

# Students or experts? Unpacking addiction treatment center operators' relationships to scientific knowledge in Mexico City's *mixtos*

Joseph Guisti

45

## RESUMEN

En el campo académico que aborda el tratamiento del alcoholismo y la drogadicción en México, muchas investigaciones asumen que educadores avalados por el gobierno están haciendo frente a la brecha de conocimiento científico que afecta a operadores de centros de tratamiento “mixtos”, organizaciones que combinan el trabajo profesional de la salud con planteamientos de grupos de ayuda mutua como los establecidos en Alcohólicos Anónimos. En contraste, este artículo argumenta que si bien los operadores carecen de conocimientos científicos especializados y acreditados, al mismo tiempo poseen fluidez y un entendimiento propio de conceptos científicos que juegan un papel central para la definición de la ciencia de las adicciones. Adicionalmente, su uso del discurso científico es sólo una de las muchas herramientas empleadas en el servicio de atención a las adicciones y en el reclamo de jurisdicción técnica entre expertos más tradicionales como los profesionales médicos. Para concluir, este artículo argumenta que la manera en que se distribuyen los conocimientos especializados entre expertos acreditados y no acreditados en la actualidad probablemente continuará favoreciendo las explicaciones científicas que sean compatibles con el paradigma planteado por grupos de ayuda mutua.

*Palabras claves:* drogadicción y alcoholismo, tratamiento de la adicción, alcohólicos anónimos, comprensión pública de la ciencia, normatividad de servicios de salud, estudios sociales de la ciencia y la tecnología, conocimientos especializados.

## ABSTRACT

Many accounts of Mexico's alcoholism and drug addiction treatment field assume that government sanctioned educators are working to fill a scientific

knowledge gap among the operators of “mixed” treatment centers, treatment organizations that combine the work of health professionals with mutual aid group approaches such as that found in Alcoholics Anonymous. I argue, however, that while operators lack credentialed forms of expertise, they possess their own type of fluency in scientific concepts and play a central role in defining what addiction science is. Furthermore, operators’ use of scientific discourse is one of many tools they apply in service of treating addictions and claiming technical jurisdiction among more traditional types of experts, such as medical professionals. In conclusion I argue that the current way that expertise is distributed between both credentialed and non-credentialed experts in the field will likely continue to favor scientific explanations that are compatible with the mutual aid paradigm.

*Keywords:* addiction and alcoholism; addiction treatment, alcoholics anonymous, public understanding of science, health service regulation, science and technology studies, expertise.

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## INTRODUCTION

What does it mean to be a drug addict or an alcoholic? Does it mean that one has a genetically inherited inability to metabolize drugs and alcohol? Does the very meaning of “addiction” imply the need for medically supervised treatment? Does it signify a spiritual malady best treated by the sorts of altruistic and confessional projects popularized by Alcoholics Anonymous? Is it possible to talk about addiction without talking about neuroscience, medicine, morality, spirituality, criminology or social work?

The drug treatment field, as others have persuasively argued, developed as a series of responses to the above questions, but it cannot be understood solely by a primary focus on any one of the concepts raised by those questions<sup>1</sup>. In the limited space of this article, however, I will

<sup>1</sup> For a general overview on the way these variables have combined historically in public policy measures directed at “diseases of the will” like alcoholism and addiction, see

only focus on one element: the ways that people in Mexico's drug addiction treatment field think and talk about science, specifically neuroscience, psychology and biology. *Science* is generally defined as something like "the systematic study of the structure and behavior of the physical natural world through observation and experiment", or "a systematically organized body of knowledge" (APA format Oxford University, 2005). Generally, people who work in Mexico's treatment field share this understanding of the word and assume, as most folks tend to, that science generally entails the pursuit of objective knowledge, probably through some combination of laboratories and carefully recorded data, perhaps involving lab coats. However, when it's time for them to explain what science does, or *who* does science, or *what* is indeed scientific about addiction at all, ideas about *science* necessarily combine with ideas about those other concepts listed above like criminal justice and spirituality. *Science* then becomes a malleable, contingent thing.

47

In order to talk about how science is discussed by treatment professionals, however, it is necessary to also mention Alcoholics Anonymous, which has been extremely influential in the ways that people think about addiction and alcoholism not only in Mexico, but internationally (Anderson, Swan and Lane, 2010; Campbell, 2007; Travis, 2009; Valverde, 1998). In her groundbreaking scholarship on Alcoholics Anonymous (AA) in Mexico, Haydée Rosovsky traced the emergence<sup>2</sup>

Valverde (1998). For more specific case studies see e.g. Campbell's work on the way that treatment in the United States fuses the rhetoric of neuroscience with a larger "recovery culture" informed largely by spirituality (Campbell 2007, 2010); Garcia (2010) for a discussion of the ways that treatment in New Mexico is refracted through the experience of Hispano dispossession; or Weinberg (2005) for ethnographic work showing the ways that "considerations of community solidarity and exclusion have consistently figured centrally in assessments of whether, and how, the diagnosis and treatment of of mental illness or addiction should be undertaken".

<sup>2</sup> As its roles and functions are multivalent, throughout this piece I refer to Alcoholics Anonymous alternately as a "society," "fellowship," "movement," and "organization".

of the fellowship in Mexico as an increasingly influential form of informal social service provision. Arguably the first scholar to evaluate Mexican AA as part of an internationally comparative study, Rosovsky highlighted the ways that Alcoholics Anonymous rapidly proliferated in Mexico, with the number of groups rising from 36 in 1964 to 12 811 in 1990 (Rosovsky, 1998). In this piece, as well as in a later study (Rosovsky, 2009), she suggests that scholars with interests in all sorts of social phenomena, not just alcoholism and addiction, have found AA to be a rich case for thinking about the ways that civil societies produce social networks and forms of identity. As AA is an international movement that tends to reproduce similar ways for its members to talk about power and personhood across very different socioeconomic circumstances around the world, it serves as an interesting case for thinking about how informal, global movements might challenge our assumptions about how individuality and geographic place inform one another (*ibid*).

I would like to heed Rosovsky's call to look at AA in Mexico as a case for thinking about social networks and identities, but I would also like to do so in the context of an ethnography of the AA-influenced professional and para-professional drug treatment industry in Mexico City. In this ethnographic account, I situate treatment work within larger national and international projects organized around the management of social problems using scientific knowledge. In the case of addiction treatment, examples of these projects include the National Institute on Drug Abuse (as a producer of scientific knowledge both internationally and in the United States, where it is based), the World Health Organization (as the producer of standards for diagnosis such as the *International Statistical Classification of Diseases and Related Health Problems*, or ICD), the American Psychiatric Association (as producer of the *Diagnostic and Statistical Manual of Mental Disorders*, or DSM), Mexico's National Center for Addiction Control and Prevention (CENADIC), National Addiction Commission (CONADIC) and Mexico City's Addiction Treatment and Prevention Institute (IAPA).

Almost twenty years ago when Rosovsky was gathering data for her 1998 study, she noted how various fragmentations within AA's service structure (mainly the cleavage of the movement into "traditional" or "hour and a half" groups, and the residential or "24 hour" groups) mapped not only onto socioeconomic divisions between middle-class and working-class members, but also onto the ways in which different populations were variously affected by austerity measures that reduced social services for at-risk populations. She also observed a then-nascent referral system in which judicial authorities sent teenagers with drug problems to the more working-class "24 hour" groups (1998). In this article I pick up where Rosovsky left off, so to speak, focusing on the present-day addiction treatment field in Mexico, which is increasingly composed of professionalized versions of "24 hour" groups that are subject to government projects aiming to normalize, regulate, and bureaucratize them. In these new intersections between AA groups and the government's attempts to manage drug treatment, we are witnessing another moment of metamorphosis within Alcoholics Anonymous, which has, by Rosovsky's account, already passed through various processes of "mexicanization" (*ibid*). In these processes of mexicanization, it emerged as a highly syncretic way of understanding and managing alcoholism and drug addiction, fusing North American, indigenous, and Mexican-catholic understandings of health, morality, community and identity (Rosovsky, 2009). In the metamorphosis, I trace in this article, AA groups are pulling away from their connections to the NGO like international service structure of Alcoholics Anonymous (as a non-profit organization with global offices in New York City), and aligning more closely with government oversight offices in Mexico. They are, however, maintaining their connections to Alcoholics Anonymous as a philosophy and culture. As AA is historically connected with early attempts to study alcoholism scientifically, these treatment centers are, by extension, already well versed in the popular scientific understandings of alcoholism and addiction that AA embraced in the mid-20th century. This article examines the ways that those popular scientific

conceptions of alcoholism are being fused with the contemporary language of neuroscience to create a discourse that simultaneously enables and constrains clinical approaches to addiction throughout the field as a whole.

