

Wernicke-Korsakoff Syndrome (WKS) – A Case Study

By Judith Ann Miller, PhD, Neurotherapist and

Tamea Rae Sisco, DC, DACACD, Addiction Diplomate

Abstract

Could it be that the initial clue that alcoholism is a brain disease was discovered as early as the 8th Century? At that time, German Psychiatrist, Carl Wernike and the 9th Century Russian Psychiatrist, Sergei Korsakoff identified memory loss and extreme neuropathy as the symptoms that now bear the name Wernike-Korsakoff Syndrome (WKS). This article is a 2019 case study of a client diagnosed with (WKS), a current recognition of this sort of brain dysfunction, and its successful treatment in only 60 days. This is highly unusual, as WKS is considered an incurable neurological dysfunction. A strong emphasis on a Paradigm Shift from Medication Assisted Treatment (MAT) to Coordinated Alternative Therapies (CATs) is presented through 13 Centuries of research. This paradigm Shift is a dramatic departure from the current predominant treatment regimes that are narrowly focused on diagnostic categories of disorders. You are invited to consider broader diagnostic, psychological and therapeutic questions and approaches that help to address the questions: “*Why are we continuing to criminalize alcoholism, rather than provide science-based explanations as well as offering treatments for the brain disease that it is, and for a broad spectrum of approaches to help people who have these problems?*” While most therapists are trained in just one or at the most a few ways for dealing with these problems, this article surveys a very broad spectrum of treatment options.

Case Background

On October 1, 2019, a 34-year-old female, whom I shall call Ms. A, entered our recovery center, escorted by her step-father. She had received a private neurologist’s MRI diagnosis of Wernicke-Korsakoff Syndrome. Her presenting symptoms included:

- Loss of memory
- Extremely painful neuropathy in both feet
- Inability to function cognitively and behaviorally
- Apathy
- Agitation
- Restlessness
- Panic attacks
- Hallucinations
- Agitation
- Confusion
- Trouble concentrating
- Trouble sleeping

Ms. A’s drug of choice was Vodka, which she consumed excessively for 18 years. In our 16 years of practice, this was our first WKS client, which required our extensive research in order to develop the most effective treatment plan.

The most valuable and informative article we found is *Korsakoff’s Syndrome: A Critical Review* (Arts, Walycort, and Kessels, 2017), which details a literature review of over 130 years. German psychiatrist, Carl Wernicke (1881), and Russian neuropsychiatrist, Sergei Korsakoff (1878) are

credited with the first detailed description of the syndrome. Though they didn't recognize its cause, they are credited with the name Wernicke-Korsakoff Syndrome (WKS).

Arts and associates (2017) present 200 references that describe the evolution of science related to the diagnosis and the treatment of WKS. It is interesting to note that Korsakoff and Wernicke had no idea of the cause of the syndrome they described, and it took the next 136 years to develop science-based methods of diagnosis and treatment.

WKS affects the memory systems of the brain, and causes histopathological damage due to ethanol-neurotoxicity (EN) and thiamine deficiency (TD). The damage of Wernicke-Korsakoff Syndrome is considered an *alcohol-related brain injury* (Arts, et al., 2017), with an onset, a progression, and ultimately death. This is what we needed to explain to our client to help her understand that if she wants to live, she must say Good-Bye to her beloved Vodka.

“Addiction is a disease of the brain that affects the circuits involved in processing punishment and reward and in exerting inhibitory control. As a result, the addicted person will seek drugs compulsively even when they consciously don't want to and despite the threat of severe punishment, such as incarceration and loss of child custody, and at the expense of natural reinforces, such as family and friends” (Volkow, 2002). Even despite the threat of death.

Why was it vodka?

The clear, distilled alcoholic beverage originates from 8th century Poland and 9th century Russia as a medicinal agent. It is a popular choice with working alcoholics because unflavored vodka has a less noticeable scent than gin. Potatoes have since proven a viable source in vodka production, but all that is really needed to make vodka is a sugar source (even just sugar). Most modern vodka is grain-based, though some is made from grapes, milk whey and other foods that can be converted to alcohol. The characteristics of the base ingredient will impact the final product; with wheat-based vodka often being lighter and whey or potato based being a bit creamier.

Our comprehensive literature review revealed the magnitude and seriousness of the diagnosis of WKS, and the research is clear that there are no medications or specific treatments that resolve addiction. Medications merely alter symptoms of addiction. In order to attain a sustainable recovery, one must stop using and abusing the substance of choice, and then begin a Coordinated Alternative Therapy regime to resolve the underlying causes of the addiction.

The approaches employed in our practice are broadly varied, enabling us to offer treatments and self-healing approaches tailored to the individual needs and preferences of the people who come for help.

The diagnosing neurologist's treatment plan

The initial treatment for Ms. A's neuropathy included Thiamine; 1500 mg for 4 days, 1000 mg for 3 days, 500 mg for the next week, and 250 mg for the rest of her life. She was also prescribed Zoloft, Gabapentin, and Trazodone (commonly used tranquilizers). Ms. A stated that she experienced agitation, restlessness, problems sleeping, nightmares, anxiety, depression, confusion, inability to focus, and frightening hallucinations. It was noted that the side effects of these medications closely resembled the initial symptoms that she was experiencing, so we immediately titrated her medications. She began a Coordinated Alternative Therapy regime without delay.

We start with Neural-Nutritional Therapies because the brain and gut are intimately connected to the whole person. A successful recovery depends on rebalancing and optimizing the performance

of the brain, the digestive tract, and the messages they send back and forth. We utilize Neurofeedback Therapy, amino acid therapy, acupuncture, and optimal nutrition, and other therapies detailed below, which work together to repair the brain, the gut, and the balance between them.

Neurofeedback (NFB)

NFB is an innovative, FDA-approved, non-invasive, cutting-edge treatment that corrects neurological pathways compromised by physical and emotional trauma. This system utilizes advanced technology software to track brainwaves in real time, and uses this information to help the brain reset its neural-connectivity. It can be used to optimize the functioning of the brain and the rest of the Central Nervous System.

