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***Mental Disorder or Governmental Disorder*?** Self-administration of illegal neurotransmitter-analogue substances: delineating Substance Abuse mental disorder from health and human rights considerations in the field

Brief Summary:

My proposed research project in medical geography involves the utilization of geographic techniques to test the reliability of Substance Abuse mental disorder diagnostic criterion A3 as defined in the DSM-IV-TR. My concern is that diagnostic criterion A3—recurrent or persistent substance-related legal problems—may obscure the actual reasons for why people use currently illegal substances and therefore lead diagnosticians to inappropriate diagnoses. I am focusing on the population of individuals who are diagnosable with or at-risk for developing a Cannabis Abuse or Hallucinogen Abuse mental disorder based strictly on diagnostic criterion A3, due to actual or potential legal problems stemming from victimless infractions. The key question is: is there any other medical explanation other than an underlying substance abuse mental disorder that would explain why this population engages in substance use that can lead to legal problems or has a high potential of doing so?

I am interested in examining underlying human rights considerations (as defined in the Universal Declaration of Human Rights) that may be motivating substance use, including the human right to medical care and to a standard of living adequate for health and well-being as well as the human right to freedom of thought, conscience, and religion. If the human rights of cannabis and hallucinogen users are being abused or violated through structural and direct violence, geographic research can help to uncover how this population is responding in an effort of harm reduction. Such responses would include geographically visible and measurable maneuvering to minimize or escape violence and human rights abuses, both structural and direct, by movement, migration, community building, and democratic and cultural resistance. Additionally, geographic research methods such as content analysis and interviewing can be used to uncover the biopsychosocial-spiritual context of cannabis and hallucinogen use. Claims to the medical benefits of cannabis can be cross-referenced with the growing medical and scientific literature regarding the therapeutic benefits of cannabis and cannabinoids. Claims of religious use and spiritual benefit of these psychoactive substances can be compared with similar claims made by other recognized religious groups that employ psychoactive substances (e.g., the Native American Church). Finally, I plan to engage in a detailed case series review that looks at claims of self-directed psychotherapeutic benefit of cannabis use in a large patient population with a history of problematic substance use who have presented for medical approval for cannabis use in California.

My normative goal is to help orient medical knowledge and practice in the direction of unflagging respect for universal human rights. This research project will be an exploration of the human rights of cannabis and hallucinogen users.

A Primer on Substance Abuse Mental Disorder and Criterion A3 As Per The DSM-IV-TR:

Before I describe the geographic nature of my proposed research and the human rights concerns it entails, I will outline the medical knowledge that informs and constitutes modern diagnostics in the area I wish to research—the identification and diagnosis of **Substance Abuse**, a mental disorder listed in the Diagnostics and Statistical Manual of Mental Disorders – Text Revision (DSM-IV-TR). The DSM-IV-TR is used by clinicians and researchers around the world in numerous areas such as family medicine, internal medicine, psychiatry, emergency medicine, psychology, social work, nursing, occupational and rehabilitation therapy, counseling, and other health and mental health fields. The medical definition of substance abuse found in the DSM-IV-TR has far-reaching implications as the current legal framework in the United States uses medical and scientific evaluation to determine which substances have a "high potential for abuse" and therefore must be controlled accordingly. In the DSM-IV-TR section entitled **Substance-related Disorders** appears the description and diagnostic criteria for the mental disorder of **Substance Abuse** which is distinguished from the mental disorder of **Substance Dependence**. In total, using the diagnostic algorithm given in the DSM-IV-TR, 15 criteria combinations satisfy the diagnosis of the disorder (*). I am specifically focused on the pathognomonic diagnosis of substance abuse mental disorder by Criterion A3, which is one of four pathognomonic criteria that satisfy the algorithm that defines the diagnosis of the disorder. A diagnosis of substance abuse mental disorder by Criterion A3 given to patient X would read as follows:

Patient X has a maladaptive pattern of substance use leading to clinically significant impairment or distress as manifested by recurrent substance-related legal problems occurring within a 12-month period.

We can call this **Substance Abuse** mental disorder, type A3. Legal problems are the central issue that this diagnosis turns on because, as the DSM-IV-TR states, in these patients, the presence of recurrent or persistent legal problems is the sole manifestation of substance use that is maladaptative and is causing impairment or distress. What is meant by legal problems? Certainly, they are as numerous as the laws themselves. The DSM-IV-TR gives several examples of legal problems. What follows is a complete list of the legal problems given in the **Substance-related Disorders** section of the manual.

