes to know the various aspects of the disease as they affect him. Through his doctor, he learns the importance of rest, exercise, high protein diet, avoidance of coffee, cokes, excessive carbohydrates and sugar, etc.

Even though the physician is not a direct part of the therapeutic process of S.A. the program cannot be wholly successful without his intelligent assistance.

Each new member attends the "Beginners" meetings for several weeks until he acquires a solid grasp of the physical needs of his recovery and the absolute necessity of vigilant and continuous adherence to the prescribed regimen.

Every member is given a knowledge of the H.O.D. card test which he can learn to administer himself. He thus checks on his progress and also on his relapses and so learn to regulate his medication accordingly. He can also in this way detect signs of the return of his symptoms through undue stress, carelessness in taking his vitamins -- improper diet, etc. All of these "slips" show up very quickly on the H.O.D.

When the member begins to feel physically better, he joins the regular S.A. group which discusses, one step a week of the A.A. 12 Step program -- substituting only the word Schizophrenia for the word Alcohol. Through involvement in these steps, he gains an acceptance of his disease and a knowledge of his part of the responsibility for repairing the damage it has brought to himself and others.

Through sharing his experience with other members he finds the hope that these corrective principles can and will restore him to health and sanity. He is able to communicate, often for the first time, with the other members of his group who have endured his experiences and afflictions.

He also learns, as does the alcoholic member of A.A., that there are immense affirmative values to be found in his illness and that by helping others he is helping not only himself, but his family, and his society. This is a spiritual bonus of inestimable value.

Through the "12 steps" and group participation, he also learns how to mature emotionally, to cope with his fears, hostility and isolation. Thus he builds on to his physical and psychological recovery, a creative and constructive structure of spiritual values.

Another factor which helps immensely is the personal knowledge of the SA member that he is a schizophrenic. In nearly every case a tremendous relief has been experienced when the actual diagnosis has been made. Most of our members have spent thousands of dollars and untold hours of unnecessary suffering in the limbo of various psychiatric approaches without ever knowing what actually ailed them. The release for the family is also very great, since most of them have been led by the same psychiatric advice to believe themselves responsible for the illness of their children.

In New York we have one closed "step" meeting a week exclusively for schizophrenics, and one open meeting for schizophrenics and nonschizophrenics. The first is strictly a discussion group and in the second the "S.A." members relate the "stories" of their recovery for the purpose of identification with the new member and education of the non-schizophrenic.

STORY OF S.A. MEMBER - JOHN F. D.

My first experience with drinking came at the age of 17 at which time I had my first drink, my first drunk and my first blackout.

When I graduated from high school, I was a weekend drinker and the first serious incident of my drinking occurred. I was in a barroom fight and because of the damage to my face I was unable to go to work for a week.

After six months I volunteered for the draft. The Korean War was going on at the time and the thought of being out on my own appealed to me. By the time we got overseas to Germany I was drinking heavily, frequently skirting serious trouble only by a hairline. After 20 months' active duty I was sent to an Army psychiatrist. He said he could help me if I chose to stay in service but I was ashamed and accepted a general discharge.

After my return home I was unable to go back to work right away. Instead I just idled around the house. I remember one time going downtown in the city during the day and being terrified by the crowds and the traffic. I know now that the schizophrenia was beginning to make itself felt. Finally I started working and enrolled in college at night. After two years, during which time the weekend pattern of drinking became a way of life, I tired of the routine, felt a desire to get into newspaper work and quit work and college within two weeks.

I went to Florida for a rest and I remember trying to stay away from a drink for the first three or four days. This worked for a while but eventually the loneliness caught me and I went into a bar for one drink. The next day, when I came out of the blackout, I found I had only my bus ticket left and seventy-five cents in change. I got back to New York and fortunately in two weeks got a job on a paper. I felt happier then, even though relations at home were strained to the point of long periods of silence becoming commonplace after my drinking bouts.

The changes in my personality were becoming more pronounced. The shyness was taking greater hold of me. I was frightened of the idea of sex and found it painful and embarrassing to be in the company of women when I was sober. However, within a year, I met a girl and found myself engaged. I say "found" because the engagement just seemed to happen. But before too much time went by I was drinking more and more heavily and frequently in front of the girl.

She gave me back the ring and I left New York to work on Jersey papers. The jobs got better through the years but the drinking got worse. I was thrown out of one apartment because of my drinking and a little later I had an automobile accident while drunk on the job.

By this time I was about 28 and the pattern of isolation had become pronounced. I was back living with my family. I worked nights and consequently the only time I had for recreation was weekends. Invariably I was drunk on weekends, and now found myself getting drunk more frequently during the week.

Each S.A. member is recommended to read - "How to Live with Schizophrenia" by Drs. Hoffer and Osmond

After four years in New Jersey I decided to try for a job in New York again and I located one. However, prior to my switching jobs, I was hospitalized, this time for a cerebral concussion sustained in a bar fight.

When I started my new job I was terrified. It was a day job and the office was huge. I found the shyness had become such a block that I dreaded going into the office every day. More and more frequently the drinking was becoming a daily occurrence. After a year-and-a-half of this existence, I got drunk one day at my parents' house, blacked out and on the way home fell down a flight of subway stairs.

Two months after my discharge from the hospital for this episode I was out on a date and for some reason found myself being repulsed by the drink I held in my hand. I felt as if I were chained to alcohol and no longer had control of it. I decided then to see if I could stay away from a drink for just one period of twenty-four hours.

I did stay away from a drink for a day and decided to see if I could do it for two days. Gradually, I built up a week and then two weeks. But I was becoming more and more frightened. I was afraid to drink now because I thought if I did I would be killed in a blackout. Finally after almost a month-and-a-half of this, I was having dinner with a friend one night and he broke his anonymity, told me he was in AA, and suggested I give it a try. Within two weeks, I called A.A. Intergroup in New York and went to my first meeting. Fortunately I identified from the first night.

I began going to meetings regularly and within three months met the man who was to become my sponsor. I also discovered the Closed Step meetings and suddenly sobriety began to take on a new meaning for me. The program was making more sense and I began to experience a great deal of comfort from taking the Fourth and Fifth Step with my sponsor who was a counseling psychologist and Catholic priest as well as being an alcoholic himself.

Very slowly a new pattern of life began to emerge and even though I was still subject to rapid mood changes, going from deep depression to elation within minutes, and was still subject to violent fits of deep hostility, I was enjoying life more. The program now became for me a vital way of life, despite the depression, the elation and the extreme hostility. My sponsor had been helping a group of young men my own age and I quickly became fast friends with several of them. All of us seemed to share the same problems.

However, when I approached my second A.A. anniversary, I began to notice that the odd feelings of mood changes were becoming more and more pronounced and that I seemed to be very ill at ease at many meetings. I began to think this was to be my lot for the rest of my life, despite the fact that other men who came into the program about the same time I did, seemed to be enjoying a happy sobriety.