NFB has helped hundreds of thousands of individuals decrease anxiety, increase and improve attention and concentration, reduce depression, increase overall energy, regulate sleep patterns, enhance creativity, and reclaim the ability to be present. The system works by disrupting the maladaptive patterns, or looping mechanisms, that the brain has acquired in response to acute conditions such as birth trauma, concussion resulting from a sports accident, addiction, anoxic event, etc. NFB encourages the brain to release these inhibitive patterns, and to adapt a higher functioning neural circuitry (Ochs, 2006, a & b).

NFB begins by applying sensors to the scalp, to observe brainwave activity. We then process the signal through a computer, and extract information about key brainwave frequencies. Through a patented process, we can relay this information back to the client down the sensor wires to the person's skin. The results are reduction and/or elimination of symptoms that previously interfered with the client's quality of life. The sessions are (usually 3-5 minutes), gentle (most people feel nothing during the session), and the changes are usually long lasting. Some exceptions include symptoms of progressive conditions such as Parkinson's Disease and Multiple sclerosis, in which the treatments need to be ongoing to sustain the improvement. NFB has generated positive results with those who suffer from concussive injuries, TBI, anxiety, depression, PTSD, OCD, Autism Spectrum Disorders, Stroke, Asperger's Syndrome, explosiveness, ADD/ADHD, Bi-Polar Disorder, MS, Parkinson's, Alzheimer's, lack of motivation, seizures, headaches, migraines, substance abuse/addiction, Cerebral Palsy, etc. We now know that NFB has a strong contributing effect in managing the debilitations of WKS.

Amino Acid intravenous (IV) therapy

Combining Amino Acid Neurotransmitter Therapy with NFB physically enhances and accelerates the effect of the individual psychotherapies. The Brain's neurotransmitters must function normally before the brain waves function. Amino acid therapy combines successfully with neurofeedback to create a speedy and successful recovery. During the late 1900s, Dr. Kenneth Blum initiated the concept of amino acids to achieve optimum health, without psychotropic medications (Blum, 1988, 1989). A science-based, specialized amino acid Intravenous formula was created and patented as an anti-craving formula by Addiction Diplomate and is currently used in this program. Her research indicated that amino acids don't work alone but a scientifically, combined source of essential components are also necessary for optimal results. The crucial elements of her science-based formula, specifically designed to create brain health and emotional wellness, are briefly presented below:

Tyrosine

This amino acid is used to increase energy, stress resilience, and focus by supporting the two neurotransmitters Dopamine and Norepinephrine. The symptoms of Dopamine and Norepinephrine depletion are fatigue, apathetic depression, and ADHD. Administration of Tyrosine

is indicated when withdrawing from stimulant drugs, such as caffeine, cocaine and methamphetamines, as well as, alcohol, opiates, and sometimes cannabis.

5HTP/L and Tryptophan

These amino acids are used to reduce social anxiety, panic and phobias, agitation, obsessive thinking, and carbohydrate craving by supporting the neurotransmitter Serotonin. Serotonin is a precursor to Melatonin, which signals the brain to sleep. The symptoms of Serotonin depletion are insomnia caused by worry and rumination, anxious agitated depression, overwhelming shame, worry, irritability, sugar craving, and/or social phobia. 5HTP and Tryptophan are indicated when withdrawing from a selective serotonin re-uptake inhibitor (SSRI), cannabis, alcohol, and ecstasy.

D-Phenylalanine (DPA)

DPA, a synthetic amino acid, was created to lower the need for morphine in post-operative patients. It is well researched for its effectiveness in supporting the opioid neuropeptide: Endorphin. Endorphins relieve pain and induce feelings of pleasure and euphoria. The symptoms of endorphin depletion are generally addictions to pornography, gambling, and shopping, as well as being overly sensitive to physical pain, loneliness, and grief. This amino acid is indicated when withdrawing from the opiate family of drugs, cannabis, and alcohol. It is available over-the-counter as DLPA, which is a combination of DPA and its mirror form L-phenylalanine, which is precursor for L-Tyrosine.

Gamma Amino Butyric Acid (GABA)

GABA is an amino acid, and neurotransmitter that blocks impulses between nerve cells in the brain. Researchers suspect that GABA may boost mood or have a calming, relaxing effect on the nervous system. The symptoms of GABA depletion are muscle tension, anxiety, chronic pain, panic, seizure activity, feeling overwhelmed, being a 'highly sensitive person', and insomnia due to muscle tightness. This amino acid is indicated when withdrawing from benzodiazepine drugs, alcohol, or cannabis. Caution: GABA can cause anxiety and agitation in some people when used in amounts over 500mg at one time, therefore formulas where it is combined with taurine, glycine, inositol, and other calming agents are recommended.

There is a recent exploration of the role of GABA in psychiatric treatment, presented by Dr. Charles F. Zorumski (2019). He states, "*There's real potential in the GABA sphere for new treatments in psychiatry.*" He notes that we are in need of new treatments, to deal with psychiatric illness that is causing a lot of disability and death, where currently used medications are producing only fair responses with significant remission rates but with high relapse rates. GABA is the major inhibitory neurotransmitter in the brain and is used in 20% of the synapses in the nervous system. "*It is one of the main things that's available for fine-tuning neural circuits, particularly in key regions of the brain like the hippocampus.*" (Airov, 2019).

L-Theanine

Another calming amino acid, L-Theanine is especially recommended for people with ADHD who feel overwhelmed. This amino acid has several interesting properties. It can block Glutamate, Cortisol and Norepinephrine, which may cause anxiety and agitation, and can support the neurotransmitters, dopamine, GABA, and serotonin, often leading to calm, focused attention. It can be helpful at night for the type of insomnia caused by high cortisol at bedtime. It is sometimes identified as 'Sun-Theanine'.

L-Glutamine

This amino acid supports energy metabolism in the brain, reducing symptoms of low blood sugar. It is used to reduce cravings for alcohol, sugar, and other addictive substances. It also supports liver function and has an anti-inflammatory effect on inflamed or irritated mucosal tissues. It should

be taken on an empty stomach, to avoid stomach acid, which changes its function, and degrades its effectiveness.

Vitamin B-12

Vitamin B12 is simply a water-soluble vitamin that *the body absolutely needs* in order to ensure that nerves and blood cells stay healthy. It plays an essential role in the formation and metabolism of red blood cells, as well as in the ability to produce DNA (the genetic material in cells).