50

My intervention is essentially Foucaultian in nature, studying the ways that power and knowledge create new forms of knowing and managing populations. As mentioned in the introduction to this volume, such a project is integral to the subfield of “science and technology studies”, and the processes I identify extend far beyond the issue of addiction treatment, affecting any social problem in which society looks to science to reveal the “truth” about reality. In my case, I discuss how contemporary experts are thinking about addicts in ways that simply don’t move them from a punitive “badness” to a health-focused “sickness”, but rather move them from a punitive model to an ostensibly rational medical model which still manages to retain much of its punitive character despite claiming to be rooted in morally objective science. In such a configuration of power/knowledge, scientific “truth” is not the only thing that is created: in addition to “data”, science also produces ways of understanding, regulating, labelling and governing persons and things (Foucault, 1975, 2010; Foucault and Gordon, 1980). If we turn our attention to this element of the scientific process and observe the ways that scientific understandings are reproduced, repeated and interpreted by the publics that they affect, we are better equipped to critically evaluate the claims that science enables, as well as to identify the possibilities for governance, and freedom, that it forecloses.

#### WHAT IS A “MIXTO” AND WHAT DOES IT LOOK LIKE?

In the section above I allude to the hybrid medical/legal/spiritual/psychological frameworks that comprise current approaches to addiction, but the best way to discuss the logics that structure the field is to begin with a representative account of the types of interactions I observed

during my fieldwork. What follows is an edited extract from my field notes, written after I had observed men from a treatment center helping to bring a client in for treatment.

On this evening, my respondents asked if I would like to observe a “*doceavo*”. I had no idea what that term meant in the context of treatment, and the following excerpt describes the circumstances in which I came to understand not only what that term means for my interlocutors, but how it captures the logics of a field built around civil associations that are *not* AA groups but which are deeply inspired and structured by the logics of AA, while simultaneously employing and relying on the contributions of scientific and medical experts.

51

*I'm in the backseat of a hatchback with three servidores<sup>3</sup> from the treatment center and I'm trying to catch whiffs of fresh air from a cracked window as Miguel<sup>4</sup>, our driver, chain smokes Marlboro reds. We're speeding down Anillo Periferico at 100 km/hour, flashing our brights as we whip around slower traffic. Miguel and I, along with guys from the center they call 'Avispas' and 'El Ricas' are headed to a poor neighborhood somewhere in Iztapalapa to apprehend a man and bring him to the center I've been observing.*

The scene we arrive to is initially far less dramatic than I expect. Four or five people in front of the house hold beers or plates of food as they watch us pull up. A spry looking man around fifty years of age points to a guy in black framed glasses and a black polo shirt slumped

<sup>3</sup> All translations are my own. Whenever I feel that meaning would be lost in translation, or when speakers use local terms specific to addiction treatment, I include the original Spanish. In this case, the word *servidor* is both a local term and something that loses meaning when translated. *Servidores* are persons who are in treatment at a recovery house and who work in roles that resemble employment, such as greeting visitors at the front desk or working in the kitchen. Because this work is considered part of their rehabilitation and is not monetarily compensated, however, they are referred to as *servidores*, or roughly, “those with a commitment to serve”.

<sup>4</sup> All names are pseudonyms and I have taken measures to anonymize the non-governmental sites I discuss.

in a recliner in front of a blaring television, eyes closed. A school-age girl looks on as Avispa and El Ricas go into the house, put their arms around the guy we came for, and maneuver him into the backseat of the hatchback so swiftly he barely has time to resist.

*El Ricas climbs in next to him and, like an older sibling, puts him in a playful headlock, assuaging him: “don’t trip, papi. Whaddy’a want? Want a beer? Want a whiskey?”*

*“Uhhhhh, yeah, I do” the guy moans, sounding defeated and bitter.*

*Miguel is outside having our client’s mother and father sign paperwork on the hood of the car. “Please read this closely. You need to sign this form. And can you sign here...aaand here. Don’t worry, ma’am: it’s a recovery house. There’s no physical mistreatment, they eat regularly, they bathe with warm water. You guys can come see the house and take a look at the living arrangements and you’ll see how it is”.*

*The mother of the client’s children watches as the client’s parents sign the release forms, then negotiates with the driver until he permits her to get in the car with us so that she can take a look at the treatment center and verify that it isn’t an abusive one like the kind frequently reported in the news.*

*As we pull onto the highway, dialogue in the car alternates between the client and woman arguing bitterly while the driver advises her to avoid too much conversation while he’s intoxicated, and the woman asking us about the quality of the center.*

*“It’s a really nice house. I’ll repeat again: there’s no physical mistreatment, they bathe at the proper times, there’s hot water, they get something to eat. My buddies in the backseat there accompanying me, they’re anexados (residents at the center) as well. You can ask them questions to see. Ask them if the treatment there at the house is good treatment that respects the integridad del ser humano (human rights)”.*

*The woman looks at us to confirm.*

*“To start with, the food is luxurious,” El Ricas offers. This interests her. “Yeah, there are a few vegetables, but there’s pork chops, longaniza. We eat good. Steak sometimes”.*



*"Fish", Avispa adds.*

*"Yeah?" she asks distractedly, gazing at the father of her children being restrained by the muscular arms of El Ricas as Avispa lists more menu items. She interrupts him: "because, like, I really don't know anything about any of this. About the groups, like you guys. Is it a grupo, or a clinic, or, what is it?"*

*Miguel's tone is clinical but warm. "It's a casa de recuperación (recovery house). We work with psychiatrists, psychologists. We work with medical supervision".*

*"He has diabetes," she says.*

*"Whatever medication he takes; you guys bring it. Right now we're going to give you a piece of paper that lists all the things you need to bring, clothes, toothpaste, sandals, things like that. At 40 days, a psychiatrist is going to evaluate him. Right now, to start, a general practitioner is going to evaluate him, how he is physically, if he's sick, if he's not sick, what he's suffering from. To make sure he's in good physical shape, to note that there aren't any marks of any physical mistreatment. Everything is going to be there on his dossier, and my little colleagues here are going to say what state he was in when he arrived. They're going to take him to his talks, to his therapy sessions, psychotherapy with a doctor<sup>5</sup>. The psychiatrist is going to come through at day 40. Why day 40? Because after 40 days we've detoxed our brain, now it's thinking more clearly. So he's going to be in this same state for a few days until he detoxes. The psychiatrist is going to evaluate him to see if he needs to be prescribed medicine. If he does, we'll let you know as a family. I repeat: it's a really good place. I don't say that for no reason, I was anexado (interned) there just like my colleagues here. In fact, I seem like I still am most of the time, because I'm always around the house".*

53

To understand this excerpt of field notes, it's necessary to pause for a moment and explain the 12-step philosophy that these men have adapted

<sup>5</sup> The psychologist is not technically a doctor, though she is licensed to practice clinical psychology.

in the service of the house calls they make. The twelfth step of the program of Alcoholics Anonymous reads: “*Having had a spiritual awakening as the result of these steps, we tried to carry this message to alcoholics, and to practice these principles in all our affairs*”. This twelfth step, or “*doceavo*” as it’s called in spanish speaking AA groups, belies the Pentecostal origins of Alcoholics Anonymous, a mutual aid fellowship-cum social movement that describes itself as “spiritual but not religious”. In the AA’s twelfth step the program diverges from its Christian roots in the sense that members don’t necessarily channel the Pentecostal spirit of evangelizing so much as they enact the core philosophy of AA: alcoholic consumption is symptomatic of profound self-centeredness. Altruistically helping other alcoholics to achieve sobriety, however, is a means by which to turn one’s unique experience as a problem drinker into the core resource that keeps them sober precisely by granting them the authority and the empathy they will use to help others. What I observed on this particular “*doceavo*”, however, was a fusion of AA-inspired altruism with contemporary logics of not-for-profit social work.

As I rode along on the treatment center’s house calls, which they often refer to as the “*patrulla enchancadora*” (literally “the patrol that puts people in sandals” or the “sandalling patrol”) given that most treatment centers require clients to wear sandals<sup>6</sup>, the men I accompanied referred to both the process of bringing in clients, as well as to the clients themselves, as “*doceavos*”. As noted above, however, these men were not in an AA group *per se*. The men I observed do not frame what they do as working AA’s 12th step so much as bringing clients to a semi-professional, government regulated, medically supervised treatment center which had once been an AA group and is now considered a *mixto*, a treatment center that combines both “professional” and “mu-

<sup>6</sup>In cramped quarters where sleeping, eating and grooming spaces are often combined, sandals are seen as more hygienic than sneakers. They also serve as a physical reminder that clients are in a sick role, as Talcott Parsons might have put it, in which they must remain subject to therapeutic intervention and surveillance. Some of my respondents also added, only half-jokingly, that sandals are harder to run away in should clients attempt to abscond.

tual aid” treatment. So-called “*doceavos*” of the type I observed are the product of an addiction treatment field in present day Mexico that spans the multiple worlds of “mutual aid” centers inspired by Alcoholics Anonymous, public health care, neuroscience, social work, criminal justice, religion and new age spirituality.