> First, there is "arrests for substance-related disorderly conduct" which appears as a parenthetical example immediately following the diagnostic Criterion A3 of **Substance Abuse**. Under **Cannabis Abuse (305.20)** mental disorder, it is written "…legal problems that may occur as a consequence of arrests for <u>cannabis possession</u>." Under **Cocaine Abuse (305.60)** mental disorder, it is written "Legal difficulties may result from <u>possession or use</u> of the drug." Under **Hallucinogen Abuse (305.30)** mental disorder, it is written "…legal difficulties may arise due to behaviors that result from intoxication or <u>possession of hallucinogens</u>." Under **Amphetamine Abuse (305.70)** mental disorder, it is written "Legal difficulties typically arise as a result of behavior while intoxicated with amphetamines

(especially aggressive behavior), as a consequence of obtaining the drug on the illegal market, or as a result of drug possession or use. Occasionally, individuals with Amphetamine Abuse will engage in illegal acts (e.g., manufacturing amphetamines, theft) to obtain the drug; however, this behavior is more common among those with Dependence." Under **Inhalant Abuse (305.90)** mental disorder, we find: "Users can also become agitated and even violent during intoxication, with subsequent legal and interpersonal problems." Under **Opioid Abuse (305.50)** mental disorder, "Legal difficulties may arise as a result of behavior while intoxicated with opioids or because an individual has resorted to illegal sources of supply." Under **Phencyclidine Abuse (305.90)** mental disorder, "Legal difficulties may arise due to possession of phencyclidine or to behaviors resulting from Intoxication (e.g., fighting)." Other relevant passages of the DSM-IV on this topic are: "The category of Substance Abuse does not apply to caffeine and nicotine"; "The term *abuse* should be applied only to a pattern of substance use that meets the criteria for this disorder; the term should not be used as a synonym for "use," "misuse," or "hazardous use"; "The essential feature of Substance Abuse is a maladaptive pattern of substance use manifested by recurrent and significant adverse consequences related to the repeated use of substances. In order for an Abuse criterion to be met, the substance-related problem must have occurred repeatedly during the same 12-month period or been persistent"; "There may be recurrent substance-related legal problems (e.g., arrests for disorderly conduct, assault and battery, driving under the influence) (Criterion A3)"; "Substance-Related Disorders are distinguished from **nonpathological substance use** (e.g., "social" drinking) and from the **use of medications for appropriate medical purposes** by the presence of a pattern of multiple symptoms occurring over an extended period of time (e.g., tolerance, withdrawal, compulsive use) or the presence of substance-related problems (e.g., medical complications, disruption in social and family relationships, vocational or financial difficulties, legal problems)." [Underlining added for emphasis]

The final statement quoted above implies several corollaries, such as:

1. One way that "social" drinking, an example of nonpathological substance use, can be distinguished from pathological cannabis-related use disorders is by the presence of legal problems.
2. One way the use of medications for appropriate medical purposes can be distinguished from pathological cannabis-related use disorders is by the presence of legal problems which might occur due to the use of cannabis, even if the cannabis is being used medically.

The idea that the use of medications for appropriate medical conditions might, in fact, not be legal and the idea that other forms of nonpathological substance use are possible with substances aside from alcohol, nicotine, and caffeine is not considered in the DSM-IV-TR.

So, the DSM-IV-TR tells us that if persistent or recurrent substance-related legal problems arise in conjunction with substance use, then a mental disorder is the likely pathological 'cause'. Are there other explanations? Does this hold for all legal problems?

A Study Population: Those Diagnosable By Criterion A3 And Those At-Risk

The examples of substance-related legal problems given in the DSM-IV-TR fall into two general classes: legal problems that arise due to behavior that disrupts the lives of others and legal problems that arise due to the violation of laws which purport to protect people from themselves. The items underlined above are the latter type of legal problems. These will be the type of legal problems that will be the subject of my research—consensual or victimless crimes where the perpetrator is viewed as the victim. In the case of substance use, the legal problems that fall into this category would be those related to the possession, manufacture/preparation, or delivery (pharmacological) of illegal substances or metabolic evidence of their use. People who use illegal (or quasi-legal) substances and develop these types of legal problems or those who are at risk for developing such legal problems—they will be the population I will focus on in this research. ***The question is: is there any other medical explanation other than an underlying substance abuse mental disorder that would explain why this population engages in substance use that can lead to legal problems or has a high potential of doing so?***