Finally, just about the time of my second anniversary, my sponsor met Drs. Abram Hoffer and Humphrey Osmond and heard their definitions of schizophrenia. He suspected that several of us whom he had been trying to help might also have this illness. I was given the HOD test in August 1966 and was diagnosed schizophrenic. I began taking massive doses of Vitamin B-3 and the other vitamins: C, E, B-1 and B-6 and a phenothiazine.

Within three months of taking niacin, I suddenly found myself free from the staggering fatigue from which I used to suffer. I felt more alert and more interested in daily life. Within six months I began to notice a release from the strange thoughts which had been with me all my life. These frequently took the form of bizarre sexual images and gave me a lot of trouble.

During this period I also noticed I enjoyed A.A. meetings much more than previously. We also formed a group called Schizophrenics Anonymous, and I found a great deal of relief in attending these meetings.

After a while I began to pay much more attention to the schizophrenia than to the alcoholism. I soon discovered a train of thought that had me thinking perhaps my real trouble all the time had been schizophrenia and not alcoholism. Fortunately, through the grace of God, I realized the danger in this rationalization and was able to accept that I was still an alcoholic as well as a schizophrenic.

Today, I find a great deal of help at both A.A. and S.A. Because of the chemical help I received from niacin, I am able to get much more from A.A. than I used to. My life is becoming more and more normal and stable and I do not suffer nearly as much from depression, paranoia, or the sudden mood changes.

John D.
(35-years-old)

STORY OF S.A. MEMBER – VINCENT C.

"Because I am a schizophrenic and recovering, thank God, my experience may be of value to others. As far back as I can remember it was extremely difficult being around people whom I did not know very well and to whom I could not express my feelings. My self-image was degrading to myself and I was usually a victim of fear. School was a most torturous experience, particularly mathematics. It was laborious to retain knowledge and to continue in the process of learning.

I was reared a baptized Roman Catholic and the training received became a source of pain, stress and confusion. There is no blame with my religious profession. It was just a matter of Jansenism. Most of the time I suffered from introversion, however, at other times I became grandiose. Depression and elation were the mainstay of my life. Rarely was I ever comfortable with myself. An occasional expression of humor helped me to prevent complete insanity.

A significant change came after my introduction to ethyl alcohol. The wonderful changes which took place through excessive consumption were a source of definite release. 'I am,' so I thought, 'free again from the prisoner of myself.' Consequently, I resorted to alcohol every opportunity I had. Many times I passed out and suffered blackouts but this I thought was a small price for the feelings I enjoyed while drinking. Drinking became the hub of my existence. My experiences with alcohol unmistakably pointed to the fact that I am alcoholic.

I am twenty-seven years old and sober three years in September. I drank excessively for ten years starting out on this path when I was fourteen. I went through many friends, many jobs. However I did graduate from high school. At a point of time the alcohol no longer was effective in releasing me from my miserable and distorted existence. I became very frightened. I did not wish to live and I could no longer consume alcohol safely. I felt completely lost and useless to myself and others.

Through the suggestive help of a friend I became a member of the fellowship of Alcoholics Anonymous. At my second A.A. meeting I met my sponsor who was to show me the way out and how to live. I tried very hard to work the A.A. program. The longer the distance from the last drink the worse I seemed to be getting physically and emotionally. The perception – distortion of the sense images, the suspicion, the lack of belief, depressions and paranoia became most severe without alcohol. I remained in my apartment most of the time and very rarely answered the phone or used it. Job situations became increasingly more painful and, consequently, I kept losing jobs when I thought there should have been more stability in my life. The 'locked-in' feelings deepened and cut off communication. After one-year-and-a-half of sobriety a breakthrough came.

My sponsor became acquainted with Abram Hoffer, M.D., Ph.D., who had been involved in research into the nature and causes and recovery from schizophrenia. Through my sponsor I came to know of Dr. Hoffer's chemo-therapy for schizophrenics – massive doses of niacin (Vitamin B-3) – massive doses of ascorbic acid (Vitamin C). I came to know of the effectiveness of the fellowship of Schizophrenics Anonymous, which follows the model of A.A. except for the emphasis on the disease of schizophrenia.

I took the H.O.D. test (Hoffer, Osmond Diagnostic test) for schizophrenia. The test measures (1) perceptual distortion, (2) paranoid feelings, (3) depression. I passed with 'flying colors.'

Now I know I am a schizophrenic, have been, and will continue to be even though recovered. Along with this I am also alcoholic, permanently addicted to alcohol, despite a day-to-day recovery. This knowledge brought me great relief and made clear to me many childhood disturbances. There was a great deal of work to do, however.

It was recommended as an essential step that I consult a doctor who prescribed the vitamin therapy for schizophrenia. My sponsor accompanied me to Dr. David Hawkins, who became my medical advisor.

Because the H.O.D. test score was 157 — very high in all three subdivided areas — perceptual distortion, paranoia, and depression — the doctor prescribed, in addition to Vitamin B-3 and C, Vitamin B-6 (pyridoxine) and a phenothiazine. The normal scores of the H.O.D. test is 1 — 30. It is very clear how ill I have been.

The periods of the recovery process were quite varied, and often painful: (1) immediate release, (2) awareness of organized reality, (3) a long flat period — a fearful loss of awareness and enthusiasm, (4) severe crippling depression, and (5) torturous paranoia.

Dr. Hawkins prescribed the following regimen to cope with these changes: (1) real massive doses of nicotinic acid — 14 grams, (2) 8 grams of Vitamin C, (3) one gram of B-1 thiamine, (4) 150 mg. of Vitamin B-6 (pyridoxine), (5) 800 international units of Vitamin E (natural) in capsule form, (6) increase in the regular doses of phenothiazine. The progress of the phenothiazine was in the following stages:

step one: ritalin and mellaril
step two: stellazine
step three: etrafon

Regular physical exercise was strongly suggested. I selected to swim four times a week. My diet changed from heavy carbohydrates to high protein and some fat. Rest of eight hours each day and one morning sleep in until 12:00 noon. A tepid bath each day — fresh clean clothes each day. My artistic ability to paint helped a great deal and, in addition, I am taking lessons on the guitar. Pleasant colors and sounds help enormously to reduce my anxiety.

I am very well now — one year after I began the chemo-therapy. My weekly meeting schedule is the following:

- (1) closed Schizophrenics Anonymous meeting on Sunday;
- (2) closed A.A. meeting on Thursday;
- (3) open A.A. meeting on Saturday.

I must say that I followed the doctor's orders and my sponsor's suggestions in detail.

There is continuous serious need for self-imposed discipline. Meals must be on time. The prescribed chemo-therapy has to be taken with regularity and at the times indicated.

All the areas of this simple but total therapy are interdependent. Physical well-being helps to lead to emotional maturity and both of these set the stage for spiritual growth.

In closing, I have never in my life felt as well as I do now — a world of reality completely new to me, filled with enthusiasm and challenge.

The H.O.D. score is below 30 now."

Vincent C.
(27 years old)

STORY OF S.A. MEMBER — J. D.