Like the driver of the *patrulla* waxing clinical as he described a treatment that is not medical but has “medical supervision”, treatment centers are staffed by people who aren’t scientists but mention science in their everyday work, who aren’t therapists but refer to what they do as therapy, and who aren’t medically trained but who speak endlessly of curing sickness and disease. Such contested, hybrid or overlapping boundaries between different forms of expertise are not only a defining characteristic of addiction treatment in Mexico, but central to a growing “expertise” literature within science and technology studies, a discussion I return to below.

55

## BACKGROUND AND METHODS

This article is part of a larger case study of an emerging profession: the certified addiction treatment counselor in Mexico City. After more than a year of fieldwork, I observed this profession officially come into existence during my last week in Mexico when 43 counselors passed a certification exam provided by the federal government and facilitated by Mexico City’s *Instituto para la Atención y Prevención de Adicciones* (“Institute for Addiction Prevention and Treatment”), known by its initials as IAPA. This exam was the culmination of a five-year professionalization process, also facilitated by IAPA, in which a small group of persons who operate *mixtos* (referred to henceforth as “operators”), and who actively sought governmentally sanctioned legitimacy through collaboration with government projects and participation in training sessions, took courses in various topics considered central to addiction treatment. Some of these courses were introductions to basic science concepts such as the neuroscience of addiction or the epidemiology of substance

abuse, some were more clinical (e.g. “identifying comorbid disorders”, “educating the family”, “mindfulness meditation in the treatment setting”), and some covered the legal and regulatory framework established by Mexico’s *Norma Oficial Mexicana NOM-028-SSA2-2009*. This five-year professionalization process paralleled a growing sense of professional legitimacy among operators themselves. Even when they weren’t at IAPA classes, these same operators made themselves visible in Mexico City’s treatment scene more generally. They collaborated in working groups on treatment regulation, attended conferences on addiction treatment hosted by universities in the city and pursued diploma programs in addiction treatment, which frequently employ instructors who currently or previously worked for IAPA or for other governmental institutes, such as the National Institute of Psychiatry.

Data collection for this article consisted of attending IAPA’s training sessions as well as other workshops and working groups of the kind described above. I also interviewed 30 operators and spent weeklong stays in two different *mixtos*: one that is struggling to stay open and another that is flourishing and active in the city’s treatment policy scene.

In contrast to academic and governmental accounts that tend to frame mutual aid treatment centers as problematic organizations that need training in basic addiction science (CONADIC, CENADIC and CICAD, 2011; Lozano-Verduzco, Marín-Navarrete, Romero-Mendoza and Tena-Suck, 2015; Marín-Navarrete *et al.*, 2013; Medina-Mora, Real, Villatoro and Natera, 2013; Taverro, 2010), the process I observed was far more dynamic and dialectical. The government educates operators, yes, but they also recognize operators as non-credentialed experts and the government’s regulators and educators petition this expertise while simultaneously attempting to standardize and control it. For their part, *mixto* operators actively resist the stereotype of the *rudo* AA traditionalist<sup>7</sup> and they tend to seek out and defer to the “science” that the government

<sup>7</sup> Persons who have come into contact with Alcoholics Anonymous in Mexico will often mention the *rudo* stereotype, also referred to as the *cavernicola* (“caveman”) stereotype, to connote approaches to AA that employ verbally or physically aggressive tactics in attempts to force persons to take responsibility for their actions or change

trains them in. However, they also understand AA to be a rational thought system, either compatible with science or itself an extension of scientific thought. For these operators, as well as those who run strictly mutual-aid centers, their very status as recovered addicts fulfills three functions related to their understanding of AA as its own rational thought system. Firstly, they see their sobriety as empirical proof of AA's efficacy. Secondly, they see their sobriety as the outcome of a process through which they have attained mastery of and fluency in the concepts and language of AA. Thirdly, they see their experience both in active substance abuse and in sobriety as conferring upon them a type of expertise that non-addicted and non-recovered persons can never possess. Among those with considerable experience in the program, this expertise is also a "meta-expertise" (Collins and Evans, 2007), enabling them to discern experts from non-experts within AA itself, as well as to determine which outside professionals, if any, might be recognized as valid "contributory" or "interactional" experts within the AA knowledge system (per the typology established by Collins and Evans, 2007).

57

For their part, many of the "scientifically trained" professionals who teach and regulate operators send an ambivalent message. On one hand, they defer to the expertise of operators and encourage them, as recovered addicts who can understand other addicts in ways that non-addicted persons cannot, to take advantage of that privileged tacit knowledge. On the other hand, they position themselves not only as educators who understand addiction in the "correct" way, but as gatekeepers of professional and epistemic authority. Furthermore, there are a great deal of situations for both operators and "professionals" in which the scientific state of the art is less important than solving quotidian technical problems and claiming jurisdiction over those problems. These situations add an extra layer of complexity for anyone trying to understand what the relationship is between these actors and scientific knowledge.

their behavior. These stereotypes also imply a lack of education on the part of the *rudo* themselves, as well as an ignorance or negligence of a person's human rights.

## ON “MEDICALIZATION”

58

It is common for sociological writing about addiction science to fall into one of two perspectives: those authors who want to argue that social factors either prevent or enable a benevolent science vs. authors who critique the very assumption that addiction is a valid object for science and medicine, often suggesting that “scientization” or “medicalization”, understood as the reformulation of complex problems as those that can be entirely understood and treated with the tools of western science or contemporary western biomedicine, are reductive and funnel resources and attention away from more profound social problems such as economic inequality<sup>8</sup>. This article does not fall into either of those two camps.

Science and evidence-based inquiry indeed have the capacity to produce technological innovations that help people live more comfortable healthy lives, just as they have the capacity to produce overly reductionist accounts of complex bio-psycho-social problems. I am neither “pro science, anti-mutual-aid”, nor “pro mutual-aid, anti-science”. Rather, I maintain that the rhetoric around both techno-scientific approaches and non-techno-scientific (e.g. spiritual) ones is structured by material realities, and that rhetoric also plays a role in structuring those very realities. Addiction science and mutual aid groups are two important moving parts in treatment projects worldwide, and rather than viewing them as antithetical, I view them as co-constructive and reliant on one another. It is not my goal to argue for any particular policy or approach. My goal, rather, is to analyze the ways that people think and talk about addiction science in Mexico in the context of an increasingly

<sup>8</sup> Examples of the first perspective are frequent in public health scholarship on drug addiction and alcoholism, e.g. (Glasner-Edwards & Rawson, 2010; NIH, 2007; Weisner, Mertens, Parthasarathy, Moore, & Lu, 2001). For examples of the second perspective, see e.g. (Conrad, 1992; Fingarette, 1989; Levine, 1978; Roman & Blum, 1991; Schneider, 1978) For a concise discussion of this tension in the literature, see Bryan Turner’s forward to (Weinberg, 2005)

formalized Mexican drug treatment system, and to discuss how that system both enables and constrains scientific inquiry and application.

This paper is a contribution not only to the applied literature on addiction treatment provision, but a contribution to science studies literature on the nature of technical expertise and the democratization of scientific knowledge. Persons without formal credentials or expertise, such as patient advocacy groups or social movements based around disease categories, are playing an increased role in determining public health policy and research agendas (Collins and Evans, 2007; Epstein, 1995). As scholars have noted, patient groups and health advocacy organizations pose “crucial questions for scholars in the field of Science and Technology Studies, [such as]...” what is the character of the experiential knowledge of illness possessed or cultivated by patient groups or health movements? What sorts of challenges do these lay actors pose to the authority of credentialed experts, and what kinds of alliances with professionals do they construct?” (Epstein, 2007). Alcoholics Anonymous and the 12-step fellowships they have inspired have played a formative role in the development of such social movements (Epstein, 2007; Valverde, 1998). But despite their increasing entrenchment in the world of patient advocacy, mutual-aid inspired groups still merit sociological study into their relationship to formal scientific knowledge. As they have aggressively championed the idea that alcoholism and drug addiction are diseases, rather than moral failings, they have played an important role in the “medicalization” of social problems (Conrad, 1992, 2007). However, as other scholars have noted, the hybrid nature of addictions as psycho-social-medico-legal disruptions have prevented them from being completely medicalized, despite the increasing neurochemical frames used to describe them (Campbell, 2012) and the increasing “biologization” of medicine as a whole (Clarke and Shim, 2011). The role that non-credentialed experts play in the addiction treatment field, then, serves as a sort of limit case for the extent to which *social* problems might or might not be approached as *scientific* problems.

## NATIONAL AND TRANSNATIONAL HISTORIES: A BRIEF SKETCH

Tracing the genealogy of addiction treatment in Mexico, with its roots in both national and international histories, is a task far too large for this article. It is necessary, though, to provide context for the interactions I recount below.