For this work, I will focus on **Cannabis Abuse (305.20)** mental disorder and **Hallucinogen Abuse (305.30)** mental disorder. To uncover other explanations as to why people engage in cannabis and hallucinogen use that can lead to legal problems or has a high potential of doing so aside from underlying mental disorder, geographic research tools and techniques can be employed. The populations to study are those who use cannabis and/or hallucinogens/entheogens but do not display any of the maladaptive and dysfunctional behaviors outlined in diagnostic criteria A1, A2, and A4 of **Substance Abuse** mental disorder. These individuals would however qualify based on criterion A3 or are at-risk for doing so. Once this population is identified, detailed interviews with members of this population and content analysis of culturally relevant print and media will be undertaken in order to learn more about the biopsychosocial-spiritual context of substance use in this population. Special attention will be given to underlying human rights considerations and as defined in the Universal Declaration of Human Rights such as the human right to medical care and to a standard of living adequate for health and well-being as well as the human right to freedom of thought, conscience, and religion.

This work would involve investigating people's claims as to how they understand cannabis and hallucinogens to be medicines and in what ways they find them to be therapeutically beneficial. Claims made about the health promoting features of cannabis can be cross-referenced with the large and growing medical and scientific literature on the therapeutic benefits of cannabis and cannabinoids. These claims and this body of literature will be important when analyzing data from medical cannabis users who legally use cannabis under physicians' recommendations, as per state law in 11 US states and as per Canadian federal law. Claims to the religious importance or spiritual benefits of cannabis and entheogens/hallucinogens can be compared with similar claims made by members of the Native American Church who are permitted by federal law to use the mescaline-containing cactus peyote (Lophophora williamsi). Any therapeutic and spiritual/religious significance of cannabis and hallucinogens that may be discernable in the course of this research project will likely be understood through the invocation of a

broad spectrum of healing modalities such as integrative medicine, transpersonal psychiatry, psychotherapy, and allopathic medicine.

In order to fully recognize the human rights of substance users who are at-risk for "developing" or already have "developed" **Substance Abuse** mental disorder, type A3, based on legal problems that are victimless, it is essential that health care practitioners have a full understanding of the biopsychosocial-spiritual context of substance use and use-related behaviors in this population. If there are legitimate health and human rights considerations and claims that motivate or underlie a given person or population's substance use, then victimless legal problems that arise or that may arise related to substance use which have the effect of forcibly preventing, deterring, or driving underground such substance use must be understood as human rights violations or abuses rather than manifestations of underlying mental disorder in the users. Additionally, any and all the structures and definitions that would uphold such a legal system that systematically abuses human rights, including medical definitions of substance abuse, would be participating in and perpetuating structural violence against such persons or populations.

Geographically Discernable Responses to Violence: Harm Reduction

Structural violence is violence that is visible only upon close examination. The 'violence' is typically understood as commonplace, ordinary, and acceptable. Direct violence, which is plainly visible when it can be witnessed, is often a downstream consequence of structural violence, but the causal linkages are generally unexamined or difficult to see. When structural violence results in grinding and abject poverty, as Paul Farmer has described it amongst the peasant populations of Haiti, its effects are visible to the naked eye of the observer, but its origins are hard to see. However, when structural violence results in gross violations of the human rights to freedom of thought, conscience, and religion, its impacts are far less visible to the naked eye of the observer. The same is true when structural violence is aimed at violation of a population's human rights to medical care and to a standard of living that is adequate for health and well-being, especially when health-promoting medicines used in conjunction with this human right have a contentious, conflicting, and politically charged status.

If this population is in fact enduring human rights abuses, geographic research can help to uncover how this population is responding to these abuses in an effort of harm reduction. Such responses would include geographically visible and measurable maneuvering to minimize or escape violence and human rights abuses, both structural and direct, by movement, migration, community building, and democratic and cultural resistance. There are several examples of this geographic maneuvering. I will discuss several major ones below and pose questions about them. They include migration of populations who engage in putative beneficial use cannabis in response to the shifting state-federal-global patchwork of cannabis control laws. Many, I suspect, have moved west to Oregon, Washington, and California, where strong, state-level medical marijuana laws offer a safer, more supportive, and less hostile environment in which to use cannabis. Others have fled to Canada from the US to escape prosecution related to legal problems stemming from cannabis use that they claim to be medical; they have even claimed refugee status and sought asylum. What is the extent of this 'medical marijuana

migration' and what benefits do these populations enjoy as a result of migration? Thousands each year travel to Vancouver, British Columbia's New Amsterdam Café on West Hastings Street where a safe, public environment for cannabis consumption exists. Where do the Café patrons come from, why do they go there, and what is their experience of the environment? Many cannabis and hallucinogen/entheogen users have formed churches, cooperatives, and collectives in order to build community and a sense of solidarity. The Worm-hole cooperative in West Seattle is an example of such a place. How does such community-building benefit the members? Many examples of successful democratic and cultural resistance to substance-related legal problems exist in the US today such as the passage of city ordinances in various US municipalities that make marijuana the "lowest law enforcement" priority. Laws like Seattle's I-75 which passed in September 2003 or Oakland's Measure Z which passed in November 2004 serve as "paranoia-minimization" laws for cannabis users. What is the significance of this political and social organizing? Finally, what implications do these various geographic phenomena have on the reliability of Criterion A3 as an effective pathognomonic diagnostic criterion for Cannabis Abuse and Hallucinogen Abuse mental disorders?

