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Preventing Harm in the Name of Help: A Guide for Addiction Professionals

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“The history of medicine demonstrates repeatedly that unevaluated treatment, no matter how compassionately administered, is frequently useless and wasteful and sometimes dangerous or harmful. The lesson we have learned is that *what is plausible may be false and what is done sincerely may be useless or worse.*” --Enoch Gordis, Director of the National Institute of Alcohol Abuse and Alcoholism, 1986-2001 (Gordis, 1987, p 582).

I. Introduction

Inadvertent harm in the name of help is a persistent theme within the history of medicine. The potential for harm through the helping process is reflected in two medical terms: *iatrogenic* illness (injury to patients resulting from medical treatment) and *nosocomial* illness (injury to patients occurring during institutional treatment). Originally focused on physicians and hospitals, these terms, particularly the former, have come to refer to harm that can occur from the actions or inactions of a broad spectrum of service professionals and the potentially untoward effects of diverse service environments (Caplan & Caplan, 2001). The term *iatrogenic* is most often used in the addictions literature to refer to drug addictions resulting from use of narcotics or other psychoactive drugs in the course of medical treatment (Musto, 1985), but this term also applies to the broader arena of inadvertent harm experienced by clients undergoing addiction treatment.

Individuals and families undergoing addiction treatment can respond positively (optimal and full problem resolution), partially (problem reduction without full resolution), neutrally (no measurable effect of treatment services), or adversely (clinical deterioration as a byproduct of the treatment intervention). Reviews of adverse reactions to addiction treatment reveal that 7-15% of clients exhibit worse in-treatment and/or post-treatment levels of problem severity and functioning than were evident at treatment admission (Moos, 2005).

Iatrogenic harm within addiction treatment potentially poses threats to multiple parties: clients and their families, addiction professionals, treatment organizations, the larger addictions treatment field, and local communities. Such broad vulnerability is the foundation of the special *fiduciary* relationship that exists between addiction professional and those they serve (White & Popovits, 2000). This essay: 1) reviews the history of iatrogenic and nosocomial injury within addiction treatment from post-colonial America to contemporary addiction treatment, 2) highlights a few of the historical lessons from this review, and 3) proffers guidelines that can be used by addiction professionals to avoid injury to their clients, themselves and others to whom they are accountable. Harm in the name of help is an issue of concern in the broader alcohol and other drug problems arena, including prevention (Werch & Owen, 2002), research (Scott & White, 2005) and harm reduction programs (Kleinig, 2008), but our focus will be specifically on harm that can occur in addiction treatment and addiction counseling.

What Were They Thinking?

Treatments that were once thought to cure alcoholism and other addictions include the disgusting and the whimsical. Alcoholics have been forced to drink their own urine, forced to drink wine in which an eel had been suffocated, and surreptitiously dosed with everything from mole blood to sparrow dung—all in the name of treatment and cure. Alcoholics have been subjected to the “Swedish treatment” where everything they drank and ate and even their clothes and bedding were saturated with whiskey. They have been put on every manner of dietary treatment—including the apple, salt, grape, banana, onion and watermelon cures (White, 1998). While the recounting of such treatments can elicit grimaces of disgust or smiles of amusement, there is a much more ominous side to this story.

Dr. Benjamin Rush is a pioneer in the recognition of chronic drunkenness as a medical disorder and was the first prominent physician calling for the creation of specialized institutions for the care of the inebriate. And yet he treated alcoholism with methods that included blistering, bleeding, switching alcoholics from distilled spirits to wine, beer and opium, and unknowingly poisoned his alcoholic patients with prodigious quantities of mercury-laden medicines. He was not alone. Treatment practitioners of the 19th century regularly treated alcoholics and addicts by prescribing alcohol, narcotics, cannabis, sedatives, stimulants, and other substances whose natures were never revealed. Private addiction cures were sometimes temporarily withdrawn from the market until their formulas could be changed following the deaths of patients (White, 1998).

