Light on Schizophrenia

Revealing causes and solutions from an orthomolecular perspective

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It is recommended that treatment of all health concerns
be undertaken in consultation with a qualified health
care professional.

This book should not be regarded as a substitute
for professional medical advice.

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About this book...

This publication is an update to Dr. Abram Hoffer's book *Orthomolecular Treatment for Schizophrenia and other Mental Illness, A Guide for Practitioners*, originally published in 2007. Its purpose is to support and validate Dr. Hoffer's work, and add information that he might write about if he were alive today.

Dr. James Greenblatt and Dr. Jonathan Prousky have provided content segments for this update. Both doctors have extensive knowledge and clinical experience, acquired from many years of research and work with schizophrenia patients. Their contributions are invaluable additions to this publication.

This book is meant to be a useful introduction and resource for understanding schizophrenia from an orthomolecular perspective.

Much of the content of the original book is included in this update. To keep the legacy of Dr. Hoffer's original writing, the text of his original book exists alongside the updated content and is displayed in a contrasting typeface.

Dr. Hoffer's writing looks like this:

The original content is displayed throughout the book in this typeface.

Updated content looks like this:

The additional content from the various contributors is displayed in this typeface.

Table of contents

Preface

James Greenblatt, MD
Medical Director, Psychiatry Redefined Chief Medical Officer, Walden Behavioral Care

Schizophrenia may be the most complex, mysterious, and misunderstood psychiatric condition that has perplexed and frustrated clinicians over the past several decades. Despite ongoing research and efforts to improve its definition, diagnosis, and treatment, schizophrenia retains a stubborn presence in society.

Most recently defined in the Diagnostic and Statistical Manual of Mental Disorders (DSM-V) as a chronic disorder characterized by visual and auditory hallucinations, cognitive deficits, delusional beliefs, incoherent speech, and inappropriate behavior, schizophrenia can arise abruptly or gradually (McCutcheon, Marques, & Howes, 2019).

The World Health Organization currently estimates that schizophrenia affects at least 23 million individuals worldwide, representing a prevalence rate of roughly 1%. In addition to a higher incidence in young adults, statistics also indicate that schizophrenia occurs more often in men and is associated with ethnic, racial, and economic minorities. The latter evidence suggests a strong psychosocial contribution to the etiology and prognosis of the disease (World Health Organization, 2019).

Interestingly, cultural interpretations of schizophrenia symptoms differ widely, to the extent that the global prevalence rate is likely much higher (Morrill, 2017). Many developing societies assign theocentric or supernatural responsibility for mental illness, either exalting or ostracizing those with Western-defined schizophrenia symptoms. Some psychologists and philosophers have even proposed that schizophrenia is an advancement in evolutionary human biology, a theory that has gained favor among some genetic researchers (Scarr, Udawela, & Dean, 2018).

Beyond taxing medical systems, schizophrenia brings untold costs to prisons and homeless shelters, where hundreds of thousands go undiagnosed and lack proper care (Torrey, Zdanowicz, & Kennard, 2014).

In addition to a 5 to 10% greater risk of death by suicide, individuals with schizophrenia face a significantly shorter life expectancy, estimated at double to triple the risk of early death compared to typical American adults (McCutcheon, 2019).

The conventional treatment of schizophrenia has relied almost exclusively on an array of antipsychotic medications that offer moderate control of symptoms in some patients but deliver debilitating side effects in many (Chien & Yip, 2013).

Whether through ignorance, apathy, or arrogance, it is clear that the medical system has failed schizophrenia patients. Beyond unproductive diagnoses and ineffective treatments, most clinicians have neglected to comprehend the full picture of care needed to address the physical, psychological, functional, and sociological ramifications of schizophrenia, and support recovery of the patient as a whole person.

Without ignoring its biological aspects, schizophrenia is clearly a disease of socioeconomics: mounting data strongly link low income status at birth with lifetime risk of schizophrenia, a relationship strengthened by enduring poverty and chronic stress (Hakulinen, Webb, Pedersen, Agerbo, & Mok, 2019).