This is my story as best as I can write it as a recovering alcoholic schizophrenic. As early as aged 5 or 6 I recall myself acting abnormally to which I now know as the disease of schizophrenia. A buzzing sound in my ear, afraid to be alone, and acute anxiety which has been dormant in my life. As I grew older my ability to concentrate on schoolwork, especially math, was nil.

I was also an orphan from the New York Foundling Hospital of Catholic Charities, and this added to my distorted look or existence in reality. I was living under the guidance of the Foundling Home until I was 16 and ran away from a place I believe now to be saturated in schizophrenia.

I quit high school at 16½ and went to a new foster home and to work. It was at this time that I took my first drink of alcohol. I got drunk nearly every time I was drinking and started to keep very late hours. I experienced my first freedom in this home in so much as I could come and go as I pleased.

I recall my speech impediment increased during these years and so did the anxiety. As I was always depressed, the feeling of nothingness was ever present. I always had the feeling that I was different but I rationalized it to be the orphan label.

I enlisted in the Navy at 17 years old and from this period on I drank quite heavily and was nearly drunk every day. My four years in the Navy was spent in bars, brigs and prisons. I was awarded a bad-conduct discharge for being AWOL for 47 days. The feeling of "I don't care" was on my mind most of the time. I just did not care for life or anything else.

In 1958 I was discharged from the Navy and was in my last five years of drinking. I lost every job I held during this time because of drinking. I could not stay employed longer than three months. I started to lose jobs quicker. It didn't take me long to get drunk any longer. I would lose my furnished rooms and sleep in cars and cellars.

In January 1963, I was given a notice to move from where I was staying and I had just lost another job. I had a \$40 unemployment check in the mail and had about \$4 in my pockets when I made that call to the A.A. Inter-Group. The gentleman asked me if I could live until 7 p.m. that evening without a drink and I said I could. That evening a man from Inter-Group, another alcoholic, came to see me. I've been sober since.

My life in A.A. started me anew or so I thought. However the first summer I was sober, 1963, I recall the feelings of anxiety, nervousness, depression, headaches. My emotional binges were increasing and so was the paranoia. I realize now that I was paranoid a great deal of the time. The feeling of being cut off from the world was getting very strong. I started to shove money in the bank like a squirrel.

I was feeling lousy with almost a splitting headache every day. In 1964, I moved to Manhattan. I thought I needed a change of scenery. About this time I started to experience bizarre sexual thoughts. I was most of the time all keyed up. I was also suffering from the guilt of coming to work late. I lost three consecutive jobs due to insomnia.

I met my present sponsor, Father Joe, at an A.A. Step meeting in Manhattan and asked him for help. One night Father Joe said he thought I might be a borderline schizophrenic. Anyway I held on as tight as I could. The bizarre thoughts, depression, hostility, fear, the inability to sleep normally, rocking me. I couldn't read a newspaper. I really don't know how I stayed away from alcohol. Nobody in the world knew what I felt like. About a year later, in May 1966, I read an article in the Herald Tribune concerning the treatment of schizophrenia with B-3 therapy or niacin.

About this same time, Father Joe was at Guest House, and was looking the B-3 therapy over with Dr. Hoffer. What Father Joe brought back with him was fantastic. I started taking 3 grams of niacin each day. In June 1966, I took the HOD test for schizophrenia and got a score of 127. I understand that 30 is normal. I increased the niacin to 6 grams and started taking ascorbic acid, B-1, and B-6. On some very hot days I've taken as much as 20 grams of niacin.

The relief came gradually. I wasn't as nervous as usual. My sleep was getting better. I started swimming as often as I could, usually three times a week. I started feeling really good, a daily bath and shave, doing my laundry and started to take care of myself and my clothes. I started to feel like living.

I have started taking Vitamin E and it helps me a good deal, sort of brings me together. It has been over a year now since I started the B-3 therapy. I attend a regular Schizophrenics Anonymous meeting every week. Life is worthwhile for me at last. I must thank you, Bill, for your indirect hand in my recovery from alcoholism. I thank my sponsor, Father Joe for his many hours of help and it was through him that I received the message of Schizophrenics Anonymous. I thank Dr. Hoffer and Dr. Osmond for all they have done for me.

J. D.
(31 years old)

THE "HOD" DIAGNOSTIC TEST

Many references have been made in these reports to the H.O.D. (Hoffer-Osmond-Diagnostic) test. Its value as a diagnostic tool of great effectiveness has been stressed repeatedly. At the back of this report Dr. El-Meligi of the Bureau of Research in Neurology and Psychiatry, Princeton, New Jersey, gives a technical description of its use and merits for the interested clinician. However a simple explanation in lay-terms might be useful for the general reader.

In their work, Hoffer and Osmond have proceeded on the organic hypothesis of schizophrenia. They reason that the intensity of the psychotic or neurotic manifestations would reveal itself to the degree that the perceptions — seeing, hearing, tasting, smelling, feeling, time sense, etc. — were affected.

Using normal responses as a baseline, they devised a questionnaire (the H.O.D. test) which reveals the kind and degree of perceptual distortions experienced by their patients. A normal "score" on this test was calculated to be under 40 in persons over 18. It was found that seriously ill schizophrenics would come up with scores ranging from 75 to as much as 150! Moreover, the severity of the illness in its various mental and emotional manifestations could be readily diagnosed.

Before being placed on the B-3 therapy and other supportive medications, the patient is routinely given the H.O.D. When, two months later, the patient again answers the identical questionnaire, it is usually found that his scoring has taken a marked drop toward normal. If, at this juncture, B-3 is withdrawn, it is found that within a similar period his score would have returned to the original figure, and he would be seen as sick as ever.

By means of HOD testing, research has revealed a large incidence of schizo-tendencies among classes of people who had not been previously diagnosed as such by ordinary psychiatric methods. For example, in a group of 50 diagnosed retarded children, 50 percent turned out to be schizophrenic and a number of delinquents tested 35 percent. Of 200 alcoholic admissions in the Saskatchewan hospital, 33 percent were shown to be alcoholics with schizophrenic tendencies. Some other hospitalized alcoholic groups have shown a higher percentage than this, and some lower.

These results strongly suggest that the incidence of undiagnosed schizophrenia of schizo-tendencies among alcoholics is many times greater than had been previously demonstrated although many psychiatrists have long suspected the existence of this relationship.

Most certainly, HOD testing is something that should be of interest to all engaged in the mental health field and in the treatment of alcoholics. It should be noted that in this connection a large scale investigation, using the HOD and B-3 therapy, is now being conducted on several hundred delinquent boys by Dr. Russell Smith, at a large state institution in Michigan.

The HOD test consists of a series of cards each with a question on it relevant to the perceptions, which the patient answers as "true" or "false." HOD testing consumes very little time, and can be accurately scored by almost anyone, including laymen. Indeed it will be noted in these pages that many members of Schizophrenics Anonymous, with the encouragement of their physicians, are scoring their own results to measure their progress or lack of it. The HOD also provides an effective way of checking when a patient "goes off," or "forgets" his vitamins. A relapse is often picked up by the tests much quicker than the individual or doctor can detect the regression. When the patient can see this for himself, the temptation to abandon his vitamins just because he "feels so much better" is greatly reduced.