Some early treatment practices are remarkable in light of subsequent knowledge. There was Dr. J.B. Bentley who in the 1870s and 1880s prescribed cocaine (by the pound) as a treatment for alcohol and morphine addiction and reported, as a testament to the effectiveness of this treatment, that his patients were requesting additional quantities of cocaine and that they had completely lost their appetite for alcohol and morphine (Bently, 1879). There was Dr. J.R. Black who in 1889 recommended that alcoholics be medically addicted to morphine on the grounds that morphine was cheaper, less physically devastating, and rendered the alcoholic less socially obnoxious. There was the published report of a physician, who after noting that alcohol intake decreased among his patients suffering active stages of gonorrhea, recommended medically infecting alcoholics with venereal disease as a way to save the expense of sanitarium treatment for alcoholism (Gonorrhea..., 1990). And there were early twentieth century “bromide sleep treatments” used to facilitate narcotic withdrawal in spite of reports that twenty percent of patients died during the procedure (Church, 1900; Kolb & Himmelsbach, 1938).

Such insults continued in the 20th century. At the height of the American eugenics movement, laws were passed that facilitated the mandatory sterilization of alcoholics and addicts (along with the mentally ill and developmentally disabled). The twin goals of sterilization were to reduce the underlying exciting causes of alcoholism and to prevent the conception of alcoholic progeny. The coerced sterilization of alcoholics, particularly alcoholic women, continued into the mid-20th century. Early 20th century therapies prescribed for other addictions included “serum therapies” that involved raising blisters on the addict’s skin, withdrawing the serum from the blisters, and then repeatedly injecting this serum during withdrawal. Some withdrawal therapies of the 1930s utilized “medicines” that could induce psychoses of up to two months duration (Kleber & Riordan, 1982; Reddish, 1931).

The 1940s and 1950s witnessed addiction treatments that included the use of electroconvulsive and insulin shock therapies as an aid to addict withdrawal, carbon dioxide therapies (with rare fatal side effects), and the experimental use of psychosurgery (the prefrontal lobotomy) as a treatment for alcoholism and narcotic addiction (Mason & Hambry, 1948; Talbot, Bellis, & Greenblatt, 1951; Thigpen, Thigpen, & Cleckley, 1955; Valenstein, 1986). This was followed by the use of apomorphine and succinyl choline to induce an aversion to alcohol. The latter, when paired with drinking, produced an aversion to alcohol by temporarily paralyzing the respiratory system and inducing the terror of suffocation (Madill, Campbell, Laverty, & Vandewater, 1965). Methamphetamine was also used in the late 1950s as a medically prescribed substitute for addiction to alcohol and heroin.

This practice served as a petri dish for the subsequent growth of a methamphetamine injection subculture in the 1960s (Kramer, Fischman, & Littlefield, 1967).

It is easy to look back on this brief review, shake our heads and ponder aloud how such so-called treatments could have ever come into existence and achieved even brief periods of professional legitimacy and social acceptance. But what of such harms in the modern history of addiction treatment?

Iatrogenic Injury in Addiction Treatment

Early Awareness of Iatrogenesis. When the modern field of addiction treatment came of age in the 1970s, it did so with an awareness that individuals and families could be harmed as well as helped by the actions or inactions of the new addiction treatment workforce. As a result, a number of protective mechanisms were built into mainstream treatment. These mechanisms included:

- Program licensure and accreditation standards that emphasized safety and professional practice protocol
- Procedures for informed consent prior to initiation of treatment services
- Confidentiality and privacy regulations
- Addiction counselor certification and licensure standards
- Addiction counselor codes of ethics, and
- Clinical supervision.

The further professionalization of the field in the 1980s and 1990s added additional mechanisms, such as college-based pre-service preparatory programs for addiction counselors, quality improvement programs, infection control programs, risk management programs, and Institutional Review Boards to govern research involving clients undergoing addiction treatment.

Prevalence of Iatrogenic Injury The rate of clinical deterioration (more severe AOD use frequency/intensity than pre-treatment levels) during and following addiction treatment ranges from 7-15% (Ilgen & Moos, 2005; Moos, 2005). In the single study that has evaluated psychiatric deterioration during addiction treatment, 13% of clients exhibited an exacerbation of psychiatric symptoms during treatment and as a consequence were more likely to use alcohol and drugs during treatment and to drop out of treatment (Ilgen & Moos, 2006). In the following discussion, we will explore the sources of such harm.