Vitamin C

Vitamin C and B Complex are necessary to enable amino acids to cross the blood brain barrier and to reach the brain. "*Magnesium is the natural partner with Vitamin C in the treatment of all medical conditions.*" (Levy, 2019, p. 135).

Magnesium

Magnesium is essential for life as well as good health. Most patients enter the program with a magnesium deficiency. Magnesium deficiencies have been associated with many disease states, including psychological and neurological conditions such as depression, anxiety, and insomnia. Only magnesium can alleviate the impact of magnesium deficiency. Magnesium supplementation has been known to alleviate the neurological syndromes that are often the underlying causes of addiction. A recent publication, *Magnesium Reversing Disease*, provides an up-to-date explanation of the vital need for magnesium for food health. "*One should never miss the opportunity to have magnesium added to an intravenous infusion.*" (Levy, 2019, p.55).

Folic acid and trace minerals

These are co-factors to drive amino acids into the cell membrane. Deficiencies of these elements in a person's diet can be contributing factors in many physical and psychological problems.

Adjunctive nutritional treatments for psychiatric disorders

A recent meta-review by Dr. Joseph Firth of Western Sydney University in Australia states: "We have brought together the data from dozens and dozens of clinical trials conducted all over the world, in over 10,000 individuals treated for mental illness. This mass of data has allowed us to investigate the benefits and safety of different nutrients for mental health conditions—on a larger scale than what has ever been possible before." The review, published in *World Psychiatry*, provides strong evidence for nutritional adjunctive treatments for psychiatric disorders. Dr. Firth also commented: "The age-old saying: '*Healthy body, healthy mind*' really is true."

Nutritional therapy is often more effective than medications in many cases

For example, research has shown that depression is caused by a serotonin deficiency. Dr. Anne Procyk (2018) stated: "The key to understanding someone's depression is understanding, why the serotonin is low, not just giving an SSRI to make the serotonin last longer. Prozac may help, but identifying why it is low is key to figuring out what the **real** cure is." Another Australian study found that people who switched to a healthier diet had fewer symptoms of depression after just three weeks. Those who continued healthy eating for three months continued to feel relief from their symptoms. The lead study author, Dr. Heather Francis of Macquarie University in Sydney, Australia stated: "This has 100% reach (since everybody needs to eat), is more cost effective than medications, and is an aspect of treatment that individuals can control themselves." (Crist, 2019).

Addressing physical pain

The neuropathy in our WKS client's feet was consistently unbearable and caused her to painfully 'walk like a duck'. During the time she sat to receive her 2-hour amino acid infusions, we also applied NFB body treatment to her feet. The swelling and pain dissipated.

Photon Stimulator Low-Level Laser Therapy (LLLT)

We also incorporated LLLT, another pain relieving alternative, into her recovery program, The Photon Stimulator light therapy was very helpful in relieving the pain and swelling caused by her neuropathy. Low-level laser therapy is the application of light (usually a low power laser) to a pathological condition to promote tissue regeneration, reduce inflammation, and relieve both acute and chronic pain. The use of low levels of visible or near-infrared (NIR) light for reducing pain, inflammation and edema, promoting healing of wounds, deeper tissues and nerves, and preventing tissue damage has been known for almost forty years, since the invention of lasers. Originally thought to be a peculiar property of soft or cold lasers laser light, this therapeutic approach has now broadened to include photobiomodulation and photobiostimulation using non-coherent light.

Trauma Therapy

Ms. A, a divorcee, revealed that she had met her husband in a bar and their relationship had been rocky because she drank excessively. Unfortunately, her husband enjoyed cocaine, and made his living selling drugs. When he was arrested and incarcerated she divorced him. After her husband had served his prison term, he returned to live with her. He pleased her by supplying her with 12-packs of vodka shooters, but soon violated parole, became abusive with her, and was neglectful of their son. Her only choice was to call law enforcement, but when the police arrived to arrest him, they put a gun to her head as well. The PTSD she suffered from that experience could not even be relieved by more vodka. We presented our client with The Ross Trauma Model and trauma therapy to help her understand her trauma and dissociation (Ross, 2019; 2007a 2007 b). This approach has given her some great strategies for coping and stabilization.

Trauma-Sensitive Yoga

Trauma-Sensitive Yoga was introduced by Bessel Van der Kolk's Center, where he taught: *"We gradually introduce a limited number of classic postures. The emphasis is not on getting the poses 'right' but on keeping the participant's notice which muscles are active at different times. The sequences are designed to create a rhythm between tension and relaxation – something we hope they will begin to perceive in their day-to-day lives. A major challenge in recovering from trauma remains being able to achieve a state of total relaxation and safe surrender."* (Van der Kolk, 1994). Yoga and exercise have beneficial effects on mood and anxiety. The practice of yoga postures is associated with increased brain GABA levels.

Meditation and Yoga associated with brain changes

Brain researchers have detected improvements in cognition and emotional well-being associated with meditation and yoga, as well as differences in how meditation and prayer affect the brains of those who believe in God and those who do not (Jarvis, 2017).

Acupuncture as an alternative

As of January 1st, 2019, BlueCross BlueShield (BCBS) of Tennessee has stopped covering prescriptions for OxyContin, an opioid narcotic. As an alternative, BCBS has replaced the drug with the traditional Chinese practice of Acupuncture. Furthermore, acupuncture treatments release endorphins into the nervous system. Considered by many to be the natural "feel good" chemical of the human body, endorphins promote feelings of health, positive thought processes, upbeat attitudes, and promote the sense of general well-being (Miller, 2019, b).

Massage

Everyone receives weekly massages that include cranial sacral massage which is a gentle, noninvasive form of bodywork that addresses the bones of the head, spinal column and sacrum. The goal is to release compression in those areas which alleviates the stress and pain that most patients suffer.

Family therapy

All families fall somewhere in the continuum between painful, dysfunctional family systems, and optimally functional family systems. Essentially, the healthier the family system functions, the higher the sense of self-worth is displayed. Similarly, the more painful the system, the more dysfunctional the family; the lower the sense of self-worth in each family member.