The HOD testing kit (price \$26) along with full directions, can be obtained at:

Bell-Craig, Inc. *
41-14 27th Street
Long Island City, New York

* Bell-Craig does not HOD testing itself.

**HYPOGLYCEMIA:
ITS WIDE INCIDENCE AMONG
ALCOHOLICS AND SCHIZOPHRENICS**

As more and more B-3 therapy results are reported by individuals and physicians, it becomes apparent that about 70% of those trying the vitamin are receiving substantial benefits. This is suggested by the 70% B-3 re-orders at wholesale outlets. In view of the probability that no more than a fraction of this very large group can possibly be suffering from schizophrenia, it becomes evident that two-thirds or more of the alcoholics concerned are being helped by niacin for other reasons.

During the past year (1967) evidence has mounted that many of this larger group reporting recoveries from depression, anxiety, tension, etc., are actually hypoglycemics, people in whom B-3 was to a considerable degree preventing the abnormal drop of blood sugar which is characteristic of that malady.

Further evidence of this probability began to be received from several physicians who specialize in hypoglycemia, as well as in alcoholism or schizophrenia. Their reports and papers suggest about a 70% incidence of hypoglycemia, among all alcoholics, and about 40% among schizophrenics. To them it had been common knowledge that hypoglycemia of itself could cause or certainly aggravate, many neurotic symptoms.

Dr. Jack L. Ward, psychiatrist of Trenton, N. J. writes as follows:

"I do see a fair amount of alcoholics in my practice. I think that hypoglycemia is a frequent component of the alcoholic illness . . . If one takes a careful history, there often exists a diet high in carbohydrate and high in coffee. I think that this pattern is especially important in the episodic drinker who remains dry a good part of the time but who drinks to excess whenever he starts to indulge.

"I believe that this pattern is also important in drinkers who experience a definite personality change when they are drinking. It is easy to visualize the blood sugar or blood alcohol level being rapidly raised with a drink or two followed by a rapid fall. At this time the individual again takes in alcohol which is almost immediately effective in reversing the fall of the blood sugar temporarily. This however stimulates an even greater decrease in blood sugar. We now have a picture of a person attempting to shove his blood sugar up again, with each drink that he takes.

"I think that probably the cocktails before dinner pattern, which is so difficult for most individuals to break, also has a considerable amount to do with level of blood sugar, rather than habit only. Blood sugar levels usually are at the lowest point in the day sometime between 3 and 6 p.m. Undoubtedly some of the "unwinding" effect of alcohol taken at this time comes from the increase in blood sugar or blood alcohol.

"I have gone over my current records. Twenty-two alcoholics have had six hour glucose tolerance tests. Results are as follows:

Two had normal curves

The remaining twenty patients had combinations of the following or had just one of the abnormalities:

- 17 Relative hypoglycemia (greater than a 20 mg.% drop from fasting blood sugar)
- 6 Absolute hypoglycemia (values under 60 mg.%)
- 6 Diabetic type curves (these referred to an Internist with a recommendation that they are kept on Niacinamide)
- 1 Flat curve

"I wonder if the good response of the 'unhappy sobriety types' to the niacin or niacinamide reported by you is due at least in part to the effect of B-3 on the blood sugar level. I feel that B-3 is very helpful with hypoglycemia.

"On the general subject of treating alcoholics, I have found the following very useful: Niacinamide 1000 mg., Ascorbic Acid 1000 mg., Pyrodoxine 200 mg. intravenously. The following 3 cases are illustrative:

1. Relapse of an alcoholic dry for 3 years following one LSD treatment. Drank in excess of 1 quart of whiskey daily from October through March. Hospitalized and given the above intravenous twice daily plus Niacinamide 4 gm., Ascorbic Acid 3 gm. and Pyrodoxine 200 mg. by mouth. He had practically no withdrawal symptoms and stated that the inside shaking stopped about half an hour after receiving the intravenous.

2. Relapse of an alcoholic who drank great quantities of alcohol in the 4 days before his A.A. friends could bring him into the hospital. The intravenous on the night of his admission and early the next morning and the vitamins by mouth and some sedation produced little if any hangover and the patient could be discharged a day following this on vitamins and Antabuse.

3. An epileptic alcoholic extremely disturbed one evening, hallucinations, delusions, etc. Given the intravenous and the vitamins by mouth. The next day, he had no repetition of the psychotic state that evening or from then on. The intravenous has been very useful in two patients who had taken psychedelic substances the night before and who were still in the psychotic and panicky state the next day."

Knowing that Dr. M. H. an A.A. physician has had an extensive experience in treating alcoholics, I recently asked him to estimate the incidence of hypoglycemia among alcoholics, as a class. He replied that: "The incidence is certainly not lower than 70% and may amount to 90%; the conditions ranging from very mild to very serious.

"It has been my experience that most patients who followed the hypoglycemia diet . . . plus the vitamins, do very well and have no difficulty in maintaining their A.A. sobriety . . .

"The total number of alcoholic patients who have been placed on B-3, are 70. Of these, 57 have shown marked improvement, particularly in their ability to think more clearly. It is my considered opinion that B-3 is a valuable adjunct to the total management of the alcoholic."

Dr. Allan Cott, psychiatrist of New York City, in a recent report states . . . "Relative Hypoglycemia is known to mimic many neuro-psychiatric disorders. This study was begun in an attempt to determine the incidence of its recurrence among schizophrenics and alcoholics . . .

"It has long been recognized that hypoglycemia can be accompanied by marked psychic phenomena — i.e., depressive states, severe chronic exhaustion, anxiety and other symptoms which have so frequently been dismissed as ordinary neuroses. Derrick in his review, states that hypoglycemia, as a disease entity, should be kept in mind constantly by all physicians, particularly those doing neuropsychiatric work . . .

"Treatment for hypoglycemia consists primarily of diet high in protein and fat, and low in carbohydrates. Caffeine is prohibited because it stimulates the adrenal glands. Fructose or levulose sugars are utilized much more efficiently than dextrose, since fructose does not require insulin in order to be metabolized. The diet (for hypoglycemia) therefore calls for fruit and fruit juices at and between meals, which provides a source of immediate energy . . . All patients take niacin and ascorbic acid three to nine grams daily."

Dr. Robert Meiers, psychiatrist of Twin Pines, Belmont, Calif., comments as follows: "When I first became aware of Relative Hypoglycemia, I had ten psychiatric patients with whom I had been working for six months to two years without benefit. All were given a six-hour glucose tolerance test, and seven of them were positive. Five of this seven were helped by the treatment as described by Abram, Salzar, Beule, and others. Since then, 54 cases have been diagnosed. Of these, twelve were patients with schizophrenic reactions. The experience with this latter group strongly suggests that Relative Hypoglycemia is a contributing factor in precipitating the schizophrenic reaction. Also, the treatment of Relative Hypoglycemia appears to increase the patient's energy, clarify his thinking, and increase his sense of well-being."