Harm from Flawed Theories: Defective theoretical formulations about the nature of alcohol and other drug problems have led to invasive and harmful interventions. For example, the mid-twentieth century theory that chronic alcohol

and other drug intoxication was a superficial symptom of underlying psychiatric illnesses (e.g., a symptom of depression and not a primary disorder) and that such symptoms would disappear with appropriate psychiatric treatment buttressed the use of prolonged psychiatric institutionalization, convulsive therapies, psychosurgery, and indiscriminant post-detoxification use of anxiolytic, sedative, hypnotic, stimulant and anti-psychotic medications as a treatment of addiction. Similarly, theories that addiction was a manifestation of anti-social personality disorder provided justification for mass incarceration of the addicted. Variations of that theory posited that persons addicted to alcohol and drugs possessed elaborate characterological armor that had to be dismantled before treatment and recovery could begin. That theory buttressed the use of verbal confrontation and “hot seat” techniques in the early history of therapeutic communities and Minnesota Model alcoholism treatment programs—approaches that have since been softened or abandoned (see White & Miller, 2007 on iatrogenic effects of confrontation in addiction counseling).

Harm from Errors in Diagnosis There are at least three types of injury that can occur during the screening and assessment processes conducted by addiction professionals. These include 1) false positives (diagnosing someone with a substance use disorder who does not have such a disorder), 2) false negatives (declaring there is no substance use disorder in an individual with such a disorder or misjudging and miscommunicating the severity of such a disorder), and 3) failure to recognize and respond to a collateral disorder or issue that is critical to long-term recovery.

Harm from false positives can occur when transient increases in alcohol and drug use that do not meet diagnostic criteria for a substance use disorder are diagnosed as a substance use disorder, resulting in a stigmatized diagnosis, the cost and life disruption of unneeded treatment, and other potential consequences ranging from loss of driving privileges, lost custody of children, and hiring disqualification based on a prior history of addiction treatment. It is unclear, for example, how many adolescents involved in transient alcohol and other drug experimentation have been misdiagnosed as having a substance use disorder as a result of professional misjudgment or institutional (financial) exploitation of the adolescents’ families.

At its extreme, false positives include “iatrogenic artifacts”—diseases made up by professional helpers that rise to the status of diagnostic fads only to later be scientifically discredited, e.g., nymphomania, repressed memory, and multiple personality disorder. In the late 1980s, the newly formulated “disease of co-dependency” generated great professional and cultural interest before coming under attack. Critics of the excessive promotion of co-dependency charged that

there was no such disorder—that the diagnostic indicators of co-dependency were so broad as to include nearly everyone and that the concept was being over-extended for the financial gain of therapist specializing in its treatment. Feminists also charged that by defining the problem of “women who love too much” as one of psychopathology, professionals were failing to hold abusive men accountable for their neglectful, demeaning and violent behavior (Kaminer, 1992; Katz & Liu, 1991; Travis, 1992). False positives can inflict harm by attributing pathology where none exists (via consequences of unneeded treatment) or result in misdiagnosis (via consequences of the wrong treatment or the wrong target of intervention).

Harm can also result from false negatives in the assessment process, e.g., failing to identify the presence of existing problems. Several factors contribute to false negatives in the diagnostic process: 1) the over-reliance on client self-report, 2) the failure to adequately involve collaterals in the assessment process, 3) the failure to obtain independent reports that could aid the diagnostic process (e.g., the complete criminal and driving records of those referred for evaluation following an arrest for driving while intoxicated), and 3) the lack of objective laboratory tests to aid the diagnostic process. This risk is particularly pronounced when clients are referred from coercive institutions and fear the (real and imagined) consequences that could follow a positive diagnosis. The nature of iatrogenic harm from false negatives includes the failure to get treatment by those who need it and the threats these same individuals will pose in the future to themselves, their families and their communities.

Long-term recovery from severe substance use disorders requires resolution of these disorders and the broader problems and circumstances in which they tend to be nested. These collateral problems and conditions can impede recovery, contribute to relapse and compromise the quality of life in long-term recovery. Failing to identify co-occurring medical/psychiatric disorders, historical or developmental trauma or a lack of family and community recovery capital in the post-treatment environment, or other critical issues can elicit potential harm as a consequence of the assessment process.

Harm from Treatment Dosage or Type Harm from a faulty assessment process is often continued through the subsequent placement decisions. Three types of harm can flow from such decisions. The first results in too little treatment—the placement of a client with high problem severity/complexity and low recovery capital in a treatment protocol that lacks sufficient intensity and duration to achieve effective recovery initiation and community-based recovery maintenance. Such inadequate doses are often following by punishment for post-treatment relapse, e.g., incarceration, divorce, lost custody of children. Like

inadequate doses of antibiotics, they also often result in the return of the condition in more virulent and difficult-to-treat form. Weak therapeutic alliance and the resulting disengagement of the client, the administrative discharge of non-stabilized clients for alcohol/drug use, and withholding pain medication from people in addiction recovery are other examples of iatrogenic harm from too little treatment.