A final aspect of this research proposal involves a case series review that looks at claims of self-directed psychotherapeutic benefit of cannabis use in a large patient population with a history of problematic substance use who have presented for medical approval for cannabis use in California. This population of cannabis users has clandestinely self-medicated for years for treatment of psychological symptom complexes and appears to have staved-off more problematic substance use patterns with alcohol, nicotine, and opiates because of their use of cannabis. After medical marijuana protection laws were passed, a subgroup of this population sought legal protection in the form of a physician's recommendation/endorsement for their heretofore illegal cannabis use. One physician in California, Dr. Tom O'Connell, has documented over 2000 such cases with thoroughly-taken patient histories; I intend to help write up his finding for peer-reviewed publication. This patient population represents yet another group who actively sought out an understanding healthcare provider who would endorse their use of cannabis and thereby provide them with a safe environment in which to use cannabis. There cannabis use then became, in the words of the DSM-IV, an example of the "use of medications for appropriate medical purposes." However, because this population is still at-risk for legal problems from the federal government, do they also run the risk for 'developing' Cannabis Abuse mental disorder? This research project will aim to answer this question with satisfaction and rigor.

(*)**Substance Abuse** (From the DSM-IV-TR)

Features

The essential feature of Substance Abuse is a maladaptive pattern of substance use manifested by recurrent and significant adverse consequences related to the repeated use of substances. In order for an Abuse criterion to be met, the substance-related problem must have occurred repeatedly during the same 12-month period or been persistent. There may be repeated failure to fulfill major role obligations, repeated use in situations in which it is physically hazardous, multiple legal problems, and recurrent social and

interpersonal problems (Criterion A). Unlike the criteria for Substance Dependence, the criteria for Substance Abuse do not include tolerance, withdrawal, or a pattern of compulsive use and instead include only the harmful consequences of repeated use. A diagnosis of Substance Abuse is preempted by the diagnosis of Substance Dependence if the individual's pattern of substance use has ever met the criteria for Dependence for that class of substances (Criterion B). Although a diagnosis of Substance Abuse is more likely in individuals who have only recently started taking the substance, some individuals continue to have substance-related adverse social consequences over a long period of time without developing evidence of Substance Dependence. The category of Substance Abuse does not apply to caffeine and nicotine. The term *abuse* should be applied only to a pattern of substance use that meets the criteria for this disorder; the term should not be used as a synonym for "use," "misuse," or "hazardous use."

The individual may repeatedly demonstrate intoxication or other substance-related symptoms when expected to fulfill major role obligations at work, school, or home (Criterion A1). There may be repeated absences or poor work performance related to recurrent hangovers. A student might have substance-related absences, suspensions, or expulsions from school. While intoxicated, the individual may neglect children or household duties. The person may repeatedly be intoxicated in situations that are physically hazardous (e.g., while driving a car, operating machinery, or engaging in risky recreational behavior such as swimming or rock climbing) (Criterion A2). There may be recurrent substance-related legal problems (e.g., arrests for disorderly conduct, assault and battery, driving under the influence) (Criterion A3). The person may continue to use the substance despite a history of undesirable persistent or recurrent social or interpersonal consequences (e.g., marital difficulties or divorce, verbal or physical fights) (Criterion A4).

Criteria for Substance Abuse

A. A maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by one (or more) of the following, occurring within a 12-month period:
(1) recurrent substance use resulting in a failure to fulfill major role obligations at work, school, or home (e.g., repeated absences or poor work performance related to substance use; substance-related absences, suspensions, or expulsions from school; neglect of children or household)
(2) recurrent substance use in situations in which it is physically hazardous (e.g., driving an automobile or operating a machine when impaired by substance use)
(3) recurrent substance-related legal problems (e.g., arrests for substance-related disorderly conduct)
(4) continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance (e.g., arguments with spouse about consequences of intoxication, physical fights)

B. The symptoms have never met the criteria for Substance Dependence for this class of substance