Dr. Abram Hoffer recently reported: "Several months ago I had twenty consecutive alcoholic patients of mine tested on a six-hour glucose tolerance basis. Every single one of them turned out to be hypoglycemic in some degree or another.

"Therefore, in addition to their niacin or nicotinamide, I have added the hypoglycemia diet, with special emphasis on virtually no sugar or coffee. The results have been surprisingly good — in fact, excellent."

Drs. David Hawkins and Russell Smith routinely prescribe B-3 and ascorbic acid, plus the hypoglycemia diet for all their alcoholic as well as schizophrenic patients. It is their belief, based on long experience, that hypoglycemia is present in the majority of these two patient groups.

The foregoing reports should be highly suggestive to us of Alcoholic Anonymous. For the benefit of A.A. laymen who may read this report, one of my medical friends explains:

"The main features of the hypoglycemic condition are easily understood. When the hypoglycemic takes sugar, his blood sugar curve rises rapidly to an abnormal height. In order to control this situation, the pancreas excretes a heavy charge of insulin, enough to rapidly force the blood sugar level far below normal. In the effort to remedy this condition, the adrenals then come into play, thus creating a state of hyperadrenalinism which in turn adds to the tension and discomfort. In short, the victim is alternately whipsawed between too much insulin and too much adrenalin."

Unconsciously, we alcoholics try to cure these conditions — first by sweets, and then by coffee. The sweets temporarily raise our blood sugar, and we feel better. Coffee also gives us a temporary boost because it lessens the shock of the blood sugar drop. In exactly the wrong way, we are unconsciously trying to treat ourselves for hypoglycemia.

If you are on B-3 and Vitamin C already, then add the dietary discipline. If you have hypoglycemia to any extent, the dividends are apt to be very large. You can easily find out — just try the regimen and see what happens.

For those who are general practitioners, as so many A.A. physicians are, it is hoped that this information will open a new dimension of treatment.

NIACIN AND THE HEART

As reported by Dr. Edwin Boyle —
Research Director, Miami Heart Institute

In a preceding section (p. 5) brief attention was drawn to the great reduction of coronary recurrences among one group of 160 Dr. Boyle patients. This occurred over a 10-year period, and was the result of massive niacin therapy. The usual actuarial recurrence figures would have forecast 62 deaths in this particular group. To date, only 6 mortalities have been reported.

All told, Dr. Boyle and his colleagues have used niacin on more than 1,000 cases.

At the 1967 meeting of our International A.A. Doctors, Dr. Boyle was asked to speak about his work. His talk was taped, and the following excerpts may be of much interest to many practitioners.

Dr. Boyle: "For the past 11 years I have given niacin in continuous doses of 3 to 4 grams daily for hyperlipemia, hypercholesterolemia, and for occlusive vascular disease. My work was originally stimulated through the discovery by Altschule and Hoffer that niacin can reduce blood cholesterol. In the large percentage of my patients, niacin has been given for those atherosclerotic changes that fatally affect 7 out of 10 of us professional males.

"There are essential hyperlipemics, people with elevated triglycerides, who may, or may not, have concomitant elevated serum cholesterol. Of these hyperlipemics, the two major categories are the carbohydrate induced, and the fat induced — the exogenous hyperlipemics.

"The genetic studies on hyperlipemia go back to Holt's cases. To my mind there are at least 4 different types. I have spent time in trying to establish the therapeutic effectiveness of niacin in these several categories. This study is becoming still more interesting because of Fredrickson's recent reports differentiating the carbohydrate induced as against the fat induced hyperlipemia.

"My main interest in what nicotinic acid does in the human has been to study its effect on coagulation, lipid transport, and on atherosclerosis. This has seemed most important because 7 out of 10 professional white males die from occluded blood vessels, either of atherosclerotic type or of thrombotic occlusion.

"Niacin is not an anti-coagulant. It is, however, an antithrombotic agent. If you will observe the jelling time of shed blood in a glass tube you will see that polymerization of fibrinogen forms a clot which has a classical histological appearance as opposed to a thrombus which is a laminated structure of platelets and fibrin strands in an orderly fashion formed in a flowing stream of blood in the blood vessel. So there is not much relation between a clot and a thrombus. As I've said, nicotinic acid (niacin) has practically no effect on clotting, but it does have a favorable and marked influence on intravascular thrombosis.

"In my work, when I was trying to touch on some of the things not confined to the blood lipid changes, I became aware of the effect of niacin on the microscopic circulation. This is the marked effect of this vitamin on the circulation in the smaller blood vessels and the capillaries.

"For the past ten years I have been making routine observations through a slit lamp in the conjunctiva of the eye, the only place in the body where transparent covered blood vessels make this possible in a person not under anaesthetic. After about 2 to 6 weeks of niacin, a marked favorable influence on microscopic circulation can be clearly seen.

"The usual formation of 'sludging' has been described by Knisely. In it, the red cells glutenate in large masses, like clusters of grapes. These circulate around in large lumps like 90 weight dirty oil, with clear plasma spaces in between. The movement is so slow as to almost simulate a near dead person. People having marked 'sludging' show much increased symptoms of systemic vascular changes. However, under niacin, these people are apt to show vast improvements, either with decreased claudication, in peripheral vascular disease, or in angina pectoris with coronary disease. Just as the 'sludging' lessens, so do they get better, and feel improved clinically.

"Before treatment, these people will often say they are depressed, have no energy, and no enthusiasm for living. They drag around like classical hookworm or malaria cases. But after niacin, on looking at the conjunctiva, you can see why they feel better, some to the point of near euphoria. The sludging is gone or much decreased. The red cells can again do their work. Not only are the dangers of their condition much reduced; the patients feel really well.

"Here is another interesting matter: About 4 years ago we found answers to questions like these, 'Just what does nicotinic acid do?' and 'Why do people flush, and why, sometimes, are there stomach upsets?'

"The answers now seem pretty obvious. In my belief nicotinic acid does not directly cause the flushing or the acidity. These effects are directly due to the release of histamine from the mast cells and basophils. Were any of you to take a good jolt of histamine you would get exactly the same flush that you get from niacin. I'm sure, besides, that the histamine release has something to do with the GI effects. The small bowel difficulties I've observed in some people are due to delayed absorption which you find with nicotinic acid preparations like nicalex, (aluminum nicotinate) and enteric coated nicotinic acid medications.

"In these GI affected cases I find that potassium nicotinate is by far the best tolerated of the niacin preparations, even though the initial flushing may be a little more severe. Histamine is fairly rapidly burned and the amount of flush one gets depends upon the rate of its release from the mast cells; also on how much was there to be released at any given moment.

"Many patients complain that flushing is worst at breakfast time. The reason is plain. Let's assume a person is taking 3 grams a day; one gram each meal - say at 8 a.m., 1 p.m. and 6 p.m. Then they take none until breakfast next day - some 14 hours later. During the night they get well charged up with histamine, and so flush heavily with the breakfast dose. This can be helped in several ways: one-half gram can be taken at breakfast, 1 gram at lunch, and 1½ grams at dinner. Another gram (with cold milk) at bedtime will help prevent histamine accumulation during the night. If the flushing continues to be severe, cold milk (or skimmed, if there is a weight problem) should be taken at the close of every meal. Periacin - 4 mg. - sometimes helps.