Too much treatment poses a risk of iatrogenic harm when it exposes a client to overly restrictive levels of care, unnecessary procedures or unneeded lengths of service involvement—all of which may be measured in financial costs, personal/family/work disruption, and the risk of treatment burnout and premature service withdrawal. Too much treatment can also be thought of in terms of doses of a particular service ingredient (whether dosage of a prescribed drug or a prescribed group) that are optimal at one quantity/frequency but create adverse effects at higher quantities/frequencies. An extreme example of this principle would be a methadone overdose death during methadone induction.

The great vision of client-treatment matching was that individual clients could be rigorously assessed and personally matched to particular treatments to produce the greatest possible positive effects. That certain types of clients would excel in one type of treatment but not another would seem evident, but scientific studies have not yet isolated variables to achieves such treatment matching (Project MATCH Research Group, 1997). (We anticipate that such matching possibilities will improve in the future, e.g., through the isolation of genetic factors that predict optimal responses to particular drug/vaccine therapies.) There is evidence to date of potential client-treatment mismatches. Clients with medium to high levels of anger achieve poorer outcomes when involved in therapies with higher confrontation strategies (Karno & Longabaugh, 2005, 2007), and adolescents whose parents have substance-related problems fare poorer in family therapy than in other modalities (Leichtling, Gabriel, Lewis, & Vander Ley, 2006).

Harm from Deviations in Therapeutic & Professional Practice Protocols
Therapeutic and professional practice protocol, as reflected in organizational policy and procedure manuals, manual-guided therapies (and adherence monitoring procedures) and organizational codes of ethics serve important client protection functions. Examples of actions that can result in harm to clients when such protocols are not followed include breaches in confidentiality, medication errors, and injury from therapeutic freelancing. The latter is of particular concern when it involves new, experimental therapies that are not closely monitored through clinical supervision.

Harm from Established Therapeutic Protocols There are cases in which the clients can be injured from standard service protocol. Such injuries include

anticipated adverse reactions (e.g., known and common side effects of medication), unanticipated reactions (e.g., idiosyncratic or allergic reactions to medication), and the institutionalization of a treatment ingredient that has the potential to harm the majority of persons receiving it, e.g., problems arising from standard methadone maintenance doses that are set too low or too high. The potential for harm rises with the newness of a procedure, the invasiveness of the procedure and the lack of information on for whom the procedure is contraindicated. Reported deaths during ultra-rapid opiate detoxification and Ibogaine-assisted opiate detoxification typify such potential (Kleber, 2007). Deaths can also occur as a side-effect of treatment, as has been reported during methadone induction, as a lethal side effect of Antabuse-alcohol interactions, and as a result of physical prostration or physical abuses that have occurred within some teen boot camps or wilderness camps.

The greatest magnitude of harm from standard therapeutic protocol accrues from inert (no effect) treatments that prevent clients from accessing alternative treatments that have been proven to generate better long-term recovery outcomes.

Harm from the Service Milieu / Service Relationship Injury to clients in addiction treatment resulting from the service milieu or a particular service relationship encompass such areas as the following:

- Exposure to infectious agents within the service milieu
- Injury or fatality related to seclusion or restraint procedures
- Injury via increased deviance from mixing adolescents with high and low levels of conduct disorder symptoms (Varied findings in the research: see Macgowan & Wagner, 2005 for a review: See Dishion, McCord & Poulin, 1999 and Burleson, Kaminer & Dennis, 2006 for conflicting findings)
- Financial exploitation (For an expose of such exploitation in the troubled teen industry, see Szalavitz, 2006)
- Emotional, social or sexual exploitation of clients by professional helpers (White, 1995)
- Clinical abandonment of clients by professional helpers, e.g., precipitous termination at exhaustion of financial benefits (White & Popovits, 2000)
- Injury from involvement in a therapeutic cult (Janzen, 2001; Temerlin & Temerlin, 1982).

Studies of clinical deterioration during addiction treatment have found such deterioration linked more to shared program characteristics than different clinical approaches or unique client characteristics. Program characteristics linked to clinical deterioration include poor therapeutic alliance, weak bonding of clients to the treatment milieu (e.g. high attrition), weak structure and supervision of clients,

low expectations of clients, and high levels of emotional arousal and confrontation (Ilgen & Moos, 2005; Ilgen & Moos, 2006).

