

The Use of Mega Vitamin Therapy in Regulating Severe Behavior Disorders, Drug Abuses and Frank Psychosis

G. von Hilsheimer, B.D., S. D. Klotz, M.D., F.A.C.A., F.A.A.A., F.A.S.I., G. McFall, D.O.,* H.

Lerner, M.D., A. van West, Ph.D., and D. Quirk

Participant/observer Study of East Coast Migratory Farm Labor

This study was made during the summer of 1960. In nine weeks as many separate groups were thoroughly evaluated for a number of variables by means of 24-hour-a-day participation with the group and simple evening clinics, workshops and formal and informal questioning. The team had been trained to participate in the life of the migrants as naturally as possible and had spent preparatory time in the home base communities of these workers.

A surprising finding for the medical specialist was the occurrence of frank deficiency diseases long regarded as absent in America—kwashiorkor, pellagra, beri-beri and frank vitamin B deficiencies.

*Deceased

This paper was presented at the Fifth Annual Conference on Behavior Therapy, American Society of Humanistic

Education, Green Valley School, held in Cocoa Beach, Florida, Jan. 30, 1970.

Deficiency Diseases Observed in Children

In 1961 we organized a child care center in a Florida agricultural base town (von Hilsheimer¹). Deficiency diseases were again observed. As a means of reducing professional cost in an extremely poor area, vitamin injections and oral supplements were given across the board to all the more than 300 children (ages 6 days to 6 years) who entered the center in a year, as well as to their parents. Multi-Purpose Food (Meals for the Millions, Santa Monica, California) was also used to supplement a high protein and fat diet.

We were interested to observe that not only did the frank malnutrition symptoms recede in obvious cases; but that a great deal of hyperactivity, irritation, crying and other indications of distress disappeared in children who had no gross signs of mal-nourishment.

A Feasibility Study for President Kennedy's Committee for National Voluntary Services

This study was carried out in 1963. The initial data was replicated and a survey of service committees and other programs with migrants indicated that both frank



G. von Hilsheimer, B.D.
 Superintendent Green Valley
 School Orange City, Florida
 32763

S. D. Klotz, M.D., F.A.C.A.,

F.A.A.A., F.A.S.I.
 Senior Physician
 Par Avenue Clinic
 Orlando, Florida 32804



deficiency symptoms and behavior problems seemed to improve under an enriched intensive diet and across the board vitamin supplements (von Hilsheimer²⁻³).

Continued in the Slums of Manhattan

In 1964 we continued this line of inquiry into work in the slums of Manhattan. Programs for infants and older children, as well as adults indicated that across the board doses of vitamins, in large multiples of the MDR were useful in behavior control.

Child Diet Control Program

During the same year we opened a residential center for children and began a program of strict diet control.

Our diet policy had a number of elements :

1. Serving no foods contaminated with commercial fertilizers or insecticides (since we had been convinced by the gross effect of these substances on the health of pickers in large doses, that less obvious allergic responses were likely in the lower quantities available in most foods).
2. Serving only breads milled freshly from high protein wheats, preserving the whole grain; serving only unpolished rice and no highly processed or low protein bread or pastries at all.
3. Eliminating easily digested soft carbohydrates and sugars from the diet.

4. Vitamin and mineral supplements.
5. High proportion of sprouts, young shoots and other green and leafy as well as yellow vegetables.
6. Frequent availability of food, freshly and lightly cooked.

This diet is designed to give a high proportion of vitamins, particularly the B complex and to eliminate readily accessible glucose in large amounts in the blood stream, as well as to provide a high percentage of protein and fat.

While the effect of diet cannot be separated from the beneficent effect of reduced stress, elimination of superstitious adult centered contingencies and other novel features of our residential program, it seemed clear that a substantial portion of our success could be credited to our dietary interventions (von Hilsheimer⁴).

A Small Core of Frank Schizophrenics

In the first three years of this program a small core of unreachable patients began to be noted. These were frank schizophrenics, with cyclical acute episodes. These patients had an early onset, no diagnostic disagreement among referring institutions and professionals with very grossly bizarre behavior, hallucinations and other features of the severely psychotic illness.