"On first taking niacin, heavy flushers can be really frightened. They call up and say 'I'm on fire, I'm burning up' or 'I'm having a stroke.' This is quite unnecessary if their physician properly instructs them. They can be told they may flush heavily; that this is normal; and that niacin will improve their circulation.

"Now the matter of circulation improvement. I fully agree with Dr. Hettesberg that niacin does not increase the volume of blood flow through the brain. But this is beside the point. The important fact is that the vitamin does favorably alter the distribution of the blood in the brain; this by reason of its ability to decrease or eliminate the condition called 'sludging.'

"Most of the 'sludge' particles go through the sinusoids and are shunted; whereas, when the red cells are in the individual erythrocyte form they repel each other electrically; their effective surface area is much greater and so, therefore, is their oxygen carrying capacity. The gallons of blood going through the head each hour do not alter. But it is now like 10 weight clean oil instead of 90 weight lumpy oil. Therefore it does a far better job in transporting oxygen to the tissues.

"I think that this much improved state of affairs may well have something to do with the sense of well-being, increased energy and favorable mood changes that we see in many patients who are placed on nicotinic acid. Indeed it wasn't until November of last year that I learned that niacin also does something specifically to the chemistry of the brain; this too, favorable to mental health.

"I would now like to mention a couple of contra-indications. One has to do with hyper-acidity and peptic ulcer cases - people who nevertheless need the B-3 therapy. Most of these cases can best be handled with potassium nicotinate. For example I currently have seven such cases. Every one of them are tolerating the potassium compound very well. Usual ulcer programs of diet and antacids should be observed.

"Regarding diabetics who need niacin, Dr. Paul Crank and I recently conducted a study of 42 such cases. Of these 50 percent required an increase of their insulin when taking nicotinic acid. However the

remainder were not so affected. Of course this points up the need to follow up diabetics who are using niacin to see whether they are on proper insulin control. Probably by the same mechanism, reactive hypoglycemia disappears in some 'normal' people while on niacin.

"There is one other contraindication worthy of note — Patients who are taking medications of the 'Reserpine' type to lower blood pressure cannot at the same time use niacin safely. A full dose of niacin may produce much nausea and a marked drop in blood pressure — not necessarily dangerous, but extremely unpleasant.

"Let's look next at the question of possible liver damage. In my considerable 11-year experience with nicotinic acid, I have had only one patient who developed jaundice. This occurred some time after the vitamin had been discontinued. Her husband also developed jaundice. They both had hepatitis. Her's became chronic, and she later died. However, I can't say the niacin had anything to do with this; I believe it was entirely coincidental.

"Back around 1960 there was a big rash of doing liver function tests, following Rivden's report describing a case of jaundice supposedly produced in California by nicotinic acid. However there is a fact in this connection which may account for the widespread impression that niacin is liver damaging.

"It is quite true that a liver function test is altered so long as niacin is present in quantity. However it has turned out that this is a false-positive indication which shortly disappears when niacin is discontinued.

"Moreover, the liver biopsies that have been done in the conventional liver tests by Parsons indicate no structural damage at all to the liver by reason of large doses of nicotinic acid over long periods of time.

"There is another side effect I've noticed — this is a favorable one. In patients with cerebral vascular insufficiency — people often referred to neuro-surgeons for neurological complaints, have had marked improvement in ischemic symptoms on niacin therapy. Eleven patients with histamine headaches, or Horton's headaches, when placed on niacin because they were hyperlipemic have had dramatic cessation of chronic recurrent headaches when 'dehistaminized' by niacin therapy.

"Niacin is indeed a most interesting compound. I am trying to get into documenting its effect on platelet adhesiveness fibrinolysin and hope to explain just why it does prevent thrombosis.

"About all that I can tell you now is that in a large series of coronary patients of which we were due to have lost about 62 in the last ten years according to the insurance company mortality tables, only 6 are dead of coronary thrombosis as of today.

"Among the many compounds considered, nicotinic acid is one of four drugs selected for the National Coronary Drug Study by the National Heart Institute after due consideration of the facts by the leading heart specialists of the U. S.

"This large study will be carried out on 8,500 coronary patients over the next 5 years by 55 selected institutions. The study will be completely double blind, and it is now underway. Top scientists around the country are conducting the investigation.

"In the double blinds, nicotinic acid, estrogens, atromid, and thyroid will be compared to see what can be done to prevent coronary thrombosis in male patients who have already survived one or more attacks.

"Notwithstanding all that nicotinic acid may promise for schizophrenics, alcoholics and behavioral problems, I think we already have a strong case that this vitamin will have a profound effect on the formation of atherosclerosis and thrombosis — ills that add up to our nation's number 1 cause of death.

"Most certainly this excellent medication should never be lightly discarded; it should continue to be investigated from every possible angle.

"While niacin might not cure us of all ills, it might well make many of us feel better — and keep us around longer!"

THE VITAMIN B-3 THERAPY: FOR ARTHRITIS AND OTHER JOINT DYSFUNCTIONS

Dr. Abram Hoffer first drew my attention to the merits of B-3 for arthritis. In 1954 he began to observe results among certain of his mental patients. Their relief from arthritis via niacin or nicotinamide had been a most surprising extra dividend of the B-3 therapy.

In my first communication to A.A. physicians, dated December 1965, I reported the recovery (via niacin) of a workman bedridden with rheumatoid arthritis. He is my housekeeper's husband and I recommended niacin to him after reading Dr. Hoffer's paper. At the time he started B-3, in March of '65, his condition was so greivous that his shoe size had increased from 7 to 11; wrists and finger joints were badly swollen. He could only lie abed, and treat himself with aspirin. Several doctors had pronounced him a probably hopeless rheumatoid case.

Two months later, after taking three grams of niacin a day, he was able to operate a steam crane. By the spring of 1966, all the swellings had disappeared. Since then, excepting only two brief occasions, there has been no return to his former condition. On those occasions he became convinced that he was "cured." He thought he could discontinue his niacin, and did so. In each instance, he soon began to experience severe pain, and swelling. But on taking his niacin again, these symptoms promptly disappeared. He has since remained completely free of any symptoms whatever. He has also found that one-and-a-half grams a day are now sufficient to maintain him in perfect condition. These facts scarcely support the assertion, made by one physician, that his remarkable recovery had been due to a "remission."

As the chain reaction increased from hundreds to thousands among A.A.s taking niacin for emotional troubles, we began to receive frequent reports to the effect that B-3 was also clearing up arthritis and bursitis aftermath, along with other aches and pains. In some situations the results had been marked, even spectacular. So I think Dr. Hoffer's experience with similar cases has been fairly well confirmed by our own observations among A.A.s.

In 1957 Dr. Hoffer received a letter from Dr. William Kaufman who turned out to be the pioneer in the use of B-3 for joint dysfunctions. His experience had extended to hundreds of patients; his results were excellent. Much impressed, Dr. Hoffer published a paper in 1959 which reviewed Kaufman's work. Just like many of Kaufman's prior publications, this one also left physicians quite unconvinced.