Lessons from the Rearview Mirror

There are several important lessons contained in the history of iatrogenesis in addiction treatment. The following are among the most important.

Announcements of great breakthroughs in the treatment of addiction are from a historical perspective notoriously unreliable. Cultivate professional skepticism in response to any claims not backed by replicated studies in the field's leading peer-reviewed journals.

Harmful interventions are often shrouded in claims of scientific breakthroughs, expert opinion and client testimonials during their initial promotion. Beware of any treatment method claiming a high "cure" rate that rests only on "junk science,"¹ professional endorsements linked to personal or institutional profit, and selected client testimonials.

Harmful effects of addiction treatment are often written off as symptoms of the client's addiction pathology or as products of medical psychiatric comorbidities. If we attribute positive change in clients to the potency of key treatment ingredients, we must also consider that negative change in some clients may flow from these same potent forces.

Members of historically disempowered groups are particularly vulnerable to iatrogenic injury, e.g., women, children, elderly, ethnic minorities, prisoners, and persons experiencing stigmatized conditions, e.g., mental illness, addiction. Iatrogenic injury most often comes to light when it is inflicted on a person/family of power and influence as occurred in the exposure of harm from Carbon Dioxide Therapy. Extra efforts must be made to protect the historically disempowered from such injury.

Professionals who first challenge harmful interventions are at risk of being labeled heretics and being scapegoated and extruded from their organizations and the larger field. If you choose to challenge what you perceive to be harmful policies or service practices, seek consultation from professional mentors and professional associations to support you through this process.

¹ By "junk science" we mean the use of faulty scientific data or analysis to promote particular ideological or financial interests, e.g., follow-up studies that rely only on telephone follow-ups without family or drug testing corroboration and skewed samples—only reporting on treatment "graduates" or those with a high (6-12 month) service dose.

Adverse events that are covered up tend to be recapitulated in the future in more severe forms. Treatment procedures with iatrogenic effects do not spontaneously dissipate. Someone must stop them. Those who have spoken out to stop harmful practices in addiction treatment are as much deserving of pioneer status as those who introduced beneficial practices.

“First Do No Harm”

In closing this essay, we would like to suggest prescriptions that we hope will stir discussion about how addiction professionals can prevent and respond to iatrogenic injury.

1. Use your preparatory training and continued education to heighten and sustain your awareness of the potential sources of iatrogenic injury.
2. Recognize the variability of response to all treatments--optimal response, partial response, non-response or adverse response—and remain watchful for the latter.
3. Remain particularly alert to the potential for iatrogenic injury to members of historically disempowered service populations.
4. Commit yourself to evidence-based practices & fully participate in fidelity monitoring protocol related to such practices.
5. Utilize clinical supervision to prevent and intervene quickly in response to clinical deterioration and report/review/document all incidents of clinical deterioration following initiation of treatment procedures.
6. Solicit formal approval from your clinical supervisor before using any experimental service procedures (those outside of standard clinical protocol).
7. Practice within, and only within, the boundaries of your education, training and experience and within professional/organizational codes of ethics.
8. Rigorously utilize mechanisms of client protection, e.g., established service protocol, informed consent, confidentiality guidelines, infection control and other safety procedures.
9. Solicit ongoing feedback from clients, family members and referral sources on their observations of effects of service procedures; encourage clients and families to use mechanisms for complaint and redress, e.g., grievance procedures.
10. Recognize your professional/organizational obligation to speak out about possible iatrogenic injury when you observe it.
11. Consider whistleblowing when other venues of redress have been exhausted; Remember, you may be held professionally, ethically and even legally liable for

failing to report an adverse event caused by your own action or the actions of others.

12. Conduct research involving clients only with the approval by an Institutional Review Board (IRB).
13. Make personal/professional amends where iatrogenic injuries may have occurred.

Summary and Closing

This essay has defined iatrogenic injury in addiction treatment via its history, current prevalence, and forms, and it has offered suggestions on how such injury can be prevented and corrected. It is easy to look back with self-righteous indignation at the professional insults that have been inflicted upon those addicted to alcohol and other drugs, but one wonders how our own era will be judged in the future. Who within our own period will future historians call the healers and who will they castigate as the hustlers and charlatans? What harm done in the name of good exists today in the field of addiction treatment? The history we have reviewed calls for clinical humility and a continual pledge to follow the first of all ethical mandates: *First do no harm*.

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