Genetic propensity

Since our WKS patient has a Native American genetic background, she may have inherited and/ or socially acquired the propensity toward alcoholism. It is noted that her father, brother, and sister are also alcoholics. Her parents are divorced, and her mother is remarried. While her mom has been fully supportive, she does not understand why her daughter cannot *just quit drinking*. The family is now educated about the dynamics of the disease of addiction and this new understanding is helping the entire family find relief and recovery.

Ms. A. also has a 7-year-old son who is in the custody of her former in-laws, and she currently is allowed regular supervised visits. We are working with her social worker, and reunification seems possible within the next few months.

Experiential Therapy

Our program provided meditation and mindfulness therapy on a weekly basis and Ms. A is regularly attending evening AA meetings. She also attended the Native American ceremonies of the talking circle and traditional sweat lodge. White Buffalo Calf woman is recognized as the inventor of the native traditional sweat lodge. Sweats are valued for health and hygienic benefits as well as spiritual rewards. The natives recognized the skin as the body's *third kidney*, since sweating cleanses the body of toxins and provides a regeneration of mind and body (White Bison, 2002).

Complementary Integrative Health Care

The emerging field of complementary integrative health care has evolved from centuries of the tried-and-true healing approaches of Native American Medicine. Porter Shimer (2004), a Princeton University graduate has presented a documentary of how Native Americans have passed down over generations how they actually harvested the bountiful gifts of nature to heal mind, body, and spirit.

During the late 1700's, the Seneca Tribal Leader, Handsome Lake created the *Talking Circle*, which began the first great Native American sobriety movement. "It is a native tradition to sit in a circle and talk – to share what is in your heart." John Peters (Slow Turtle), WAMPANOAG. The talking circle is also a listening circle, which allows one person to talk at a time, for as long as they need to talk. So much can be gained by listening. Is it a coincidence that the Creator gave us one mouth and two ears? (White Bison, 2002).

Career counseling

Our patient reported that she enjoyed high school, and was an avid student. Upon graduation, she completed cosmetology school and also became certified as a dental assistant. She has several years' experience as a competent dental assistant, but resigned from work when her addiction progressed to 'out of control'. Our career counseling motivated her to update her resume, search for possible dental assistant positions, and she has already accepted employment.

Ms. A's recovery progress

At patient intake, October 1, 2019, her writing was nearly illegible and she asked us three separate times, "What day is this?" On October 5th, she actually remembered the date on her own, and that

it was her brother's birthday. However, she could only recall one item on the 3-minute 3-item recall test. On October 7th, her mom called to happily report that for the first time in months, her daughter had showered without being coaxed or forced.

The treatment plan

As noted above, the entire treatment plan included what we have come to call Coordinated Alternative Therapies. Ms. A. enjoyed the benefits of this whole treatment plan.

All of the above therapies were administered to Ms. A. over a period of 60 days, with the usual outstanding improvements we have now come to expect. Ms. A. now has a job and her memory is returning.

We have been working on developing this program for 20 years and it has come together very well. The first day of treatment produces phenomenal improvements and it keeps on working. We are finding this treatment program to be a viable alternative to Medication Assisted Treatment.

“Medical Madness – Given the momentum behind MAT, not to mention the support it enjoys among members of the nation's medical commercial and political elite, addiction may be destined to endure as one of the worlds least understood and mistreated social maladies”
- Journalist Ajay Sinijh, 2018).

Thousands of people have also enjoyed the benefits of our non-pharmaceutical program. It is not surprising that one may find our WKS treatment plan incredible – because it is. One may question whether Ms. A's treatment included all the therapies described above. This is possible because during the time our patients are receiving their 2-4 hour amino acid IVs, they do not just sit in a recliner and look at the ceiling. They are a captive audience, as they come for treatments 4-6 hours a day, 6 days per week during their month of treatment. During their daily stay, we provide group and individual therapies, such as trauma therapy, meditation, relapse prevention, massage, etc. In fact, during the 15-20 minute neurofeedback sessions, it is ideal to employ the Ross trauma therapy. Dr. Ross has designed a model that can do more in 10 minutes than a traditional Psychiatrist typically does in a 50 minute couch session. Then, the remainder of the day for 7 days, our patients may engage in Yoga, AA, acupuncture, attorney and social service visits, child visits and all the other therapies described in the treatment plan above. It is perfectly reasonable for each patient, during 30-days, to experience 100% of the therapies described in the WKS paper. I could write a similar paper for each of the current patient population. If you think that Ms. A's treatment plan is incredible, take a look at our current population:

- A 300-pound woman with diabetes, overly medicated, couldn't sleep, and was suffering anxiety and depression
- A man with TBI following his boxing and football career and was self-medicating with alcohol
- A man with PTSD who witnessed his mother shoot herself
- A woman who sleepwalks and is on the sleeping medication, Ambien, who lost her children to Social Services and foster care.
- A woman suffering anxiety and depression who just lost her parents to murder-suicide
- A 6-year old boy, overly - medicated because he is having difficulty focusing, paying attention in school, always moving, restless, boisterous, forgetting what he has just heard, like many children experience. His medications were not helpful, so dosages were increased, which actually exacerbated his previous behavior.
- A woman suffering a Traumatic Brain Injury (TBI) after she was bucked off her horse when the horse was attacked by a neighbor's dog
- We NFB treated the horse that was traumatized from the dog attack as well

- An alcoholic woman whose husband locked her out of the house, who had suffered anxiety for 16 years
- A man suffering anxiety from his daily website viewing of Schuman Resonance Today and was concerned about turning into light
- An attorney with 6-figure earnings, who was drinking to pass out every evening, came because his 7-year-old daughter said, “Dad You are sick”
- Several veterans suffering TBIs, PTSD, anxiety and depression

Tamea has provided the 15 sessions of Amino Acid IV treatments, administered by a Registered Nurse. Tamea has successfully treated over 6,000 patients with the IV formula.

I have successfully treated over 2,000 with NFB for TBIs, PTSD, anxiety, depression and SUD. This past year Tamea and I have teamed up to provide the combination IV and NFB TX, so far with great success.

We also work with the criminal justice system (currently 6 attorneys), the county and state social service system (currently 3 social workers), and manage a staff of 12 professionals.