Therefore it may be useful to again recapitulate the observations of both Hoffer and Kaufman:

In 1941 Dr. William Kaufman of Connecticut, a specialist in joint disorders, commenced the use of nicotinamide in large doses for the treatment of his arthritic patients. In 1943, he published a monograph, reporting his observations upon 30 cases. The results were very favorable. Joint mobility was increased, stiffness decreased and joint deformity and pain alleviated. Much encouraged, Kaufman devised simple, objective methods of measuring joint mobility through special mechanical appliances — a really clinical approach.

By 1949 Kaufman could extensively report his use of nicotinamide as a therapeutic agent on 342 patients and, in 1955, on 663 patients. Without exception, he states, those patients who took adequate amounts of niacinamide continuously experienced clinically significant and measurable improvement. Then too, he reported there were additional B-3 benefits, such as gains in muscle strength and working capacity, decreased fatigability, improved sense of equilibrium, and the relief of certain emotional disorders including depression.

Dr. Kaufman's patients included those who had clinically obvious rheumatoid arthritis, or hypertrophic arthritis, or those who had the stiffness of increasing age which had not yet developed to a degree where it could be diagnosed on casual examination as hypertrophic arthritis. Various joint deformities, he reported, also lessened in severity, or disappeared.

The benefits of B-3 therapy continued for so long as the vitamin was used. Reduction in the amount of nicotinamide taken by the patient per day from the prescribed amount to lesser amounts

resulted in decreasing benefits. Cessation of the therapy resulted in the slow, moderate, or even rapid return of the pre-treatment status, including the reappearance of stiffness, swelling and discomfort in joint movement. Re-institution of adequate niacinamide therapy resulted in the reinstatement of all of the improvements previously listed.

Kaufman further reported: "There were no adverse side reactions or allergic, toxic or idiosyncratic effects from niacinamide therapy in the dosage range from 900 to 4000 mgs. per day."

Dr. Kaufman's 1949 publication was a book called "The Common Forms of Joint Dysfunction." In it he summarizes the excellent results attained among the greater part of 342 cases, describes his method of instrumental measurements of joint dysfunction, and presents numerous case histories in profuse detail. This report presents a convincing case for the use of nicotinamide in arthritic and other joint dysfunctions.

The foregoing material has been quoted or paraphrased from that volume. Regrettably this impressive work is out of print. Apparently Dr. Kaufman's professional colleagues paid little or no attention, either to his book or to his many other significant reports and papers.

In a letter to Dr. Abram Hoffer, written in 1957, he said: "Ever since 1943, I have tried to call my work on niacinamide to the attention of leading rheumatologists, nutritionists, and gerontologists, through conversations with them, or by sending them copies of my monograph and papers on this subject. Also by two talks given on the usefulness of niacinamide and other vitamins which I delivered at the International Gerontological Congress in 1951 and in 1954.

"I think that two factors have made it difficult for doctors to accept the concept that continuous therapy with large doses of niacinamide could cause improvement in joint dysfunction and give other benefits. The first difficulty was the advent of Cortisone and the second was the fact that my (massive) use of the vitamin was such a large departure from the recommended daily allowance for vitamins by the National Research Council."

Quite independently, Dr. Abram Hoffer had begun in 1954 to observe the effect of B-3 on arthritis. This he reported as follows:

"In 1954 I prescribed one gram of nicotinic acid per day for an elderly woman who had started to decline physically. A few months later, she reported that she was better and that the osteoarthritis of her hands, which had troubled her, was much improved. After that, I observed its anti-rheumatic effect in six cases with uniformly good results. Since my interest was in psychiatric research, I did not scan the literature very thoroughly to see whether anyone had made similar observations. In August 1957, after our paper on nicotinic acid in schizophrenia was published, I received my first letter from Dr. William Kaufman, directing my attention to his excellent long-term results."

In consequence of this communication Dr. Hoffer later wrote a paper that was published in the Canadian Medical Association Journal of August 15, 1959. This carefully summarized Kaufman's work and it presented six of Hoffer's own cases, by way of confirmation. The paper was entitled "Treatment of Arthritis by Nicotinic Acid and Nicotinamide."

A summation of Dr. Hoffer's six cases is interesting:

<u>Age</u>	<u>Diagnosis</u>	<u>Treatment Started</u>	<u>Present State (1959)</u>
68	Osteoarthritis	March 1954	Normal
14	Rheumatoid arthritis	December 1954	Nearly normal
44	Rheumatoid arthritis	November 1956	Normal
34	Rheumatoid arthritis	August 1957	Normal
37	Schizophrenia, arthritis	April 1958	Normal for both conditions
58	Vascular nodulitis	May 1958	Much improved

While progress is sometimes very rapid under the B-3 therapy, many sufferers will require long-term and persistent treatment for maximum results.

Large numbers of such case histories are, of course, available from the work of Kaufman and Hoffer; also out of the experience of A.A. members and their friends.

Joint dysfunction is still another area in which independent, scientific validation is much needed. It is therefore encouraging that at last a serious research program of this kind is going forward at a Michigan hospital. Since there are 13 million victims of arthritis in the U. S. alone, this effort seems most commendable.

It is to be hoped that the foregoing information will be of definite use to a great many physicians.

ADDITIONAL POSSIBILITIES FOR B-3 EXPLORATION

In the areas of illness already reported, excellent results have been achieved. However there are several other conditions in which a certain amount of evidence for the efficiency of B-3 has turned up. I have had some doubts about including these fragmentary reports lest the case for the B-3 therapy be made to look quite incredible to some readers. However the hope is that the following information may stimulate others who are working in these particular fields.

Schizo Tendencies Among Students. Several years ago, HOD tests were given to a cross-section of 1,500 high school pupils. Perceptual distortions were observed in 10 percent of them. The possibility that schizo content in this group was high is further suggested by the considerable prevalence of "breakdowns" and suicides among high school and college students. The suicide rate among these young people is 5 times the average for adults. Further study, testing, and B-3 preventively applied to such a group, might well open up a new and effective therapeutic approach.

Criminal Insanity. Many savage and senseless murders are committed by diagnosed schizophrenics because of their premature release from institutions on the supposition that they have "recovered" — a state of affairs perhaps preventable by HOD testing, to reveal the extent of illness still present in the prospective parolee before his release. An insistence upon HOD testing and massive B-3 therapy before and after release, may further reduce the risks to the community.

Crimes Committed by Individuals Having "Undiagnosed Schizo Tendencies." There is evidence that many and various crimes are chargeable to this often hidden condition. These people are not legally insane. Yet they are subject to "compulsive" and often irresistible behavior patterns.

For instance, there was the young professor who to all appearances was in normal and happy pursuit of his career when he was suddenly arrested for taking nocturnal pot shots at cars passing on a main highway. Though fully aware of the nature and consequence of these acts, he complained of an unbearable "compulsion" to commit them. He was paroled into the care of Dr. Abram Hoffer, who found his HOD score was very high.