60

As one might expect, policy makers, academics and the popular press critique “mutual aid” treatment centers for lacking credentials and scientific validity. Some of the most notorious centers, which were much more common in Mexico City before the government wrote and began implementing the first version of *NOM-028* in 1999, literally tortured and starved clients, ostensibly in a brute force attempt to make addicts comprehend that they were powerless over their addictions. Scholars have established the extent to which these centers, often referred to as *anexos*, have attained enough notoriety that it impedes many families from seeking help at AA-based centers (Carrasco Gómez, Natera Rey, Arenas Monreal, and Pacheco Magaña, 2015). As National Psychiatry Institute researchers Ródrigo Marín-Navarrete *et al.* describe:

...for years, numerous studies have demonstrated that the emotional and physically abusive procedures that take place [inside some residential mutual aid centers] lack clear evidence of therapeutic value. [Journalists] have amply documented [...] the ‘*anexos*’, highlighting, among other things, overcrowding, unsanitary conditions, physical and verbal aggression, torture, physical restraint, exploitation and slavery (Marín-Navarrete *et al.*, 2013)

While problematic, these centers are also ubiquitous: The Federal District alone is home to around 300 of them, and that number doesn’t reflect the thousands of non-residential 12-step groups that make up the metropolis’ larger mutual aid subculture. Compared to the fewer than 100 beds provided by public services in a metropolitan area of over 21 million people, mutual aid inspired centers absorb the vast majority,



some estimate over 90% (Garcia, 2015), of persons receiving residential care. The sheer number of them combined with the rapid and widespread adoption of Alcoholics Anonymous across Mexico means that these centers in many ways are Mexico's treatment industry. A few pricey professional centers exist, as do limited services provide by Mexico's *Centros de Integración Juvenil*, but for the vast majority of people working in treatment, "addiction treatment" and "the 12 steps" are one and the same. The following table lists the various treatment options available to persons seeking residential care in Mexico City:

<i>Type of center</i>	<i>No. of centers (Federal District)</i>	<i>Organizational features</i>
Residential mutual aid centers registered with local government ( <i>"centros [o casas] de recuperación"</i> , <i>"centros de tratamiento"</i> , <i>"centros de ayuda mutua"</i> )	248	Private organizations or non-governmental civil associations, ranging from free to low-cost, may provide govt. subsidized financial aid, majority based in or inspired by Alcoholics Anonymous, few counselors certified by federal govt.
"Mixed" centers that combine mutual aid with "professionals", registered with local government ( <i>"mixtos"</i> )	18	Private organizations or non-governmental civil associations, generally affordable to mid-level fee-for-service, may provide govt. subsidized financial aid, many began as AA groups before attaining <i>"mixto"</i> status, majority initially inspired by Alcoholics Anonymous, majority of operators recently certified as counselors by federal govt.
Professionally staffed private treatment centers (Monte Fenix, Clinicas Claíder)	2	Private, unaffordable for majority of population, treat small percentage of affected population but highly visible and influential in professional treatment community

<i>Type of center</i>	<i>No. of centers (Federal District)</i>	<i>Organizational features</i>
Unregistered or clandestine mutual aid centers (“anexos”, “granjas,” “grupos fuera de serie”)	Unknown	Private, clandestine/illegal, ranging from free to low cost; inspired government efforts to regulate or eliminate abusive mutual aid groups beginning with the first NOM-028 published in 1999; increasingly rare in Mexico City due to efforts of government regulators, but prolific and notorious in many parts of the Republic, especially rural areas
Centros de Integración Juvenil Iztapalapa “CIJ” (limited residential services)	1	Para-governmental organization with 30 beds (Iztapalapa location only) for residential treatment
Toxicology centers Xochimilco / Venustiano Carranza (limited acute/emergency care only)	2	Public clinics providing intensive care for patients requiring emergency detoxification

The prevalence of mutual aid centers, especially those engaged in dangerous or abusive practices, led federal and municipal government to author the aforementioned *NOM-028* in 1999 as well as to create organizations like IAPA in subsequent years, which help centers to implement the *norma*<sup>9</sup>. The official purpose of a *norma* is to define quality standards for services, which, in the case of *NOM-028* are addiction treatment and prevention services. This *norma* does more than just describe categories of treatment, however; it effectively creates them. The

<sup>9</sup> IAPA is not a regulatory agency, rather they're considered a “normative” agency that helps to develop policy, does research and contracts educators to implement the training programs they develop. They also directly refer court-mandated clients to treatment services.

*norma* divides treatment providers into three groups: “mutual aid”, “professional” and *mixto*. People who work in the field do not see this delineation as bureaucratic nitpicking, rather these categories mark boundaries within which people understand their work and their expertise in relation to other people.

It is almost impossible, then, to discuss treatment in Mexico without hearing mention of *NOM-028*, as it provides a framework for distinguishing compliant credible centers from noncompliant ones; distinguishing professionals, who possess “scientific understanding” from mutual aid groups who do not; and, very importantly, distinguishing *mixto* and “professional” centers, which may legally put people in treatment against their will, from mutual aid centers, which cannot.

63

The “*doceavo*” trips I observed in my field observations of *mixtos* make sense to people who carry them out on a daily basis because they’ve become a popular accessible resource in a country that, as understood by my informants, not only suffers from a dearth of public options for addiction treatment services but also struggles with other institutional challenges such as widespread corruption, which prevent people from trusting and relying on other social services like law enforcement and healthcare organizations that might otherwise benefit addicted persons and their families.

This is the context in which I found myself in an unmarked car with men who were having a family sign documents without any judicial validity so that they might have bargaining power against a potentially corrupt patrol car who could otherwise arrest them on (arguably valid<sup>10</sup>) kidnapping charges. These men with no medical training invoke the professional authority of doctors and psychologists to a concerned

<sup>10</sup> The “sandalling patrol” trips I observed were technically illegal, but they are unofficially sanctioned. According to *NOM-028*, compulsory treatment can be provided by *mixtos* but only when a doctor determines there to be a life threatening emergency. I never observed a doctor provide the mandated written documentation, but I also observed IAPA inspectors verify that this center’s adherence to compulsory treatment practices was within the *norma* without requesting to see any verification of this written documentation.

family member who, based on what I observed, got in their car to attempt to assess the quality and safety of a service that she did not yet know what to call. Their work is located within larger state and professional projects on the part of treatment industry reformers: they took that client to a center run by a recovered addict-turned-operator who not only complies with government oversight to the best of his ability, but participates in clinical studies managed by the National Institute of Psychiatry as well as pilot programs for service innovations developed by IAPA, such as a client nutrition program he was helping to prove during my time in the field. That center operator not only passed the first ever federal examination for certifying addiction treatment counselors, he collaborated in the development of its curriculum and in working groups about the official norms for implementing it. In our interviews he passionately maintained that addiction services will not improve until centers everywhere become willing to collaborate with credentialed professionals to provide addicts the holistic treatment necessary for, as he explained, “tragically misunderstood biopsychosocial diseases” like drug addiction and alcoholism.

My respondents across the treatment spectrum, from government researchers to people driving around in the “sandalling patrol”, espouse this idea that addiction and alcoholism are all too often misunderstood as *badness* rather than as *sickness*, and that this is something that society must change through science. Oftentimes my respondents would assume that I, as a researcher from the US, had come to Mexico to implement the wisdom and precision of North American science in Mexico, a place that they often bemoan lacks a “culture” of scientific rigor. Their assumption does not reflect a long history, though, of Mexican reformers who claim that addiction is an illness best understood by science. Such discussions go back at least as far as 1939 when Dr. Leopoldo Salazar Viniegra, then head of Mexico’s Campaign Against Alcoholism and Other Toxicomanias, proclaimed that “toxicomanias are illnesses and not crimes, and as such, should be treated with the same humanity that medical science encourages” (Montfort, 1999).

This odd feature of addiction discourse, in which stakeholders seem to endlessly repeat the putatively new and controversial claim that the stigmatization of addicts prevents society from granting them the dignity of a scientific solution, and have been doing so for the better part of a century, is part of a larger international history in which, as sociologist Nancy Campbell argues, “the cultural work of the word ‘addiction’ must be situated within the context of a succession of passionate debates conducted by scientific researchers, policy makers, and clinicians over the need to ‘de-stigmatize’ the field” (Campbell, 2012). The debates that Campbell refers to are often so passionate precisely because stakeholders on both sides are attempting to determine whether society should heal addicts or punish them. What is often missed in these debates is the fact that most of society’s addiction treatment efforts tend to do both at the same time. As Julie Netherland writes in the introduction to an edited volume of critical addiction studies, “while the medical and the moral are often pitted against one another rhetorically (e.g. addiction as a public health versus a criminal justice problem), our responses to addiction often contain elements of both. According to May (May, 2001), ‘clinical constructions of addiction still engage a set of moral questions’. These moral questions are often directly built into addiction treatment programs (Whetstone and Gowan, 2011), many of which have explicit crime control functions (Fox, 1999) but rely on medical language to describe addiction” (Netherland, 2012).