Medical madness

Medical madness describes the Brain-Disabling Theory and the negative aspects of the Psychopharmacological Complex as described by the well-known psychiatrist, Dr. Peter Breggin. Dr. Breggin notes that psychotropic treatments act by disabling normal brain functions and cause generalized brain dysfunction. They may cause typical signs of severe brain dysfunction such as euphoria, apathy, and indifference and may lead to poor judgment such as violence, suicide, and crime (Breggin, 1994, 1997, 1999, 2007, 2009, 2013 & 2014).

The complexities and limitations of psychiatric medication

Dr. Colin Ross (2019) reports from his Trauma Model: Throughout psychiatry, medications tend to be prescribed on a ‘hit or miss’- fashion, often with four to six prescribed at a time. This is too often the case regardless of the diagnosis, be it schizoaffective disorder, rapid cycling bipolar mood disorder, borderline personality disorder, schizophrenia, or other problems. The pattern has been called irrational polypharmacy, but sadly this is the norm in psychiatry. There are many problems with a rational Polypharmacy. Psychiatrists not uncommonly make the following prescribing errors:

Too many medications prescribed at one time.

Dosage is too high or too low.

Different medications are started, stopped, increased, and decreased within a short time period, often with little clarity or certainty regarding the reasons for making such change,

Medications are not managed with clarity of diagnosis.

Medications are prescribed for reasons not supported by scientific data (so-called off-label uses).

Medications are prescribed for too long or too short a time period.

Symptoms are not documented or tracked systematically.

Medications with opposite actions are prescribed simultaneously. For instance, stimulant and a sedative may both be prescribed at one time.

Addictive medications are prescribed to known medication abusers.

Patients are discharged on high doses of numerous medications without adequate follow up.

Side effects and drug-drug interactions are not recognized and/or not fully explained to patients.

Patient noncompliance is often attributed to a bad attitude from the patient even when their prescribed medications make no sense, are not helping, or are toxic.

Patients are told that improvement is definitely due to medications, when improvement could be due to numerous other factors.

Patients are often told that medications are required because they have a biological illness when this theory has not been demonstrated scientifically.

The effectiveness of medications is overstated, while the effectiveness of psychotherapy is understated.

I, Judith have been providing this program for 16 years with an 80% - 90% success rate. It is clear to me and relief is very quick when all the therapies are coordinated. In their first visit the addict is amazed at the relief they experience and gets better every day during the month they are with us.

I have represented 25 profiles of TBI veterans in my book, *Boots on the Ground* and profiled 15 addicts in my *Herding Cats* book. We have a phenomenal program. I have been asked to present the model at International Conferences in 2020 in Amsterdam, the United Kingdom, Switzerland, and Orlando, Florida.

False presumptions of pharmacological therapies

Medical professionals have developed creative, non-medication regimes to treat the underlying causes of addiction, with an 80% sustainable recovery rate, despite receiving no addiction training during their medical school experience. Their counterparts, the prescribing physicians, (who also received no addiction training in medical school) have relied on Big Pharma for training, monetary rewards, and often on false information, resulting in an 80% relapse rate. A brief sampling of some of the scientists who have chosen to treat the causes of addiction rather than the symptoms include: (Adkins, 2019a; 2019b; Blum, 1984; Cass, 2015; Glenmullen, 2000; Levine, 1997; Mate', 2009; Pert, 1997; Ross, 2007; Siegel, 2003; Van der Kolk, 1994). For a 5-decade literature review of these admirable men and women see Miller, 2019a; 2019b, as well as others mentioned in this paper.

Further extensive research is needed to clarify the range of acute and longer-term mental, behavioral, and physical effects of psychiatric drugs, both during and after consumption and withdrawal, to enable users and prescribers to benefit from their psychoactive effects judiciously, in a safe and more informed manner (Miller, 2019). The psychoactive effects of psychiatric medications have been obscured by the false presumption that these medications have disease-specific actions.

The 5-decades of enormous literature on psychoactive effects of medications is particularly helpful, because these studies provide a baseline to which the current experimental treatments can be compared. Psychoactive effects can themselves directly modify mental and behavioral symptoms and thus affect the results of placebo-controlled trials. These effects and their impact also raise questions about the validity and importance of modern diagnosis systems. Exploiting the parallels and contrasts of conventional psychoactive medications with the psychoactive effects and uses of recreational substances helps to highlight the much broader psychoactive properties and consequences of psychiatric medications.

Some psychiatric medications produce pleasurable psychoactive effects, or even euphoria, and have consequently become drugs that some people use recreationally. Sometimes they indulge in

them excessively revealing serious potential for abuse. This has been the fate of stimulants like amphetamine, introduced as a treatment for depressive neurosis in the 1940s (Rasmussen, 2006).

The misleading nature of psychiatric medications

Drugs commonly called antidepressants produce various psychoactive effects. The sedative effects of tricyclics may be useful for treatment of insomnia, anxiety, or agitation and these effects are not restricted to people with a diagnosis of depression, as reflected in the continuing popularity of low-dose tricyclic prescribing (Moncrieff, 2012).

The ability to flatten, dull or mask emotions may explain why neuroleptics are distinguished from placebo in trials of depression (Robertson & Trimble, 1982) and this, combined with their sedative effects, would also explain why many people find them helpful in anxiety (Maher, et al., 2011).

Benzodiazepines may be preferable on safety grounds, however, if temporary sedation is what is intended, because they act rapidly and their effects are generally relatively brief (4-6 hours). The benefits of other tranquilizers are not so clear. The emotional flattening or disengagement described in relation to SSRIs may reduce feelings of depression, but the generalized nature of this effect, and its frequent association with loss of libido (Goldsmith & Moncrieff, 2011) would argue against the utility of these drugs in depression.

We can speculate on how other psychoactive drugs – such as amphetamines (which induce euphoria) were long used as antidepressants, and opiates (which produce emotional anesthesia) might reduce or mask depressive symptoms. Drugs that produce short-term mood elevation or dull the emotions, however, typically require increasing doses to maintain this effect and often leave people with dysphoria when they are discontinued. Although the initial relief is recognized, often it is not long lasting and the medications can be habituating or addictive. These substances do not produce long-term mood elevation, which hints at the misleading nature of the term “antidepressant” (Moncrieff & Cohen, 2006).