These patients had responded as *manageable* through sleep therapy, close directive management, traumatic or relief from aversion conditioning, marathon exhaustion

G. McFall, D.O.

(now deceased)
General Medical Consultant
Green Valley School
Orange City, Florida

A. van West, Ph.D.

Senior Psychologist
Dade County Juvenile Court
Miami, Florida

H. Lerner, M.D.

Specialist, Nutritional
Deficiencies (private practice)
Boston, Massachusetts

D. Quirk

Senior Psychologist,
Adult Services
Clarke Institute of Psychiatry
Toronto, Ontario, Canada

sessions and other techniques developed from behavior, reality or direct therapy. They were not responsive to phenothiazines or other tranquilizers except in massive doses. They could by no means be considered improved except in their manageability.

Introduction to Megavitamin Therapy

In the summer of 1967 Dr. Lerner introduced us to the work of Abram Hoffer and his associates (Hoffer⁵). We began by testing a 19-year-old male schizophrenic, first diagnosed at age 11, who had been in residence for 10 months with improvement only in toilet control, reduction of obsessive talking and suppression of hallucinations. The boy was extremely active, developed twirling and lost toilet control whenever travelling, had a touching compulsion and other bizarre behaviors, almost never slept, was drug resistant and incredibly active. He had a fixation for shoes and if he could not find his own would wear shoes much too small even though they appeared painfully uncomfortable.

Danny (a pseudonym) was begun on 1000 mg. nicotinic acid four times a day. He initially flushed for several days, but subsequently did not flush when the dose was increased to 4000 mg. four times a day. The dose was buffered with magnesium trisilicate and 1000 mg. of ascorbic acid and supplemented with minerals and B complex vitamins.

Improvement was noted immediately. In a patient of this severity no subtle diagnostic tools

were required.

We then experimentally delivered mega dose niacin with supplements to a substantial portion of our staff, both to consider subjective effects and to give us a base line for biological variables in more or less normal subjects. A survey of the literature convinced us that no negative results had been reported for the use of mega dose niacin. This was confirmed by our normal population.

Application of Niacin Therapy

Niacin therapy is now routinely used in our setting in a number of ways:

1. For all drug abusing or alcoholic patients.
2. For all patients reporting a great deal of anxiety, distress or dysphoria.
3. As a standard placebo given by the first aide station.
4. For all psychotics.
5. Experimentally for a wide variety of individuals.

Tentative Findings

We are not prepared, at this time, to publish detailed findings since it is our opinion that numbers of cases under 200 are not useful scientifically.

However, a number of tentative and useful conclusions are possible:

1. In alcohol and drug abuse mega dose niacin with supplements relieved the intoxicated crisis, reduced the post intoxication reaction, and rapidly established physical tonus and well being in the recuperative.
2. The safety of niacin is indisputable (Hoffer⁶, Kohn and Montes⁷, and Kaufman⁸).
3. Niacin is an effective placebo which has effects significantly stronger than placebo routines in which it is absent.
4. Mega dose niacin with supplements can relieve acute psychotic and character episodes and apparently effects substantial improvement in severe psychoses and behavior disorders after long term mega dose treatment.
5. A number of other disorders seem responsive to the niacin therapy.

Alcohol and Drug Abuse

Since 1957 we have been involved in crisis centers for alcoholics and drug abusers, in a large number of urban "street" programs. Supportive care, including administration of vitamins, has been used during all of this period, with injectable B complex preferred if a physician is available— because of ease of administering in an acute crisis, to drive placebo effect and accelerate distribution of the vitamins in the bloodstream.

Since 1967 mega dose niacin has been recommended to all centers and on all consultations. Particularly in the case of LSD psychoses, the use of niacin has dramatically succeeded in detoxification and reduction of post intoxication reaction. Maintenance on niacin has assisted in discouraging recidivism. These effects have also widely been reported in many thousands of individual cases for alcohol crises, post inhalation psychoses and other forms of drug abuse.