65

Such an arrangement, wherein addiction is described as medical but treated as moral, has its roots in the very history of Alcoholics Anonymous, which, ironically, ascended to dominant status in the world of alcoholism and addiction treatment partly through advancing the idea that addiction should be understood as an illness rather than as a moral failing (Campbell, 2012; Travis, 2009; Valverde, 1998). The fellowship and the 12-step program it created were explicitly influenced by a mystical strand of Christianity practiced in a community known as “the Oxford Group”, but early AA also counted agnostics and atheists as members. These non-believers warned their fellows that any perceived

links to organized religion would scare away potential recovering alcoholics. Simultaneous to discussions of how religious AA should be, founding members were also quite interested in the ideas being promoted in the newly developing field of 'alcohol science' which, at the time, was starting to suggest that the bodies of alcoholics were most likely different than the bodies of other people. This emphasis on fundamental bodily difference was seen by the cofounders as a way to emphasize the hopelessness of the alcoholic condition and would help sufferers attain the state of "surrender" that was seen as necessary for adopting the tenets of a program that is, at its core, spiritual and moral despite lacking any overt religiosity (Travis, 2009). In the same way that it sought to distance itself from any religious controversies, AA members quickly realized that publicly advancing a medicalized definition of alcoholism might be politically unwise and possibly detrimental to the therapeutic program it was trying to establish. Instead of explicitly referring to alcoholism/addiction as a "disease", then, the fellowship thus "strategically substituted words like 'malady' or 'illness' to avoid divisive debates with potential medical allies" (Campbell, 2012).

Despite that rhetorical strategy, it is nonetheless the case that "AA popularized a disease concept among lay persons, treatment professionals, and para-professionals, and the organization bolstered its position by using scientific ideas" (Campbell, 2012). Historians and sociologists note that addiction as a scientific object might be understood in very different ways today if it were not for the formation of the powerful National Institute on Alcohol Abuse and Alcoholism in the United States, which US Congress agreed to form based on the testimony of experts in the then-nascent treatment field including Bill Wilson, cofounder of Alcoholics Anonymous (Travis, 2009). Indeed, foundational work on the disease concept of alcoholism by E.M Jellinek, widely understood to be something like the "father" of addiction neuroscience, was based on a handful of self-reports from AA members.

Calls for a "scientization" of addiction, then, have come full circle. After rising to prominence by allying with a burgeoning alcohol sci-

ence and by explicitly avoiding the moralistic overtones of the Washingtonian and the prohibitionist movements it historically sought to distance itself from, the fellowship of Alcoholics Anonymous (alongside the broader “recovery movement” it has inspired) now defends itself against those who claim that science, rather than the moral and spiritual interventions described by the 12-step program of AA, is what addicts really need.

In Mexico, which is home to the second largest AA service structure in the world (after the combined us/Canada service structure), this same history structures the field, but combines with the gruesome infamy of abusive *anexos* to make rallying cries for a more “scientific” treatment system all the more pronounced. Mutual aid centers putatively “not directed by health professionals and [...] lack[ing] scientific evidence and validation” (Marín-Navarrete *et al.*, 2013) which are sites of abuse and torture, then, must be reformed to fit the *NOM-028*’s directive centers that use working methods “based on scientific principles” (NOM-028-SSA2-2009 5.2.1.2) and should receive training that promotes “scientific understandings” (NOM-028-SSA2-2009 13.2.1). In this construction of science vs. non-science, science is not just the opposite of *symbolic* violence in the form of moral judgment and criminalization, it is also the opposite of *physical* violence.

67

#### MUTUAL AID AND SCIENCE: A CO-DEPENDENT RELATIONSHIP BETWEEN TWO FORMS OF EXPERTISE

While science, as I describe above, emerges discursively as the antidote to violence in government projects to reform operators (CONADIC *et al.*, 2011), the idea that operators need science is complicated by the fact that operators understand themselves to be informally trained in science due to their experience in AA. This understanding of operators as uncredentialed experts is simultaneously validated and challenged by government regulators. In a IAPA class on “mentorship” for operators

of *mixtos*, I watch as the instructor breaks from the material regularly to stress how important each operator's uncredentialed expertise is, and to stress to them that they must learn to recognize themselves as a distinct class of experts that can work together to bring about institutional change in the field:

68

...the doctors are actually the ones who need mentoring the most. They have a lot of medical experience and training in school, but they don't have experience working with addicts. You know, doctors have a *carrera* of 5 years in school. But what I want to tell you guys is that you have equivalent levels of training! Some groups have been around for up to 40 years! That's a lot of experience!

Later that afternoon he re-emphasizes this:

In a *mixto*, what is the biggest component? The mutual aid part. Even though there is a doctor, a psychologist, the counselor is still the most important part. The person who deals with difficult client situations. The counselor. They are the ones that work on the ground, some-times even sleeping in the same space as the clients. They are the ones who realize what's going on!

But in his depiction of counselors as non-credentialed experts, he sends an ambivalent message. In the following quote, the instructor depicts government resources as stifled by an institutionalized lag in the speed at which the state can produce data that solves technical problems, but he also suggests that it has the power to provide cutting edge information that operators can petition if they are able to act together as a movement based on their embodied expertise. If they can't do this, they'll have to train themselves. Formulated this way, operators have the expertise to decide what the most important knowledge gaps are, but they ultimately rely on the state or on other professionals to fill those gaps:



Every [national addiction survey] has a two year break between publications, so we have to work with that. You might need to tell the government things like “hey, we don’t need to know about marijuana, but we need information about *kokodrilo*<sup>11</sup> and about bath salts”. When I was trained, marijuana was the queen of all this discourse. But what did I see in my toxicology center? Crack. Pure crack. But that had nothing to do with what was on the National Survey 20 years ago. So I had to train myself: what is crack? What is paranoia? People came in with heart attacks and we thought they had hypertension! That wasn’t the issue, so we damaged their health! This is where we need you to help us: *las instituciones tienen la politica; no tienen la experiencia* (institutions have policies, not experience).

69

I watched as operators enthusiastically embraced this frame, wasting no time in joining the teacher in his message that they are indeed experts. But at other moments in my fieldwork I saw them admit the high cost of the knowledge deficits they *do* have. A number of times I watched operators slip into a hushed register as they recounted the fatalities that occurred at centers before the government stepped in to regulate. As one operator estimated in a working group I observed, his center saw fatalities as often as once a month. He chuckled ruefully as he recounted an arrangement they had with a local mortuary that they allowed to handle all the deaths, provided that the mortuary assuaged bereaved families and painted the center as powerless to have intervened.

In this sense, both educators and operators assume that, while counseling is important, medical credentials can mean the difference between life and death. In a different class that met an hour after the one I quote

<sup>11</sup> “Kokodrilo”, or “krokodil” as it is dubbed in english language media, is a street drug made from opiate-containing medications like codeine cough syrup. Though there have been few reports of actual krokodil cases outside of a highly publicized story involving two teens in Joliet, Illinois, the drug received sensational news coverage in 2013 (e.g. Luisa Vivas, María. “La droga come-jóvenes llegó a México”. *Proceso*. Dec 15, 2013, the title translated: “*The child-eating drug arrived in Mexico*”).

above, operators received basic first aid training from an energetic doctor who captured their attention with street slang and dramatic stories of her work in the city's toxicology center. She gave them explicit instructions that could save lives: "alcohol stimulates GABA receptors, which is different than cocaine which stimulates dopamine levels", she explained. "If you receive a client who is showing signs of cocaine-induced psychosis, make sure that they haven't also been drinking, because if you give them benzodiazepines to calm them down, you risk the disastrous consequences of over-stimulating GABA receptors". In contrast to other classes I observed in which at least a handful operators played distractedly with their smartphones, I watched the operators in this class hurry to scribble down everything that this teacher said as they snapped photos of her PowerPoint slides.

Ultimately, she stressed that their role as operators was not to play at being paramedics, but to learn the language of medicine enough to effectively communicate with first responders and save lives, in other words, to act as translators. Instead of calling the doctor and being like "we've got a guy here and he's all fucked up", you need to be able to say "their pulse is doing this, their eyes are doing this, their respiration has these patterns, they're not responding to such-and-such stimulus".

As students diligently took notes and asked engaged questions, they seemed to value the idea of translation and to see this class as legitimate and helpful. This contrasted with other interactions I observed wherein operators confessed their frustration with oversight and reform efforts, seeing them as one more example of capricious governmental bureaucracy.

## TRANSLATION AS GOAL

While operators seem to have a sense that such translation work is important, it's not always clear what the goals of that translation are. That confusion partly stems from the fact that there are certain elements of

the work they do that clearly benefit from scientific knowledge, such as saving lives by communicating with paramedics or avoiding accidental deaths from poorly treated cocaine psychosis. Those situations fall under the category of things that happen as *consequences* of substance abuse. But when it comes to the work of treating the habitual thought patterns that putatively lead people to relapse, the work of teaching people how to stop engaging in cyclical patterns of harmful behaviors that they themselves cannot seem to stop engaging in, the benefits of translating AA 12-step knowledge to scientific knowledge are less clear<sup>12</sup>.

