Sacrifice & Stigma in the Four Addiction Treatment Models for Opioids

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Abstract: There are currently four national models to treat opioid addiction. These models use different methods, have different costs, and have different success rates (Bose 2020). This paper hypothesizes that the way the models are structured are key to understanding their success rate. The economics and sociology literature that deals with churches and sects provides a valuable framework when considering the addiction treatment models. Iannaccone (1992) posits that sacrifice and stigma are used in religious organizations to change behavior. Stigma reduces free riding and increases the benefits of club goods that are integral to recovery. The literature on cults will also be used to understand addiction treatment models. Three of the four models emphasize abstinence (harm avoidance), whereas the fourth and the current national model focuses on harm reduction. I will build on Lembke's (working paper) work on Alcoholics Anonymous to broadly cover all four models of addiction care.

Keywords: Minnesota Model, Florida Model, Pennsylvania Model, Massachusetts Model, sacrifice and stigma, free riders, opioids

In the U.S., between 1999 and 2017, the opioid overdoes death rates per 100,000 population (age-adjusted) has increased from 2.9 to 14.9 (an 414% increase).[1] There are currently four national models of addiction treatment for opioids. They are the: Minnesota Model, Florida Model, Pennsylvania Model, and the Massachusetts Model (Bose 2020). The Minnesota, Florida, and Massachusetts models for addiction treatment are abstinence-based or harm avoidance models where the focus is on helping the substance abuser give up their addiction.[2] Whereas the Pennsylvania Model, which is the current national standard of addiction treatment uses medication assistance and counseling to keep patients off illegal opioids and would be a harm reduction model.

The sacrifice and stigma model has been widely used to understand cooperation in a club like setting. The nature of club goods results in opportunistic individuals who over-consume and under-contribute. Club goods in the religious context includes things such as religious service, charitable activities, potluck dinners, bible studies, etc. The success of the group is based on the idea of limiting free-riding via what may seem as unproductive costs and this is because monitoring of members is difficult (Iannaccone 1994). The sacrifice and stigma model was first introduced by Iannaccone (1992, 1994) as a rational choice solution to

understanding some of the costly demands members in cults, communes, and sectarian groups faced. The costly demands were effective in reducing the free-rider problem and screening out the less committed. Sacrifice and stigma prevented one from participating in alternative groups. You either "participate fully or not at all" (Iannaccone 1992). However, at some point increased costliness will drive away patients resulting in less success. As Iannaccone (1994) states, "even though hundreds were willing to join the Bhagwan Rajneesh in Antelope, Oregon, few would have followed him to the Arctic Circle." Hence an optimal level of costliness is ideal to prevent scaring off potential worshippers and on the other hand to preventing free-rider problems.

The sacrifice and stigma model has been widely applied to study religious phenomena such as the growth of sectarian groups (Stark and Iannaccone 1997), the decline of liberal/mainstream Protestantism (Finke and Stark 1992), effectiveness of radical religious groups in providing services and terrorism (Berman 2009), success of medieval craft guilds (Richardson and McBride 2009), and so on. The model has also been extended beyond the religious marketplace. It has been extended to study environmental groups and sects (Bose 2018, Bose and Komarek 2015), military units (Hirofumi 2011), Chinese communist party (Bram 2010), Alcoholics Anonymous (Lembke 2013), outlaw motorcycle gangs (Piano 2017), etc. In this paper I extended the application of the sacrifice and stigma model to the four national models to treat addiction to understand the effectiveness of these models.

The underlying biological basis for the sacrifice and stigma model is that "[t]he oxytocin we experience from *love* or *friendship* or orgasm is chemically replicated by the molecules derived from the poppy plant" (italics added) (Sullivan 2019). Further, there is evidence that Oxytocin "seems to attenuate, even inhibit, the development of opioid use disorders" (Kovatsi and Nikolaou 2019). Hence, I hypothesize that treatment models with high levels of sacrifice and stigma that result in stronger relationships will result in less addicted individuals from the poppy due to increased levels of oxytocin that would be naturally generated.

The literature provides a valuable framework when considering the structure of the four addiction treatment models and how their success rates can be understood. In section 1 we focus on the sacrifice and stigma theory found in the economics of religion literature. In sections 2, 3, and 4, we apply the sacrifice and stigma theory to the four addiction treatment models. Section 5 concludes.

I. THEORY

To explore the relationship between membership in treatment communities and membership in illegal drug communities, we use a club-based model, following Iannaccone (1988, 1992, 1994). This model highlights the relationship between participation in treatment communities and illegal drug communities and uses participation through "human capital" formation (Iannaccone 1990) subject to income and time constraints.

We assume that an individual obtains utility from treatment (T), illegal drug usage (D), and secular (*S*) commodities. *T* depends on time spent in treatment activities, purchased treatment goods (e.g., legal drugs, books), treatment experience and treatment human capital (knowledge gained via rituals, practices, friendships, etc. (Iannaccone 1990)), and conduct. Similarly, *D* depends on time in illegal drug activities, purchased illegal goods, illegal experiences, illegal drug human capital, and conduct (Bourgois 1998, Biernacki 1986, p. 22; Burroughs 1977). Finally, *S* depends on time spent in secular activities, purchased secular goods, secular experience and human capital, and conduct. An individual hence maximizes his or her utility, $U(T, D, S)$, subject to time and income constraints. Conduct is uniform and remains the same in all three settings; for example, abstaining from sex affects all contexts (Iannaccone 1988).