“In summary, the benzodiazepines can produce a wide variety of abnormal mental responses and hazardous behavioral abnormalities, including rebound anxiety and insomnia, psychosis, paranoia, violence, antisocial acts, depression, and suicide.”

- Dr. Peter Breggin

Do benefits outweigh the harm?

The use of psychiatric drugs is only worthwhile if the benefits outweigh the harm. Calculating a harm/benefit ratio is a complex undertaking, however, given that what is considered harmful or beneficial varies according to many factors, such as the perspective of the observer and the phase of treatment. Individuals will also have different subjective responses to prescribed drugs, just as people respond differently to recreational substances. The lack of data about the consequences of the long-term use of prescribed psychiatric medications on the full range of human emotions and cognitive functions further hampers a thorough and balanced assessment of their benefits or harms, especially since they are normally prescribed for months or years. Moreover, it is often the subtle and easily overlooked aspects of drug treatment that users find most troubling. The mental effects of antipsychotics, for example, can be experienced as more unpleasant and impairing than their physical effects, and can interfere with people's ability to carry out daily tasks (Awad, 1993 & Moncrieff, et al., 2009).

The harm of psychiatric medication

It is now accepted that all major classes of psychiatric medication produce distinctive withdrawal effects, which mostly reflect their pharmacological activity. These effects are significant not only because they can prevent someone from stopping medication when they do not need it or want it anymore, but also because they may be – and probably often are – mistaken for signs of relapse

(Moncrieff, 2006). This creates a situation whereby patients become psychologically as well as physically dependent on their medication, since they (and their prescribers too) may come to believe that they cannot manage without it. That drugs like antidepressants and antipsychotics are being prescribed for longer and longer periods suggests that some people may find it difficult, either for physical or psychological reasons, to stop medication once it is started (Moore, et al., 2009 & Prah, et al., 2012).

The problem with traditional healing paradigms

“The important point is that many of the approaches employed by traditional health care practitioners have serious limitations because they fail to treat the underlying causes of disease pathologies. Rather, they are largely focused on symptom suppression/elimination. Symptoms, of course, are a manifestation of the disease, but they are not the disease, and blocking them in no way addresses the cellular pathology inside the diseased cells.” (Levy, 2019, p.29).

Let’s explore alternative strategies

When the nature of the useful effect is identified, however, other non-drug-based ways of achieving the same result may be devised that avoid the potentially harmful consequences of drug exposure (Macready, 2012). Similarly, recognizing the psychoactive effects of psychiatric medications may facilitate the development of alternative strategies for ameliorating mental distress and also draw attention to some potentially anti-therapeutic consequences of using psychoactive substances as therapeutic agents.

More help is needed to support people who wish to stop psychiatric medication when it is considered safe to do so, and further research should clarify the full range of withdrawal effects and their likely duration, since there are reports of protracted and disabling withdrawal states following the discontinuation of some prescribed drugs (Precourt, et al., 2005).

General physicians and healthcare workers need more information and training about devising tapering schedules, recognizing withdrawal-related symptoms and distinguishing them from prior symptoms, in order to improve their confidence and ability to support people who wish to withdraw from prescribed medication (Cohen, 2007).

Therapy focusing on finding alternative techniques for managing emotional states, such as that provided in drug and alcohol rehabilitation programs may be necessary for people who have been on mind-, mood-, and behavior-altering drug treatment for long periods.

Approaching psychiatric medications as drugs which produce immediate and delayed psychoactive effects, and which induce tolerance and dependence, fundamentally differs from the conventional understanding that suggests these drugs exert specific actions on (presumed) underlying disease processes. According to the conventional view, the drugs’ psychoactive properties are merely incidental ‘side effects’.

Radical change of thinking

“Clinical medicine inches forward at an incredibly slow rate, when it advances at all.”

T. E. Levy (2019, p. 55).

Despite six decades of intensive research in neuropharmacology, however, there is a lack of evidence that psychiatric drugs have a disease-specific action independent of their demonstrable psychoactive impact. These facts suggest that a radical change of thinking may be necessary about the nature, possibilities, and limitations of psychiatric drug treatment. Lessons from the use and misuse of other psychoactive substances can help to enlighten us about the broad range of

behavioral effects that different psychiatric medications are likely to exert, and how these effects might interact with the psychological, behavioral, and other problems we call mental disorders.