I spent a few weeks living at a center called *Centro Colonia Iztapalapa* and during that time, the operator Ruben and I frequently had discussions about the role of mutual aid in a larger field of addiction expertise. One night I asked him questions about the ways that AA members use certain terminology, particularly as it related to discussions of “the disease of addiction”. In retrospect I now see that, in many ways, the questions I asked Ruben were tacitly informed by my own North American (and often quite reductive) tendency to view “health” as the province of biomedicine and to understand it as potentially being ontologically separable and distinguishable from any attendant “spiritual, psychological and social factors” (as we might say in North America). I thus initially failed to recognize that, for Ruben, a treatment for a “triphasic” condition like addiction, as he describes it below, is

71

<sup>12</sup> This is not to suggest that translation efforts always go in one direction, with “AA knowledge” being translated into knowledge legible to credentialed experts. My larger study shows the extent to which some credentialed experts, particularly government educators, have entire projects dedicated to not only translating scientific ideas into forms compatible with 12-step knowledge. Even as they attempt to push 12-step adherents towards more “rational” or “formal” ways of understanding and explaining addiction, the history of 12-step philosophy as a seminal force in modern ideas about addiction, that is sometimes seen, simultaneously, as problematic and “irrational”, results in ambivalence towards 12-step knowledge on the part of credentialed experts, which results in those experts engaging in equally vigorous, even if not entirely symmetrical, processes of translating scientific knowledge into AA knowledge.

*healthcare* whether it is spiritual, psychological or medical in nature. The interaction is nevertheless informative, however, as it shows how Ruben's understanding of what addiction is informs his claims for the superiority of particular approaches to treatment. In this passage from my field notes, I ask Ruben why AA discourse features such an emphasis on the "disease" concept despite the lack of any explicit injunctions to intervene in biological processes:

72

*Ruben leans forward and begins gesticulating with his hands, waxing pedagogical. "Ok, look, it's like, well, okay: we, Alcoholics Anonymous don't say it's an enfermedad, the World Health Organization (WHO) says that!" he continues. "And if the WHO says it, it's for a reason. So we grab onto what the WHO says, and we say it's an enfermedad. Why? Because they do. They're doctors. They're scientists".*

*I ask him what the difference is between AA and religion, which, as he previously told me, is not effective because religions don't understand addiction to be an enfermedad.*

*"Well," he grants, "they have a very vague idea that it's an enfermedad. But for them, more than an enfermedad, it's the absence of God. [...] It's that the bible says that you need to behave yourself and this, and that. But they never put themselves in the shoes of the addict. Some do, for sure, obviously. Like, there are religious folks who totally comprehend the structure of an alcoholic, although they don't call [alcoholism] a disease. But the majority [of religious folk]? No. What do they tell you? 'Pray three Our Fathers and one Holy Mary' and this, and that. Or, 'with this blessing, you go behave yourself'. But [simply behaving yourself] is impossible. You have to get to the root of the problem".*

I want to know how he sees this as altogether different than the spiritual surrender and prayers for healing suggested by the Twelve Steps of Alcoholics Anonymous, the same steps that hang on the wall in his group's main room.

*"And here in the center?" I ask.*

*"We do that".*

Meaning they get to the root of the problem, as he just mentioned. I'm having trouble understanding how recognizing addiction as an *enfermedad* helps achieve their therapeutic goals if 1) by his account, WHO states that it's an *enfermedad* and AA simply states publicly that they accept that definition, and 2) as he often reminds me, "professionals" are the ones who are supposed to be in charge of treating *enfermedades*, not AA members.

73

*"What is this center's relationship to the concept of an enfermedad?"*

*"I'm getting there. The enfermedad that we suffer from, we say that because the WHO says it, it's trifásica. Which is to say that it has three, um..."*

*"Components?" I offer.*

*"Components. Exactly. Mental, physical and spiritual, and that's what the WHO says, not us, and that it has fatal consequences if it isn't treated in time. So: if the WHO tells me 'you know what? Diabetes is a disease', and I'm not a doctor, but somebody asks me 'hey, what is diabetes?' I say 'it's a disease'. It's the same with alcoholism. I say that it's an enfermedad because they say it's an enfermedad. They say it, not me!"*

I am trying to determine if Ruben sees what he does as health care, but this is hard for me to articulate because of the way he repeatedly delegates the definition and treatment of *enfermedades* to non-AA professionals. Instead of continuing to ask about labels, then, I phrase my question in terms of work objects. I ask:

*"Do you believe that this center is an establishment that treats something...health related?"*

*"Well, at one time we did that. Before this situation where LAPA got involved, and I'm not saying they're bad but I think the focus they had was a little bit bad, we had a doctor, psychologist and psychiatrist. Along with*

*that we had the program of Alcoholics Anonymous. Now we can't sustain that. We can't pay for that".*

74

I am confused at this point: by his account, AA works because it understands addiction to be an *enfermedad*. I understand *enfermedades* in the sense that I understand the world *diseases* in english: those things best treated by a health professional. Ruben is describing health professionals as non-AA persons who are scientifically trained, but he is also saying that AA works because it treats *enfermedades*, which I am understanding to mean "diseases". How is AA better than church, then, by recognizing something as an ontological entity ("disease") which it is not equipped to treat?

I try to figure out another way to phrase myself, to get back to the idea of whether or not he understands 12-step work, independently of the fact that health professionals might also treat alcoholics and independently of what the WHO says about alcoholism being a disease, to be a form of health care. In the passage that follows, I specifically ask if AA has to do with health. His answer doesn't satisfy me at the time, but it is highly revealing of the way that AA members understand the intersection of health (we were using the word *salud*), *enfermedades*, and scientific/medical expertise. By his account, Ruben does not see AA *per se* as health care, but AA is increasingly enrolling health care workers. I now understand, however, that while he doesn't understand himself to be a health care worker, he understands himself as uniquely equipped to treat those elements of the *enfermedad* that science legitimates (by defining it as an *enfermedad* in the first place) but cannot treat (because scientists aren't recovered alcoholics). My position as a native english speaker was keeping me from understanding how health and illness are understood in Mexico: biomedical diseases are *enfermedades*, but not all parts of all *enfermedades* are treatable by biomedicine:

"Do you think that AA has to do with health?"

*"Well, now, in Mexico, they're starting to do that. They're starting to have communication; they're starting to form enlaces (linkages). And that's*

*good. Because, like I told you, the WHO says that this is mental, physical and spiritual. So, the physical part, we as alcoholics” he’s speaking in terms of recovered alcoholics who will always be alcoholics, though they’re now providing treatment for other alcoholics, “don’t know how to cure that. We don’t know how. What do we need to cure that? A doctor. And on the spiritual plane, or I should say, on the mental plane, we need psychologists and psychiatrists who understand the level that we are operating on. “Or rather,” he reconsiders, “some of them, because a lot of them don’t understand. Right now we’re seeing training programs for addiction-ology (adictología) and all of that. So now psychologists and psychiatrists come better prepared to understand the enfermedad of alcoholism and of drug addiction.*

75

*So, then, we have the doctor for the physical. We have the psychologists and the psychiatrists, or the therapists, for the part that’s physic, or mental, and AA covers the spiritual part. So we have those three areas covered. And I think that addict turns out better with this arrangement”.*

Listening to this account, we also see, hear that Ruben’s understanding of alcoholism and addiction as “triphasic” ultimately produces a condition best treated by a *mixto*. Importantly for debates about whether addiction is “medicalized” or “criminalized,” we should observe that his account is neither a medicalization nor a moralization of addiction. For Ruben, the problem has always existed in humans, and its treatment has always called for both medical and spiritual interventions, like AA’s cathartic *compartimientos* (sharing at the podium in an AA meeting) or the AA process of moral inventory. What is changing, and should be changing by his account, is professional fluency in addiction treatment.

Which is not to say that he doesn’t strive to improve his understanding of “what is scientific about addictions,” as he puts it. Almost a year later when the topic of medical and scientific expertise came up again in one of our many conversations-turned-recorded-interviews, he articulates his understanding of addiction science in a very different way. By his account, he received this education in addiction science years prior

to us meeting, but for whatever reason, the way he speaks to me about the neuroscience of addiction strikes me as the product of recent studies. Whether he had gone to, as he puts it, “YouTube University” (he’s an avid autodidact) to brush up on his addiction neuroscience since we last broached the subject, or whether he simply feels more comfortable with me in this moment and thus demonstrates more fluency, I’ll never know. But he performs a basic understanding of addiction neuroscience that would have earned him the confidence of any government addiction science educator in Mexico City.

76

He explains to me that when Marcela Lopez Cabrera took the position of IAPA director when it first opened, she opened the field up to discussions about science that ultimately gave him the tools to translate his AA knowledge into the language that professionals use. It’s unclear what he would gain from this translation work, clinically speaking. At times he moves away from the clinical frame altogether, such as when he intimates that, as a recovering alcoholic, it will allow him to communicate with doctors in ways that alert them to the stakes of his disease. At other times he frames translation as a hoop that he has to jump through in order to be taken seriously as a health care provider in his own right. Ultimately this explanation of science, despite demonstrating a much higher level of fluency in the vocabulary used by educators, positions the 12-step work he does with clients as the key mechanism for bringing about recovery:

*“When Marcela Lopez Cabrera took the reigns at IAPA,” he explains, “the first thing that she does is start us on a path of learning everything scientific about addiction. What are amphetamines? How does the body work? What is heroin? THC? Like, all the drugs”.*

“Because there was a large gap in your knowledge?” I ask.

