



SCHICK SHADEL HOSPITAL

Patient and Provider Acceptance of Chemical Aversion Substance Dependence Treatments

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Chemical aversion therapy, a treatment of choice at Schick Shadel Hospital in Seattle, Washington, is widely recognized as a powerful anti-cravings treatment for alcohol and other substance dependencies. Chemical aversion therapy has garnered the support of scientific and governmental reviewers, of numerous treatment practitioners, of many major insurance providers and of thousands of satisfied recipients. However, due to the discomfort of the chemically induced gastrointestinal distress that is basic to the treatment, some critics have deemed chemical aversion therapy to be excessively intrusive or widely disparaged by potential recipients. These criticisms, which have never been data-based, will be refuted by the contents of the following presentation.

Schick Shadel Hospital was founded in Seattle, Washington in 1935 as the Shadel Sanitarium; it is the oldest known hospital that is exclusively devoted to substance dependence treatments in the United States, and perhaps the world. It was founded on Charles Shadel's enlightened concept that alcoholism is a disease which merits compassionate and dignified medical treatments that are devoid of any moral judgments or condemnations; a number of decades passed before this disease concept was endorsed by the American Medical Association, the American Society of Addiction Medicine, the National Institute on Alcohol Abuse and Alcoholism, and the World Health Organization.

During its 74 years of continuous operation the Hospital has treated more than 50,000 substance-dependent patients, the preponderance of whom has been alcohol dependent. However, in response to changing societal and patient needs, the Hospital has developed innovative new aversion therapies for additional frequently abused psychoactive substances; cocaine and cannabis treatments began in 1986, methamphetamine in 1988, and smoked or snorted pulverized prescription opiates (e.g., Oxycontin) in 2007.

Treatments of illicit substances involve the patients' exposure to and use of realistic placebo simulations of their problem substances. For example, placebo snortable cocaine combines mannitol (a harmless white powdered sugar product) with small amounts of tetracaine and quinine to deaden the nostrils and to recreate the bitter flavor of actually snorted cocaine. Smokable simulated crack rocks are made from benzocaine and baking soda. Unlike treatments for an illegal substance such as cocaine, treatments for smoked or snorted Oxycontin dependency do not require the use of placebo products. Instead, the patients consume prescribed

Oxycontin during treatment sessions, but experience none of its psychoactive effects because their brains' opioid receptors have been effectively bound by a prior injection of naltrexone, a powerful opioid antagonist.

Schick Shadel has always provided a multimodal treatment program; however, its unique offering from its inception has been a medically administered and methodologically rigorous program of chemical (emetic) aversion therapy. Chemical aversion therapy is both the oldest extant medical alcoholism treatment and the oldest behavioral therapy alcoholism treatment. Chemical aversion therapy combines carefully controlled exposure to alcohol, or a targeted problem drug (or its placebo facsimile), with emetically induced nausea and emesis. Substance cravings typically are replaced by substance aversions. This powerful anti-craving treatment, as developed by Dr. Walter Voegtlin at the Shadel Sanitarium, was based on Pavlovian (1928) conditioning, but also now is known to be a clinical application of taste aversion learning. Conditioned taste aversions are highly protective learned adaptations among humans and other foraging vertebrates whose ingestible choices include toxic alternatives. Taste aversion treatments are based on a highly efficient nausea-activated gut defense system that replaces pathological alcohol cravings with therapeutically effective alcohol aversions (Revusky, 2008). Taste aversion learning is the strongest variety of learning that is ever encountered by most humans. In humans conditioned taste aversions also extend to the sight, smell, and frequently to the mere thought of the offending substance. Most humans have acquired one or more such aversions during normal development.

Elkins (1991) reviewed the treatment's acceptability as follows. Wilson (1987) incorrectly deemed the therapy as having low acceptability. Howard & Jenson (1990) found this to be a speculative assertion that lacked empirical support. Bandura (1969) noted that chemical aversion therapy is readily acceptable to many alcoholics, but frequently is demeaned by treatment providers. Boland, et al (1978) reported that 26 of 28 consecutive admissions for alcoholism treatment volunteered for emetic therapy. Kerr and Sumi (1985) reported that only 5.4% of 654 consecutive discharges failed to complete their Schick Shadel treatment. In marked contrast, Hoffman (1985) found that 22% of 9,922 alcoholics from a variety of traditional inpatient programs were completion failures.

This presentation will debunk false patient unacceptability claims by reporting Schick Shadel patients' very low ongoing against medical advice (AMA) discharge rates and their high exit ratings of chemical aversion therapy. During six years ending in 2009 the AMA dropout rate never reached a 5% annual level. Moreover, chemical aversion therapy has consistently received the patients' highest mean satisfaction ratings of seven standard Schick Shadel treatments. Chemical aversion therapy continues to be highly esteemed by alcohol dependent patients who seek Schick Shadel services. The treatment is buttressed by numerous favorable scientific reviews including positive reports from the National Institute on Alcohol Abuse and Alcoholism as well as from the Food and Drug Administration. The last three editions of the American Society of Addiction Medicine's *Principles of Addiction Medicine* have included an *Aversion Therapies* chapter. Medicare and other insurance companies have provided compensation for treatments involving chemical aversion therapy.

There is one additional compelling indication of positive patient acceptance of chemical aversion therapy. The Hospital twice has been bought by satisfied prior patients. This most recent occurred seven years ago when the present group of 10 owners intervened during a period of financial difficulty; the Hospital now is on a sound financial footing and the owners plan a future expansion to other cities, thereby making the treatments more readily available to a larger population of potential patients.

Note: This abstract has been submitted for presentation at the 118th Annual Convention of the American Psychological Association to be held in San Diego during August, 2010.