REFERENCES

- Adkins, C. (2018a). *Co-occurring disorders: Integrated assessment and treatment of substance use and mental disorders*, Kindle, New York, NY.
- Adkins, C (2018b). *Opioid use disorder: A holistic guide to assessment, treatment, and recovery*. Kindle, New York, NY.
- Airov, T. (2019). A real chill pill: The power of mindfulness in the treatment of anxiety disorders. Presented at *Psych Congress*, San Diego, CA.
- Arts, N., Walycort, S., & Kessels, R. (2017). Kosarkoff's syndrome: A critical review. *Neuropsychiatric Disease and Treatment*, 13:2875-2890.
- Awad, A. G. (1993). Subjective response to neuroleptics in schizophrenia, *Schizophrenia Bulletin*, 19(3): 509-518. <https://doi.org/10.1093/schbul/19.3.609>.
- Bascarino, J., Rukstalis, M., Hoffman, S., et al. (2010). Risk factors for drug dependence among out-patients on opioid therapy in a large US health-care-system. *Addiction*, 105:332-339.
- Blum, K. (1984). *Handbook of abusable drugs*. Gardner Press, Inc., New York, NY.
- Blum, K. (1989). A commentary on neurotransmitter restoration as a common mode of treatment for alcohol, cocaine, and opiate abuse. *Integrative Psychiatry*, 6:199-204.
- Blum, K., Trachtenberg, M. C., & Ramsay, J. C. (1988). Improvement of inpatient treatment of the alcoholic as a function of neurotransmitter restoration: A pilot study. *The International Journal of the Addictions*, 23(9): 991-998.
- Braverman, E. R., Blum, K., & Smayda, R. J. (1990). A commentary on brain mapping in 60 substance abusers: Can the potential for drug abuse be predicted and prevented by treatment? *Current Therapeutic Research*, 48(4): 569-585.
- Braverman, E. R., Pfeiffer, C., Blum, K., & Smayda, R. (2003). *The healing nutrients within: How to use amino acids to achieve optimum health and fight cancer, Alzheimer's disease, depression, heart disease, and more*. Basic Health Publications, North Bergen, NH.
- Breggin, P. R. (2007). *Brain disabling treatment in psychiatry: Drugs, electroshock and the psychopharmacological complex*. Springer Publishing Co., New York, NY.
- Breggin, P. R. (2009). *Medical madness: The role of psychiatric drugs in cases of violence, suicide & crime*. Springer Publishing Co., New York, NY.
- Bruijnen, C., J. W. H., et al. (2019). Prevalence of cognitive impairment in patients with substance use disorder. *Drug and Alcohol Review*, 38(4): 435-442.
- Cass, H. (2015). *The addicted brain: And how to break free*. Better Balance Books, Marina Del Ray, CA.
- Crist, C. (2019). Healthier diet may help lift depression symptoms. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0222768>
- Firth, J., Teasdale, S. B., & Allott, K. (2019). The efficacy and safety of nutrient supplements in the treatment of mental disorders: A meta-review of meta-analysis of randomized controlled trials. *World Psychiatry*, 18(3): 308-324.
- Glenmullen, J. (2000). *Prozac backlash: Overcoming the dangers of Prozac, Zoloft, Paxil and other antidepressants with safe, effective alternatives*. Simon & Schuster, New York, NY.
- Goldsmith, L. & Moncrief, J. (2011). The psychoactive effects of antidepressants and their association with suicidality. *Current Drug Safety*, 6(2): 115-121.
- Hammond, D. C. (2000). (Ed). *LENS: The low energy neurofeedback system*. Binghamton, NY: Haworth Press, Inc.
- Hughes, S. & Cohen, D. (2009). A systematic review of long-term studies of drug treated and non-drug treated depression. *Journal of Affective Disorders*, 118(1-3): 99-19. <https://doi.org/10.1016/j.jad.2009.01.027>.
- Jarvis, M. (2017), Meditation and yoga associated with changes in the brain. *Science*, 358(6362): 461. [DOI:10.1126/Science358.6362.461](https://doi.org/10.1126/Science358.6362.461).

- Johnson, J. M., & Fox, V. (2018). Beyond thiamine: Treatment for cognitive impairment in Korsakoff's syndrome. *Psychosomatics*, 59(4): 311-317.
- Korsakoff, S. S. (1887). Disturbance of psychic function in alcoholic paralysis and its relation to the disturbance of the psychic sphere in multiple neuritis of nonalcoholic origin (Ob alkohol'nom paraliche) *Vestn Psikhiiatrii*, 4(2): 1-102.
- Levine, P. (1997). *Waking the tiger: Healing trauma*. North Atlantic Books, Berkeley, CA.
- Levy, T. E. (2019). *Magnesium: Reversing disease*. MedFox Publications, Henderson, NV.
- Macready, M. (2012). Opening the doors of perception. *Journal of the National Cancer Institute*, 104:119-120.
- Maher, A. R., et al. (2011). Efficacy and comparative effectiveness of atypical antipsychotic medications: A systematic review and meta-analysis. *The Journal of the American Medical Association*, 306(12): 1359-1369. [doi:10.1001/jama.2011.1360](https://doi.org/10.1001/jama.2011.1360).
- Martin, P. R., Singleton, C. K., & Hiller-Sturmhofel, S. (2003). The role of thiamine deficiency in alcoholic brain disease. *Alcohol Research & Health*, 27(2): 134-142. <https://pubs.niaaa.nih.gov/publications/arh27-2/134-142.htm>.
- Mate', G/ (2008). *In the realm of hungry ghosts: Close encounters with addiction*. North Atlantic Books, Berkeley, CA.
- Mate', G. (2009). *The body says no: Exploring the stress disease connection*. North Atlantic Books, Berkeley, CA.
- Miller, J. A. (2019a). *Boots on the ground: Neurotherapy for veterans combatting TBIs, PTSD, anxiety, depression and substance use disorder*. Simla, CO: Self-published.
- Miller, J. A. (2019b). *Herding cats: Coordinated alternative therapies for TBIs, PTSD, anxiety, depression and substance use disorder*. Simla, CO: Self-published.
- Moncrieff, J. (2001). Are antidepressants overrated? A review of methodological problems in antidepressant trials. *The Journal of Nervous and Mental Disease*, 189(5): 288-205.
- Moncrieff, J. (2007). Are antidepressants as effective as claimed? No, they are not effective at all. *Can J Psychiatry*, 52:96-97.
- Moncrieff, J. (2007). Understanding psychotropic drug action: The contribution of the brain disabling theory. *Ethical Human Psychology and Psychiatry*, 9(3): 107.
- Moncrieff, J. (2013). Against the stream: Antidepressants are not antidepressants: An alternative approach to drug action and implications for the use of antidepressants. *B J Psych Bulletin*, 42(1): 42-44.
- Moncrieff J. & Cohen, D. (2006) Do antidepressants cure or create abnormal brain states? *PLoS Med*, 3(7): e240. <https://doi.org/10.1371/journal.pmed.0030240>.
- Moncrieff, J., Cohen, D., & Porter, S. (2013). Medication: The elephant in the room. *Journal of Psychoactive Drugs*, 45(5): 409-415.
- Moore, A. & Malinowski, P. (2009). Meditation, mindfulness and cognitive flexibility, *consciousness and cognition*. 18(1): 176-186. <https://doi.org/10.1016/j.concog.2008.12.008> .
- National Institute on Alcohol Abuse and Alcoholism (2019). Alcohol's damaging effects on the brain. *Alcohol Alert*, 63:1-6. <https://pubs.niaaa.nih.gov/publications/aa63?aa63.htm>.
- Nikolakaras, G., et al. (2019). A patient with Korsakoff's syndrome of psychiatric and alcoholic etiology presenting as DSM-5 mild neurocognitive disorder. *Neuropsychiatric Disease and Treatment*, 15:1311-1320. [DOI:10.2147/NDT.S203513](https://doi.org/10.2147/NDT.S203513).
- Ochs, L. (2006a). The low energy neurofeedback system (LENS): Theory, background, and introduction. *Journal of Neurotherapy*, 10(2-3): 5-39.
- Ochs, L. (2006b). The low energy neurofeedback system (LENS): Theory, background, and introduction. In D. C. Hammond (Ed.) *LENS: The low energy neurofeedback system*. Hawthorn Medical Press, Binghamton, NY.
- Oscar-Berman, M., Sagrin, B., Evert, D. L., & Epstein, C. (1997). *Alcohol Health & Research World*, 21(1): 65-121.
- Pert, C. (1997). *Molecules of emotion: The science behind mind-body medicine*. Schreiber, New York, NY.