SAFETY

Long term mega doses of niacin have now been delivered to more than 50 patients in our residential center. Routine blood chemistries have reported no damages but two elevated SGOT (liver function) readings have been revealed. These readings have normalized within two days of cessation of niacin. One case has been restored to treatment with no sign of elevated SGOT. Biopsies were not done in these two cases.

Kohn and Montes⁷ report only one case of hepatic fibrosis in a survey of the literature, despite widespread rumors of such damage. This patient had received three years of 3 gm. daily aluminum nicotinate as an adjunct to anticoagulant therapy. They report that "rarely" has evidence of liver damage been reported. In their case all indications of toxicity disappeared following cessation of Nicalex treatment and the patient had died of coronary disease two years later, when the biopsy was made (*op cit*).

Constant monitoring of CLIN-ALERT* has failed to reveal other reports of damage.

Placebo

In September, 1967, our first aide routine established the use of 200 to 1000 mg. nicotinic acid, 500 mg. ascorbic acid, 500 mg. calcium lactate, 25 mg. thiamin, 500 mg. magnesium trisilicate and one multivitamin tablet as the placebo routinely given for all minor sick call complaints after inspection, assessment, recording of pulse, temperature and blood pressure as well as the presenting symptoms and complaints. Bed rest, liquids and re-examination is also a part of the routine. The patient, on niacin placebo, is told to lie down

*CLIN-ALERT is a service of Science Editors, Louisville, Ky., monitoring the literature and supplying physicians and institutions with immediate reports of any side effects to drugs or therapies.

and to cover up, that he will shortly become very warm and flushed and that this will be the action of the medicine as it flushes out the poisons and germs.

Evaluation

For evaluation purposes we selected 1500 sick calls during the period from September, 1967, to October, 1969, and compared these with 1500 sick calls in the two years immediately preceding:

1. In the niacin placebo group 31% had no second complaint within two weeks and appeared normal on routine re-check.
2. In the pre-niacin group only 24% had no second complaint within two weeks.
3. 74% of the niacin placebo group had no third complaint.
4. 57% of the pre-niacin group had no third complaint.
5. 12% of the niacin placebo group had more than three complaints within two weeks and 6% were referred to a physician (some before the third complaint—all of which are included in the more than three complaints figure).
6. 23% of the pre-niacin group had more than three complaints within two weeks and 8% were referred to a physician for further treatment.

In both groups (niacin and pre-niacin) only 4% of those referred to a physician were found to be suffering from a disorder related to the complaint verifiable by laboratory analysis.

It would appear that the actual health status of the two groups did not significantly differ. Some problems were eliminated for the purposes of this study (injuries, psychiatric and convulsive disorders, gross crises). No other significant differences could be demonstrated for the two groups.

The pre-niacin placebo routine was exactly

the same, except for the B vitamins and suggestions related to the flushing. We are, therefore, inspecting a variable based on different compositions and it appears that niacin, at the very least, accelerates the suggestion effect in this setting.

There is, by the way, no evidence that the giving of niacin before hypnosis increases hypnotizability.

It is clear that brief mega doses have no harmful effect.

Acute Episodes

From September 1967 to September 1969, 32 patients in acute psychotic episodes or in the aftermath of acute crises which did not appear to be psychotic in nature (serious suicide attempts, serious runaways to very disintegrated social settings with concomitant physical and mental deterioration, various outbursts of antisocial behavior and sudden depressions) not related to drug abuse, have been given heavy mega doses with maintenance on doses up to 6 gm. of niacin four times a day.

All of these patients have responded with reduced dysphoria, subjective reports of improved feeling states, improved perception, control of behavior and general improvement in tonus, orientation and appearance of health.

Several severe psychotic patients seem to have recovered as a direct function of niacin therapy. This is particularly true for the category in which our unresponsive patients formerly were grouped. While the number of these patients is still quite small, the general survey of both clinical impressions and precise measurements indicates that this population becomes quickly responsive with niacin therapy.