Notwithstanding the degree of knowledge, effort, and persistence required, patients deserve better, especially when multiple underexplored and underutilized treatment approaches exist.

Dr. Abram Hoffer's chief contributions to orthomolecular psychiatry began in 1952 when he performed the first double-blind therapeutic trials treating schizophrenia patients with high-dose niacin, after recognizing the remarkable similarities between psychosis and the neurological symptoms of pellagra.

Through his experiments with high-dose vitamin therapy, Hoffer demonstrated dramatic improvements in recovery and discharge rates in schizophrenia patients. Furthermore, he exhibited a holistic model of ethical care, removing sources of physical and emotional stress by providing comfortable shelter, adequate nourishment, and personal respect to each patient.

Hoffer's prolific career produced over five hundred scientific papers, two dozen books, and numerous collaborations with like-minded renegade experts, working tirelessly until the end of his life to leave a clear and imitable legacy worthy of more than a second glance.

A paragon of scientific inquiry, Hoffer searched existing information, compared and questioned data, developed and tested new hypotheses, reported honest results, and adjusted his views and theories according to new discoveries.

Furthermore, Hoffer never denied that antipsychotic medications were often necessary and effective when used appropriately and moderately, only emphasizing that pharmacotherapy should be one aspect rather than the entirety of treatment. Regardless, his experimental methods and clinical practices were repeatedly called into question and rejected by the medical establishment. The American Psychiatric Association and National Library of Medicine deliberately ostracized Hoffer and dismissed his research and case histories as non-"evidence-based medicine", publishing opposing data based on dissimilar and irrelevant study designs in patients with severe, irreversible damage.

Hoffer was ahead of his time in developing a biological model of a mental disorder, but arguably his greatest contribution is the example he set for doing whatever he could to find the answers needed to improve the treatment of schizophrenia patients and maintained hope that their lives could be better.

Hoffer's goal with each patient was complete recovery, including the absence of symptoms, familial and social harmony, and productive contribution to society (Hoffer, 2007). He was willing to exercise patience and accept small improvements as successful progress toward these goals.

Though he did not arrive at all of the answers in his lifetime, he set forth multiple testable hypotheses for others to build upon; indeed, to this day Hoffer's theories remain topics of research (Pires-Minard, 2017).

As Hoffer would attest, optimal mental health is not merely the absence of disease, but comprises both a healthy mind and body, autonomy, resilience, and a sense of happiness and fulfillment. Consequently, the integrative care model must address each of these areas from personal, familial, social, and environmental perspectives.

The information in this book is the product of one man's commitment to making a difference in patient's lives: a story every clinician needs to read, study, and benefit from the hope and encouragement found within Hoffer's words and in each patient's testimony.

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Introduction

Abram Hoffer, MD

This guide is a resource for health practitioners who are interested in obtaining better results treating their patients and hope to start using the program.

It is also written for patients and their families who are not satisfied with the results they are seeing when only drugs are used and want to try a treatment which is ultimately safer and more effective.

The students who have mastered the material in this manual should be able to start successful treatment for mentally ill patients. As they continue to work with this approach they will become more and more enthusiastic and gradually expand their use of nutrients.

Most often medication is essential but orthomolecular physicians use drugs in optimum doses. When the drugs are combined with the orthomolecular approach, the amount of drug needed is much less and this decreases the incidence and the intensity of their side effects.

I will discuss the important aspects of treatment from nutrition including the role of allergies, the role of toxic foods, the role of diets too rich in refined carbohydrates, the role of a few key vitamins and minerals most often used, and the role of the essential fatty acids.

We are just at the beginning of major development in orthomolecular treatment. This guide is not meant to be a Bible or a cook book. It is not "writ in stone". It is a framework that practitioners can use in order to get started but each practitioner will add or subtract what is appropriate based upon their own experience in treatment and with each patient.