After a month of niacin, his compulsion evaporated and, excepting for one occasion, there was no further difficulty. At one point he discontinued "B-3" for a brief time. The compulsion began to return. Resuming the vitamins, it promptly disappeared and he has remained well ever since. He now occupies a prominent teaching position.

Dr. Hoffer has reported on 14 additional court referrals guilty of various crimes. Ten of these had high HOD scores. Eight of this group have made good recoveries attributed to the use of B-3. One recovered without niacin, and one case was a failure.

These cases are covered at some length in a comprehensive paper published by Hoffer. This document may be of much interest to those specializing in crime. The reference is — "Psychosomatic" — Volume XII — Sept.-Oct., 1966 — titled "Malvaria and the Law."

Delinquency. A group of delinquents were HOD tested and 35 percent showed perceptual distortions. Most of the few who were willing to try B-3 showed marked behavioral improvement. A research project in depth, testing this possibility has now started at a Michigan youth correctional institution — Director, Dr. Russell Smith.

LSD Psychosis. Niacin in large doses has been found highly effective in this connection by several institutions, and by young LSD users themselves.

Dr. Joseph Downing, Chief of San Mateo County's mental health services, revealed in San Mateo that "freakouts," terrifying LSD experiences, can be counteracted by Vitamin B-3. The story was published in the San Jose Mercury, April 22, 1967. Dr. Downing, who has experimented with LSD for the past six years, called Vitamin B-3 the "perfect antidote." "San Francisco health departments are distributing large amounts of niacin in San Francisco's Haight-Ashbury district, in cooperation with the YMCA," Dr. Downing said. He reported, "that it was not harmful, and could be bought cheaply in any drugstore. It was naturally well received by the hippies."

Dr. Russell Smith also confirmed this information from his experience with over 140 young people among his correctional charges who had taken LSD.

Delirium Tremens. Numerous reports have been received of fine recoveries from D.T.'s when very large doses of B-3 are administered: 10 grams of niacin, plus 10 grams of Vitamin C daily. Psychosis has been promptly reduced; death rates lowered. Less tranquilizers are needed.

Senility. There is evidence that senility can be checked, or even reversed in certain cases, especially where early treatment with B-3 is given. Dr. Hoffer describes 15 cases of elderly patients in this category in his book - "Niacin Therapy in Psychiatry" - Chapter 6 - Chas. Thomas Publisher, Springfield, Ill.

Malnutrition. A noted Canadian regiment was decimated by starvation at a Japanese prison camp in World War II. Six of the survivors, suffering invalidism from chronic malnutrition for many years, have been restored to good health by means of niacin. This report may merit a followup on the vitamin-deprived skid-row type of alcoholic. One judge, himself an A.A., is using B-3 on such a group.

APPENDIX I

THE HOD TEST: A REVIEW*

by

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THE HOFFER OSMOND DIAGNOSTIC TEST

H.O.D.

The first attempt to quantify experiential disturbances has been undertaken by Hoffer and Osmond (1961) using a card sorting questionnaire called Hoffer Osmond Diagnostic Test, better known as the H.O.D. The author's experience with the psychological effects of hallucinogens and their vast knowledge of autobiographical accounts written by schizophrenics after recovery lead them to focus in their clinical practice upon dimensions related to the patient's umwelts, namely, their experiential worlds. They thus began to realize the prominence of sensory and time disturbances in schizophrenia. They also noted very early that perceptual disturbances are closely linked to biochemical abnormalities.

They felt the need for a psychological test to quantify perceptual dysfunctions and to relate it to affective and thinking disturbances.

They finally developed the HOD as a temporary form with the hope that psychologists who are better equipped for such work to develop a more sophisticated instrument. Crude as the H.O.D. certainly is, it gained remarkable popularity among clinicians in a relatively short time.

HOD Scales

(1) Perceptual disturbances (Per S):

This scale covers a wide range of disturbances in various sense modalities. A number of items related to time sense are also included.

(2) Paranoid scale (PS):

This scale covers a variety of paranoid experiences ranging from the most conspicuous such as delusions to the most subtle paranoid thoughts and feelings.

*From: "The HOD and the EWI — A New Concept in Psychological Testing." Accepted for Publication in the Journal of Schizophrenia.

(3) Depression scale (DS):

Covers a variety of affective disturbances such as dysphoria, mood fluctuations, suicidal thoughts and suicidal intentions.

(4) Thought changes:

This scale is made up of a number of items related to reasoning.

A Total Score (TS) is derived by weighing every item in the previous scale on the basis of the severity of pathology. In addition to the previous measures, a measure of the severity of illness irrespective of the area of dysfunction is derived in the following way: each item irrespective of its scale membership is weighed arbitrarily according to its pathological significance. The weights are then added up to yield a Total Score (TS).

A more detailed account of the test is provided by Kelm et Al. (1965a and 1965b).

Reliability

The HOD has been administered to almost 4,000 psychiatric and non-psychiatric subjects at eight or more centers in Canada and the U. S. over the past six years.

Test-retest reliability based upon 2,794 psychiatric and non-psychiatric subjects is reported by Kelm, Hoffer and Hall (1967). Reliability estimates range from .87 to .99. Thus, the dependability of the sources is well established whether the test is used for psychiatric patients or for normal subjects.

Diagnostic and prognostic value

In spite of its crudity the test differentiates schizophrenia from most other psychiatric groups (Hoffer and Osmond, 1961 & '62; Kelm et Al. 1965a; Kelm et Al. 1967 manual).

Hawkins (1968) found considerable agreement between HOD and the Organic Integrity Test (O.I.T.) in the diagnosis of schizophrenia.

In the same study, Hawkins showed that the extent of agreement of the diagnosis on the basis of HOD given upon admission and the final clinical diagnosis, is more than between the clinical diagnosis upon admission and the final clinical diagnosis.

Hawkin's findings argue in favor of the HOD as both a diagnostic and prognostic instrument.

Additional evidence is provided by Hoffer and Osmond (1962). They found that 1 out of 10 patients were readmitted to hospitals within six months after discharge, when their Total Score upon discharge was 40 or less, compared to 6 out of 10 readmitted when the score was 41 or more.

Further refinements

The introduction of a new score, a ratio score (RS), showed that the diagnostic power of the test could be increased. The ratio score is calculated by dividing Depression Score into the Total Score and when the former is zero, multiplying Total Score by 2. (Kelm and Hoffer, 1965).

The rationale of this new score is that by minimizing the contribution of the Depression Score to the Total Score, the contribution of the Perception-Score is maximized. This is in keeping with the theory that perceptual dysfunctions caused by a biochemical abnormality are the primary symptoms in schizophrenia (Hoffer and Osmond, 1963 and 1966).

Kelm and others (1966 Manual) undertook an item analysis of the HOD culminating in a 17-item scale which proved in two cross-validation samples to discriminate between schizophrenic and non-schizophrenic patients more sharply than the original 145 items. The authors suggest that these 17 items may be used as a quick "emergency scale" when time does not permit the administration and scoring of the whole test.