Other Disorders

An interesting concomitant of these studies is a large number of unusual disorders which have cleared up during mega dose niacin treatment for unrelated causes:

1. Apparently insulted nerves or chronic post traumatic back pain.
2. Migraine headaches.
3. Vaginitis and vaginal warts.
4. Reduction of glucose tolerance curve and apparent improvement in hypoglycemia.
5. Reduction of allergic reactions.
6. Normalization of sleep irregularity.
7. Reduction of chronic infected sores, impetigo and related staphylococcus infections.
8. Mixed urethritis.

Effects of Niacin Therapy

We suggest that these observations may not clearly be related to the direct effects of niacin therapy; however, the evidence begins to be compelling. Moreover, it is abundantly clear that intensive research in the area of physical disorders with a high stress component is thoroughly justified given the safety, economy and apparent effectiveness of niacin therapy.

Moreover, Boyle's⁹ reports of work with cardiac patients at the Miami (Fla.) Heart Institute indicates that the generalized effect of niacin therapy is extremely powerful. This Institute has given mega doses of niacin (4 gm. daily) for hyperlipemia, hypercholesterolemia and for occlusive vascular disease in well over 1000 cases. In 160 post coronary patients maintained on mega dose

niacin for more than 10 years, 62 of whom were statistically expected to die; as of 1967 only six had died.

Hawkins, Borton and Runyon¹⁰ have provided a very careful study of four years' experience with niacin therapy in all of the patients of a psychiatric hospital and with carefully controlled surveys in outpatient clinics including more than 2000 patients.

Our own conclusions are much more suggestive when viewed in the light of these independent studies.

Moreover, unlike many researchers in this field, our centers do not use phenothiazines, have no facilities for electroconvulsive shock and do not practice any known form of psychodynamic therapies. As our data emerge, any conclusions will very thoroughly evaluate the biological aspect of the issue.

Of course, we do expect some of the more simple minded critics to suggest that the entire success here may be placebo effect. Since the reports indicate a substantial improvement over existing knowledge of placebo effect and over all reported forms of therapy now practiced with similar patients—including our own past experience— this argument seems untenable. Even if, however, such were the case, the "placebo" is inexpensive, safe, easy to administer, and seems to hold up for a considerable period of time.

REFERENCES

1. VON HILSHEIMER, G.: Child care and the migrant farm hand. *J. of Nursery Ed.* 18:21-26, 1963.
2. VON HILSHEIMER, G.: Migrant Service Corps: pilot project. New York, Ford Foundation, 1963.
3. VON HILSHEIMER, G.: Grave administrative problems: migrant farmers and the forgotten American dream. New York, Fund for the Migrant Children, 1963.
4. VON HILSHEIMER, G.: Children in trouble. Orange City, Fla., Humanitas Curriculum pamphlet, 1966.
5. HOFFER, A.: Niacin Therapy in Psychiatry. Springfield, 111., Charles C Thomas, 1962.
6. HOFFER, A.: Safety, side effects and relative lack of toxicity of nicotinic acid and nicotinamide. *Schizophrenia* 1:78-87, 1969.
7. KOHN, R. M. and MONTES, M.: Hepato-

Continued on next page

THE USE OF MEGA VITAMIN THERAPY

toxicity. *Am. J. Med. Sci.* 258, 1969.

8. KAUFMAN, W.: *The Common Forms of Joint Dysfunction*. Brattleboro, Vt., R. L. Hildreth & Co., 1949.
9. BOYLE, E.: Niacin and the heart. Paper delivered at Int. Conf. Alcoholics Anonymous Physicians, New York, 1967 (excerpted in A

Second Communication to A.A.'s Physicians, Bedford Hills, N.Y., 1968).

10. HAWKINS, D. R., BORTON, A. W., and RUNYON, R. P.: *Orthomolecular psychiatry: niacin and mega vitamin therapy*. Paper presented at the Third Int. Conf. of Psychosomatic Med., Buenos Aires, 1970.