As more biochemical information accrues, more specific forms of the disease will be found and, with the appropriate laboratory tests, much more specific treatment will be available. There is no reason to think that the vitamins listed in this guide are the only ones.

A large amount of clinical material was published in the medical literature beginning with our first publication in 1957. The study was financed by the Government of Canada. We published originally in the establishment press until this information was suppressed by the combined efforts of the American Psychiatric Association and National Institute of Mental Health and others. We were forced to rely on our own journals, the *Journal of Orthomolecular Medicine* and its forerunners and in journals which deal with natural healing. These journals are becoming increasingly popular.

Medline consistently has refused to cover our journal for the past 33 years even though it covers *Time* magazine. Until the internet arrived this was a very effective way of censoring information that did not appeal to NIH.

Orthomolecular treatment

Orthomolecular is the term used by Linus Pauling to describe treatment that uses substances and molecules, that are normally present in the body. These are vitamins, minerals, essential fatty acids, amino acids, enzymes, and other substances normally present in food.

Nutrient dependency

A dependency is present when the need for any nutrient is so great that even what would be considered an optimum diet cannot provide the right amount.

This is due to genetic variation, to the vitamin-depleting effect of many drugs, to chronic mild deficiency, to increased need created by certain diseases, and to enzyme defects, so that important reactions in the body have to be driven by a greater quantity of that nutrient.

The term dependency was first used to describe patients who needed much larger amounts of vitamin B6. I have widened the meaning to apply to any condition and to any disease where large doses have been shown to be effective.

The first diseases that were recognized as deficiency diseases were beri beri, due to a deficiency of vitamin B1, scurvy, due to a deficiency of vitamin C, pellagra due to a deficiency of vitamin B3, and rickets due to a deficiency of vitamin D.

There are many other deficiencies but they are not characterized as readily. These diseases should be and usually are under control.

An extraordinary decision by the United States government during World War II forced the addition of vitamin B1, B2 and B3 to white flour. This logical decision eradicated pellagra which was one of the major scourges in the southeast United States and in some seasons helped fill their mental hospitals with psychotic pellagrins whose illness is identical with schizophrenia.

This enrichment of flour saved the United States billions of dollars in health costs and saved millions of people from the terrible ravages of this difficult but so easily preventable and treatable disease.

Phases of nutrient discovery

The history of the discovery of vitamins has gone through two phases. The first phase started about 1900. It led to the discovery of the vitamins, which was very important.

It also led to the RDAs which have proven to be very harmful when applied to every person. RDAs are recommended daily doses of vitamins which have become standard as if writ in holy stone.

This phase of vitamin theory and practice is called the vitamin–as-prevention paradigm. It is still with us, very powerful and is one of the main reasons why the use of large doses

has been condemned. Its main principles are: (1) that vitamins are useful only to prevent classical deficiency diseases; (2) that vitamins must only be used in very small doses.

The second and currently developing phase is the vitamin-as-treatment phase. In this phase we recognize that there are other diseases that will respond to vitamins if used in optimum doses even though these conditions have not been recognized as vitamin dependencies.

Orthomolecular medicine deals primarily with optimum doses which may be very small as with vitamin B12 or very large as with vitamin B3 and vitamin C.

Schizophrenia treatment

The Saskatchewan research group, psychologists, psychiatrists, nurses, and social workers, all worked together under my direction when we introduced the use of vitamin B3 for treating the schizophrenias.

We conducted several prospective, randomized, double-blind controlled therapeutic trials starting in 1952 and we showed that adding the right amount of this vitamin to the treatment then available doubled the two-year schizophrenia recovery rate.

Since then many American and Canadian physicians corroborated our findings using the usual clinical open-ended methods. These methods are today considered merely anecdotal. Our original double-blind studies were, and still are ignored, as is the double-blind study by J. Richard Wittenborn who corroborated our findings working with a National Institute of Mental Health grant in New Jersey.