*“Yes,” he answers. “And thanks to Lopez Cabrera we’ve filled those gaps. Like, Lopez Cabrera was that one that, to be honest, put IAPA on the right track. If they would have stuck a bureaucrat in charge of IAPA from the beginning, it would be dead right now. But not the case with Lopez Cabrera.*



*She started to professionalize all the institutions like ours, and she started to help us out quite a bit”.*

I mention that I had heard critiques of the endless drug descriptions and that I often wondered why I was attending yet another class on the different classes of mind altering substances. I said that I figured operators already knew all about street drugs.

*“No,” he corrects. “They know about their drugs. But they don’t know about, like...”*

*I interrupt to offer the example I learned in the first aid class about benzodiazepines complicating alcohol withdrawal.*

*“Look, here’s a simple example...”*

77

I expect him to give me another example of the consequences of not knowing about a certain class of drugs, but instead he tells me the stakes of communicating his own alcoholism to a dentist. He explains that the anesthesia won’t be as effective, because his body reacts differently than a non-addicted body.

*“I knew anesthesia didn’t work on me, but I didn’t know why! I have to tell doctors when I go for an operation, ‘hey, aguas (look out), I’m an addict! Anesthesia affects me differently than it does a normal person!’ But I didn’t understand that before. Now I do, ever since I started to understand the scientific side of what AA explains to us. How things are”*

I asked him to tell me more.

*“How things are? Look. We talk about the obsession. And we know that ‘obsession’ refers to an idea that overpowers other ideas, including the force of reason and willpower. But nothing past that. But now at a scientific level, the doctor explained to us that we have neuroreceptors and neurotransmitters”. He’s taken a pedagogical tone, over enunciating those last words for my benefit. “And that these neurotransmitters and receptors have, like, I’ll just say an example number because science doesn’t know exactly*

*how many there are, but we have like, let's say four. Four neurotransmitters. So what the neuron does: when we're at a resting state, we have, say, two that are working. And they're sending out their signals. But if there is something that grabs our attention, or something that puts us into a state of alertness, then an additional one turns on, then maybe another, until four are firing. And when you're in a heightened state of awareness like that, or when you eat food that you really like, all those neurotransmitters open up and they send out all these feelings of pleasure. So addicts, and I also learned this from Lopez Cabrera, we have something that they call neuroplasticity. Our brains can change. So us, because we've given ourselves these enormous jolts with drugs, we don't just have four. Rather, we have another one. And another one. And another one. So we get to the point where we have far more than you normally find in nature. So when you're just sitting there, like you show up to a bar or whatever, there aren't just four that turn on, like with normal people. You've got, like, say, eight firing. And that is the obsession. Obsessions are things that [the brain] makes you do by force. So when we enter into recovery or we're in the [AA] group, all those neurotransmitters that our bodies fabricated are still in play. It's a chemical imbalance".*

He goes on to explain that before he learned this science, he wasn't able to explain why drug addiction is an *enfermedad*. He would simply say that the World Health Organization said it was so. He was either making a corrective of our conversation a year earlier when he explained things in just that way, or he had forgotten that conversation entirely. Either way, this was information he had learned years prior, by his account, and it gave him the tools he needed to gain the respect of professionals.

*"So now I can explain to someone trained in medicine, or psychiatry or psychology, why this is a disease. Because, through our exposure to substances, we've altered our organism and how it should normally function. What substances do is they deteriorate your neurons. They kill some of them. And*

*then you have a chemical imbalance. Among those changes is a rupture in the communication between the frontal brain and the mesolimbic area, which is responsible for pleasure”.*

At this point he begins to put his neurochemical explanation in service of a treatment policy that his center is uniquely equipped to implement:

*“So we need a treatment that forces us to have a period of abstinence so that communication between these parts of the brain can be reestablished. Because the brain is plastic. But we have damage, physical damage, and that’s why we say that we suffer from an enfermedad”.*

79

In the section that follows, I discuss how these discussions, in which operators describe *mixtos* as the most effective sites for treatment, also serve as moments in which operators use scientific discourse to assert their legitimacy as service providers within the context of this increasingly regulated field where government officials have the power to close centers or otherwise threaten their organizational viability.

#### SCIENCE AS BARGAINING POWER

Because we’d been talking about these things throughout the months, I recognized that Ruben was using his discussion of neurotransmitters to argue for greater autonomy in terms of treating addicts against their will. Per his account, addicts generally require someone or something to force them into treatment until the brain can repair itself. When he spoke earlier of IAPA operating poorly, he was critiquing their decision to take away his center’s right to provide compulsory treatment. Due to a series of unfortunate scandals in which Ruben’s center had to close two of its three houses because of serious employee misconduct, he had been blacklisted by philanthropists, losing grants from several foundations and NGOSS that were subsidizing the medical doctors and psychi-

artists who made up the professional component of his *mixto*. This reduced the status of Centro Colonia Iztapalapa from *mixto* to “mutual aid”, meaning the center can no longer use the “sandalling patrol”, like the kind I observed at the *mixto* I describe above, to bring clients in against their will. Owing to this fact, Centro Colonia Iztapalapa went from a full *mixto* that treated up to 70 clients at a time to a nearly vacant “mutual aid center” with only seven clients at the time of this writing. Five of those seven clients have profound mental illness and lived at the center during the entire course of my fieldwork. Given that respondents across my sites repeatedly bemoan the unavailability of mental health services, their families will probably continue to pay for them to be interned at the center indefinitely.

Ruben, then, sees science as validating his claim that centers like his should be allowed to intern clients by force if Mexico City is ever going to see a reduction in its rising rates of drug addiction. Material profit is, of course, a partial motivating factor for Ruben and he admits this in our interview. But he also sees his work as a labor of love: he himself was interned by force seventeen years ago, and if it wasn't for this act of providence, as he describes it reverently, he would have never found the life he now enjoys. Treating addiction is his source of income to be certain, but by his account, it also keeps his illness in remission.

Ruben's discussion of neurotransmitters was one of several times that operators I interviewed used science to make claims for organizational autonomy. When I interviewed Porfirio and Fernanda, operators of a *mixto* called Casa Tlahuac, Porfirio opened the interview with something of a sales pitch for his center. His treatment model, in which clients attend 12-step meetings accompanied by classes on meditation and physical fitness as well as a few visits with the psychiatrist if their case calls for it, is *legitimated* by neuroscience even if it's not entirely *informed* by it.

*“Well, I think that our treatment model is very effective because it consists of 18 months here in this center, considering that the addict, or rather,*

*the person with problems from consuming substances, should learn a lot of things. Discipline, among others. On the other hand, we should understand that treatment lasts a long time because our central nervous system has been affected over a long period, sometimes years of consuming drugs and alcohol. And if we do a treatment that's just three months long, during those three months or 90 days, it's very possible that our neurons won't be releasing, or rather, the body is not accustomed to the dopamine levels the neurons add in order to be able to maintain the addict without the addictive substance. Therefore, this little bit of dopamine that the body naturally produces is insufficient, and for that reason the person needs more substances to feel okay. But when you're in treatment for 18 months, we consider that to be a sufficient period for a person to re-establish themselves, for the brain to re-establish itself functioning without substances. With respect to the help that IAPA gives us, especially from my personal viewpoint, it's been really significant because it has opened our eyes with respect to a number of things we're not super familiar with. I have a lot of experience [in this field], but it was insufficient. Because [I lacked familiarity] for example, with the neuronal component. How it worked. And, like, before, I would suddenly lose hope in people because they didn't want to quit using. But we weren't engaged in a type of service that was sustainable. Now that people from IAPA have been giving me those courses, I've adjusted my criteria (discretion/judgement/criteria/evaluation). But yeah, I strongly believe that someone should receive treatment for 18 months".*

81

In his pitch, science confers his model with legitimacy. As we discuss later in the interview, 18 months of treatment is not yet authorized by local laws, which only permit up to six months. He is essentially using our interview, then, as a venue to argue for policy reform based on scientific training provided to him by the same policy measures he wishes to reform. I ask later if they have ever been challenged by IAPA for exceeding the maximum treatment limit, and he responds by saying that very few clients are willing to stay the full 18 months. This same understanding of neuroscience, then, likely does the double duty of

legitimizing his model both to the state and to reticent clients and their families.

Porfirio and Fernanda's position as operators regulated by IAPA is sensitive: at any time IAPA could refer their case to authorities who would reduce their status from *mixto* to "mutual aid" and they're aware of this, which is most likely why they spend time extolling the virtues of IAPA. But they also truly grateful for the training that IAPA provides, and they tell me later in the interview, convincingly, that IAPA has literally changed their lives. Porfirio explains that he initially found sobriety in an *anexo* where he was abused violently. When he first transitioned from client to operator years ago, he mimicked the treatment he'd received but felt deeply conflicted about this. Because of science, he explains, he now sees why that model isn't "sustainable," as he mentions above. In this sense, science replaces violence, and it has helped him carry out his labor of love more sustainably.