- Prah, P., et al. (1912). National changes in oral antipsychotic treatment for people with schizophrenia in primary care between 1998 and 2007 in the United Kingdom. *Pharmacoepidemiology and Drug Safety*, 21(2): 161-169. <https://doi.org/10.1002/pds.2213>
- Precourt, A., et al. (2005). Multiple complications and withdrawal syndrome. *Annals of Pharmacotherapy*. <https://doi.org/10.1345/aph.1E073>.
- Rasmussen, J. G. C. (1999). Use and misuse: Antidepressants in psychiatric practice. *International Journal of Psychiatry in Clinical Practice*, 3(2): 121-128.
- Ray, O., & Ksir, C. (1996). *Drugs, society and human behavior*. Mosby Press, St. Louis, MO.
- Robertson, M. & Tremble, M. R. (1982). Major tranquilizers used as antidepressants: A review. *Journal of Affective Disorders*, 4(3): 173-193. [https://doi.org/10.1016/0165-0327\(82\)90002-7](https://doi.org/10.1016/0165-0327(82)90002-7)
- Ross, C. A. (2007a). *The trauma model: A solution to the problem of comorbidity in psychiatry*. Manitou Communications, Inc, Richardson, TX.
- Ross, C. A. (2007b). *Moon shadows: Stories of traumas and recovery*. Manitou Communications, Inc., Richardson, TX.
- Ross, C. A. & Hong Wang Fung (2019). *Be a teammate with yourself: Understanding trauma and dissociation*. Manitou Communications, Inc., Richardson, TX.
- Shimer, P. (2004). *Healing secrets of the Native Americans: Herbs, remedies, and practices that restore the body, mind, and spirit*. Tess Press, New York, NY.
- Sinigh, A. (2018). Medicalizing addiction. *Scientology Media Productions*, 14-21.
- Stange, J. P., Jenkins, L. M., & Pocius, S. (2019, October 10). Using resting-state intrinsic network connectivity to identify suicide risk in mood disorders. *Psychological Medicine*. [doi:10.1017/S0033291719002356](https://doi.org/10.1017/S0033291719002356).
- Sullivan, E. V., & Pfefferbaum, A. (2009). Neuroimaging of the Wernicke-Korsakoff syndrome. *Alcohol and Alcoholism*, 44(2): 155-165.
- The Neurotoxicity of Alcohol: Chapter 2: *Alcohol and the Brain: Neuroscience and Neurobehavior*, 134-146.
- Thompson, A. D., Guerrini, I., & Marshall, E. J. (2012). The evolution and treatment of Korsakoff's syndrome Out of sight, out of mind? *Neuropsychology Review*. 22(2): 81-92.
- Trevisan, L. A., Boutros, N., Ismene, M. D., Petrakis, L., & Krystal, J. H. (1998). *Alcohol Health & Research World*, 22(1): 61-66.
- Tumolo, J. (2019, September 18). Meta-Review finds support for Omega-3 as adjunctive depression treatment. *Psychiatry and Behavioral Health Learning Network*. www.psychcongress.com.
- Tumolo, J. (2019, October 23). Brain scans differ in people with history of suicide attempt. *Psychiatry and Behavioral Health Learning Network*. www.psychcongress.com.
- Van der Kolk, B (1994). The body keeps score: Memory and the evolving psychobiology of post-traumatic stress. *Harvard Review of Psychiatry*, 1(5), 253-265.
- Volkow, N. D. (2006, August 19). Treat the addict, cut the crime rate. *Washington Post*, 66.
- Wernicke, C., et al. (1881). {Google Scholar}
- White Bison (2002). *The red road to wellbriety: The Native American ways*. White Bison, Inc. Colorado Springs, CO.
- Zorumski, C. F. (2019, October 2). An update on GABA for clinicians. Presented at the *Psych Congress 2019, Practical Psychopharmacology Pre-Conference*: San Diego, CA.

Judith Ann Miller, Ph.D., is a Colorado neuro-therapy specialist focusing on sustainable recovery of TBIs, PTSD, trauma, anxiety, depression, and substance use dependency. She is a certified neurofeedback practitioner and employs natural nutritional regimes, and science-based psychotherapies to enhance optimal brain functioning. She has developed a Coordinated Alternative Therapies (CATs) model to offset the traditional, predominant Medical Assisted Therapies (MAT) model. Her premise is that it is more important to treat the causes of neural conditions rather than the symptoms.



Contact: 719-541-4912 redfeather7@earthlink.net.

Tamea Rae Sisco, D., DADACD, is an Addiction Diplomate specializing in Amino Acid Intravenous therapies for trauma, anxiety, depression and substance use dependency. She personally developed and obtained two patents for her specialized Intravenous and oral formulas. For the past 20 years she has operated Treatment Centers XL, successfully served over 5,000 patients. She holds a Doctorate in Chiropractic and is a Certified Addictionologist. Her center employs neurofeedback and science-based therapies to enhance sustainable recovery.



Contact: 303-520-8004.
mia@aminoacidsrehab

TERMS OF USE

The International Journal of Healing and Caring On Line is distributed electronically as an open access journal, available at no charge. You may choose to print your downloaded copy of this article or any other article for relaxed reading.

We encourage you to share this article with friends and colleagues.

The International Journal of Healing and Caring

P.O. Box 76, Guelph, ON N1H 6N1 Canada

Phone (609) 714-1885 Fax (519) 265-0746

Email: center@ijhc.org Website: <http://www.ijhc.org>

Copyright © 2018 IJHC. All rights reserved.

DISCLAIMER: <http://ijhc.org/disclaimer/>