With the help of a small number of pioneer physicians, the treatment has been greatly expanded and we now use other nutrients as well, including vitamin C, the B-complex preparations which provide all the B vitamins, vitamin B6, folic acid, zinc, essential fatty acids and minerals.

What was originally a simple matter of giving our patients 1 g of vitamin B3 three times daily, in addition to whatever other treatment they were getting, has become much more sophisticated and much more efficacious.

Causes of schizophrenia

Schizophrenia is a syndrome not a disease. A syndrome is a constellation of symptoms and signs which may be caused by more than one factor.

Dr. Carl Pfeiffer was the first physician to clearly recognize the importance of the multiple causes of the schizophrenia syndrome. This is still not recognized in psychiatry where psychiatric diagnosis is entirely descriptive and not based upon clearly recognized causal factors. In his 1988 book *The Schizophrenias: Ours to Conquer*, he showed that schizophrenia causal factors can be divided into: pyroluria 30%; histadelia 20%; histapenia 50%; cerebral allergy 10%; wheat gluten allergy 4% and porphyria 0.1%.

The Quakers and modern schizophrenia treatment

About 150 years ago the Quakers in England developed the Moral Treatment of the Insane. The term schizophrenia had not been invented. The diagnostic term was insanity.

They reported a fifty percent recovery rate. Half of their patients recovered. They were really guests, not patients, since doctors and nurses were not involved. Dr. J Conolly, one of the foremost psychiatrists in England, reported the same recovery rate in his mental hospital. The Dorothea Dix Hospitals in New England at the same time also reported similar recovery rate. The recovery rate today, a century and a half later, is ten percent or less.

Decency and respect

The Quakers established houses, each housing 12 insane people. They were provided with shelter, with food, and they were treated with respect and decency. These three essential elements of any satisfactory treatment allowed their patients to heal.

Modern psychiatric hospitals do not treat their schizophrenic patients with decency and respect. Almost every one of the patients who are treated in these hospitals complain of the way they were treated.

The Quakers, in contrast, treated them as human beings. They would spend Saturday nights having dinner with them, and would interact and even dance with them. This is rare in most psychiatric wards although I suspect some of the very costly private hospitals might be somewhat better with this.

The natural recovery rate is facilitated by decreasing the patient's level of stress. Under stress the secretion of adrenalin in the body is increased. Adrenalin is the precursor of adrenochrome, one of the causes of psychosis. (Adrenochome will be discussed further on page 9)

Modern psychiatry does not provide proper shelter and too many patients subsist in grossly inadequate places including the streets of North American cities, under bridges, in parks, or in prison. This hardly qualifies as shelter and does nothing to alleviate stress. Too few patients are fortunate enough to have families that can provide adequate shelter.

The Quakers of 1850 had no access to modern food. They probably used the cheapest foods they could buy and that was, of course, advantageous, as it avoided antinutrients such as sugar and white flour.

Modern psychiatry does not show any interest in providing nourishing food for patients. Eat a few meals in any psychiatric ward and you'll see the food is too rich in refined carbohydrates, too poor in protein, too low in essential fatty acids and nearly devoid of essential nutrients.

The Quakers had no drugs and they did not use any of the harsh physical methods that were torture to the poor hapless patients in the usual mental hospitals of that day.

Modern xenobiotic psychiatry increases the stress on patients and obviously this is one explanation of their very low recovery rate. Xenobiotic compounds are substances that are not found naturally in living tissue.

Drugs do decrease the intensity of symptoms but do little to offer real recovery of a patient's former life. Bertrand Russell wrote "I believe four ingredients are necessary for happiness: health, warm personal relations, sufficient means to keep you from want, and successful work."

"Recovery" can mean something more than drugged docility, it can mean that patients are free of symptoms, that they are getting on well with their own family and with the community and that they are paying income tax or are otherwise productive in other activities.