82

## DISCUSSION

To be certain, ideas about science are an important element of the treatment field in Mexico. It's clear that the boundaries between mutual aid groups, professionals and "mixed" centers, with their varying perceived levels of scientific rigor, have important consequences, both legally and for the ability of operators to provide, as Porfirio puts it, "sustainable" treatment models. It is also clear, though, that "science" is more than a stable package of skills or knowledge, something that can be imposed on operators as the state works to fill a perceived knowledge gap. It can take that form, as when science-based responses to cocaine psychosis save lives and unscientific ones leave clients dead in treatment centers. But what science cannot explain about addiction is just as important as what it can.

As mentioned above, even when operators reproduce the level of scientific literacy that progressive addiction policy is designed to help them

achieve, they still rely on things like the 12-step model to solve the puzzling technical problem of how to help people avoid cycles of self-injury that they are putatively powerless to control. As Nancy Campbell writes, a persistent lack of a consensus about how to solve that puzzle is endemic to drug treatment projects as a whole, and “symptomatic of the hybrid nature of ‘addiction’ (Dunbar, Kushner and Vrecko, 2010) and its status as a complex social, cultural and biological signifier that has thus far exceeded each and every reductive framework advanced to understand it” (Campbell, 2012).

Given that lack of consensus among even “professionals”, it only makes sense that regardless of how effective education measures are, scientific rhetoric will continue to be the tool that operators use in their daily work.

83

In discussions that emphasize science as a magic bullet that will render the treatment field functional and effective, discussants often neglect to acknowledge all of the challenges that science is perhaps ill-equipped to solve. In my interview with Dr. Luis Solis, an educator, governmental adviser and addiction professional who has been a part of that discussion for over twenty years, he stressed the extent to which addiction seems to outstrip our attempts to understand it. “It’s extremely painful for families to have an addict in the house”, he explained, “and it’s not pretty, or legal, but the ‘sandalling patrol’ is a practical solution for a lot of people”. Later he remarked that “there is something about human nature that fundamentally cannot understand addiction. This drives a wedge of incomprehensibility between the addict and those who care for them, and ultimately repels every type of service provider besides mutual aid groups”. In this sense, the emotional mediates the technical and the epistemic. Through the course of our interview, Solis agreed when I suggested that, given the lack of consensus among addiction “experts”, mutual aid groups and “professionals” are much more similar than they are different. Both groups tend to discuss scientific concepts only insofar as those concepts enable the claim that addiction is a disease. Despite an insistence that the etiology of addiction is (at

least partly) bio-pathological, there is still little articulation of how understanding that pathology will indicate a given course of treatment. The “best practices” emerging from scholarship on addiction tend to suggest ways that treatment should be configured as to give people the greatest opportunity to recover, and in ways that respect human rights and don’t exacerbate any comorbid conditions. The mechanisms of recovery itself, however, are, for the most part, still a mystery.

I felt the insightfulness of Solis’ comments as I observed fifty people embrace an operator named Julio Jose at a *mixto* called Casa Texcoco. In our interview a week prior I had asked Julio Jose to define the disease of addiction for me and he responded with a long discussion that essentially framed addiction as a compulsive moral pathology. I asked if he had taken classes on the neuroscience of addiction, and whether he also identified with that understanding of addiction. He told me that he found it interesting, but that he preferred to leave definitions like those to the “professionals”, as they have “nothing to do” with his daily work as an operator. When I asked him to explain why not, he responded in a way that didn’t so much evade my question as reframe his work as emotional labor that carries an emotional cost. He explained that he likes the training that IAPA gives, and that any education he receives also benefits the center. But he went on to say that this comes with a high price: he needs to keep a large number of things to himself, as his emotional state and comportment have repercussions for the way the center as a whole functions.

I didn’t follow his logic at that moment and we ended up finishing the interview on a different topic. I understood more, though, when I attended an AA meeting he had invited me to speak at as a special guest. Nothing I had experienced in the field up to that point prepared me for what I observed: after I gave a quick talk about my work in the field, the lights dimmed, a man at the podium went from talking about his experience getting sober to singing christian songs with a guitar, and then the meeting became an impromptu tribute to Julio Jose. I looked on as a room full of recovered addicts made a circle around him, touching his



face and bringing him to tears. This was a display of love, presented as a partial and humble reimbursement for love given. Here was a room of more than fifty people thanking their leader for loving them; the very fact of their (sober) presence, a testament to the power of his love.

When he explained to me that he finds IAPA training to be interesting but unrelated to his work and then transitioned into statements about why he needs to manage his emotions in the workplace, it was likely because he was trying to communicate the idea that, to the extent he understands, neuroscience still lacks an understanding of the mechanisms of addiction in any way that would meaningfully shape the content of his personal treatment model. For Julio Jose, science is an interesting and necessary tool for the “professionals” who work in his *mixto*, but it is not the primary one that he personally employs to help people get sober.

85

## CONCLUSION

It is of course difficult for the federal government to regulate something subjective as “love-based treatment”. The government hopes that putatively science-based treatment models, such as *mixtos*, will combine both the rational with the ephemeral and the affective. It should also be noted that despite the general notion that mutual aid work is problematically unscientific, it indeed has its own contingent of scientific support: at an annual conference for the treatment elite held by treatment foundation Monte Fenix, for example, Ricardo Nanni, the general addiction policy director at Mexico’s National Center for Addiction Prevention and Control (CENADIC), presented a string of slides attesting to the fact that mutual aid programs have proven scientific efficacy. Similarly, in an article on the “disease concept of addiction”, researcher and treatment reformer Jorge Sanchez Mejorada draws a straight line from the work of AA-allied doctors William Silkworth and E.M Jellinek, as well as Alcoholics Anonymous itself, to contemporary scientific understandings of alcoholism and addiction (Fernández, 2007).

12-step work and the mutual aid model it has inspired are popular, accessible and putatively effective solutions in a context like Mexico where public mental health services are chronically underfunded or unavailable. As mutual aid groups in and of themselves become the sites of troubling problems like violence, however, the “culture” (as many of my respondents put it) and practices of these groups are seen by commentators and policy makers as broken and needing replacement by more modern or scientific approaches. This reaction has produced education programs that both the government and operators see as productive and even, as Porfirio and Fernanda put it, life changing.

86

Ultimately, though, science isn’t so much a magic bullet as it is a cultural and rhetorical resource that operators and the government will most likely employ alongside other resources. As evinced by the interviews reproduced above, it can be a tool for establishing credibility for an operator’s claims that the government limits their jurisdiction, or can be seen as a language that can translate what a counselor knows as “real” from their own experience into advocacy that’s legible to credentialed experts, as in the case of Ruben. It can also, as in the case of the first aid class I recount, provide life saving information to those instances where clients are still under the influence of substances.

It is true that the field can benefit from “technical innovations with rigorous scientific validity” and equally rigorous research to ensure those innovations “respond to the real needs of the affected population, taking into account the specific sociocultural contexts of treatment provision”, as Marín Navarrete *et al.* note (Marín-Navarrete *et al.*, 2013). But we should also heed the work of critical addiction scholars who point to the limits of attempting to “innovate” our way to better treatment policy. As Nancy Campbell finds, for example, in her ethnographic work on the ways that neuroscience research have been mediated by recovery culture in the United States, “neuroscience cannot abstract itself from the social and political meanings projected onto the figures of ‘addicts’ as a heterogeneous social class” (Campbell, 2013). Writing about the

ways that popular accounts of addiction such as those on the television show Oprah mediate and translate neuroscientific findings, she comes to the disheartening conclusion that the only “experts” who are able to achieve credibility in the public eye are those who are able to stabilize their framing of science in ways that “accord with the ‘facts’ and ‘values’ prevailing within [the] rhetorical space” of the addiction recovery mainstream. Put more simply, the only science that succeeds is AA-friendly science. Although Campbell’s story takes place in the United States, it bears a striking resemblance to the operators like Ruben, Porfirio and Fernanda I interviewed who tacked between moral and scientific registers as they used neuroscience to bolster their ideas about treatment reform.

87

Far more serious than the ways that operators and the government might bend understandings of science to fit with their own agendas, though, are the deeper social problems that make services like the “sandalling patrol” not only possible, but necessary. A deep chasm of income inequality, corruption that potentially affects all levels of government and staggeringly low levels of education need to be addressed for any addiction prevention, harm reduction or treatment policy to be successful. Neuroscience is producing exciting models of addiction that might lead to pharmaceutical therapies or even, as some scientists at the Ramón de la Fuente Muñiz National Institute of Psychiatry hope, prevention tools like vaccines. But addiction is understood to be not only biological, but *biopsychosocial*. Rather than assuming, as many of my respondents often seemed to, that the “social” in *biopsicosocial* only extends as far as client’s families or to the edges of their peer network, a truly biopsychosocial response needs to look at the structure of a larger, increasingly global society that systematically produces improvised responses, such as the “sandalling patrol”, to problems that states either cannot, or will not, attend to.

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