An individual has to decide whether to join a treatment community, illegal drug community, both, or neither. The communities will either facilitate drug taking and reinforce abuse norms or discourage drug taking and reinforce sober norms (Biernacki 1986, 24ff). A person's preferences will influence which group or groups the person joins or does not join. In joining a group, the person makes the decision whether to be a committed member (high level of participation) or an uncommitted member (low level of participa-

tion). Because of the issue of free riding, which is common in collective action scenarios, groups that make membership costly will attract committed members and screen out less committed members. The remaining highly committed members will see the average levels of group participation rise, benefiting themselves. Iannaccone (1992) argues that stigmatizing behaviors such as shaving heads and wearing robes can reduce participation in alternative groups.[3] "Distinctive diet, dress, grooming, and social customs constrain and stigmatize members, making participation in alternative activities more costly" (Iannaccone 1994, p. 1188).

Individuals who join costly groups are forced to participate fully or leave the group. This is true for both treatment groups and illegal drug groups. Because every person has a time and income constraint, it is unlikely that a person who is highly committed to a costly illegal drug community—hence is augmenting up their human capital there—will have time and income to devote to being a highly committed member of a costly treatment community and also build up their treatment human capital. An individual who is a member of a costly treatment or illegal drug community would be discouraged from joining other groups and secular activities; the conduct[4] that is expected of the person will not be compatible across groups, as the distance between treatment community norms and illegal drug use norms will be quite large with trade-offs required. If we use the imagery of religion and environmental groups: imagine being a member of a costly religious group and being expected to attend church two or three times per week, give 10 percent of your income to church, refrain from sex outside marriage, wear appropriate clothing, refrain from alcohol and smoking, and so on. The decision also to join a costly environmental group would come with its own expectations of behavior, appearance, and time commitments, among other things (e.g. not drive SUVs, air dry clothes, etc.) (Bose 2018). Thus, you would face trade-offs between the two groups because of income and time constraints. Hence, we assume that being involved in high-cost treatment groups and being involved in high cost illegal drug groups are substitutes.

However, a person who is a member of a low-cost treatment group could also be a member of a low-cost illegal drug group. This is because the treatment group norms and the illegal drug group norms of low-cost groups will be closer to each other and to the secular norm (Iannaccone 1988). The code of conduct that an individual adopts could be compatible with both the treatment group and the illegal drug group. For example, using the analogy of religion and environmental groups, individuals who attend church once a quarter, give a small percentage of their income to church, and have only minor restrictions on food, clothing, or conduct from their church will find it easy to join an environmental group that requires an annual membership payment, recycling, and an occasional email writing campaign to their senator. One's time and budget would allow for one to be a member of both groups if one so desired. Under this latter circumstance, the individual would not build up large amounts of either environmental human capital or religious human capital.

II. THE MINNESOTA AND FLORIDA MODELS AS CULTS

Minnesota model saw addiction as a behavior that needed to be corrected. It also worked synergistically with the Alcoholics Anonymous (AA).[5] It involves an initial 28-day inpatient immersion which includes attending AA meetings, followed by participation in AA after the 28-day program (Finberg 2015). The 28-day limit has no scientific basis. It is based on the amount of leave personnel from the U.S. Armed Forces could get from military duty for addiction treatment without being reassigned.[6] The 28-days, became the norm for opiate addiction.[7] While inpatient, the patients go through a highly structured program and are kept busy and integrated with professional and nonprofessional staff, many of whom might also be recovering addicts themselves (Anderson, et al. 1999). These 28-day programs occurred in exotic locations away from friends and family. Explicit costs were between $26,000 to $58,000[8] and implicit costs were high also as one has to sequester themselves initially for 28 days continuously, hence requiring tremendous sacrifice.

The Florida Model is the lower-cost variant of the Minnesota Model. As there are no costly luxurious facilities, treatment longer than 28 days is made affordable. The demand for such a program came about due to the needs of patients in the lower income brackets who could not afford tens of thousands of dollars to get

treated in the luxurious Minnesota Model type centers. Many patients left their family and moved to Florida to settle down there for treatment. Patients received clinical services in an office-type venue while living in supervised residential settings. The traditional Florida Model is a 28-day inpatient program where patients were kept segregated, following which they would be returned to the community for outpatient treatment and intensive rehab for up to 90 days. This model afforded flexibility and provided a modular framework for the consumers and insurers to pick and choose what treatments they want to pay for. For example, a patient can choose an adult residential program, or adult outpatient program, or detoxification program, etc., based on their budget and time they had (Alexandre et al. 2012). Costs could be a 1/3 of the Minnesota Model and higher with sobriety rates similar to the Minnesota Model.

Monitoring in the MN model is minimal during the 28 days as one has self-selected to seclude oneself, thereby committing to sobriety. After leaving the program virtually no monitoring takes place unless ones joins AA type organizations where peers and mentors can socially monitor. In the FL model, due to lengthy stays, monitoring is behavioral done via curfews and uses random urine testing. Individuals can be expelled if they violate contracts signed like coming after curfew.

These models require isolation but at some point the individual returns home. The success rates are low.[9] One can model the MN and FL model by using highly sectarian groups or cults. In *Cult Controversies*, Beckford states (1985, p. 118):

> NRMs [New Religious Movements] which are insulated against, and isolated from, the influence of the outside world either by vicinal segregation or by strict rules restricting contact with outside influences to a minimum tend to have stringent entry requirements and relatively liberal procedures for withdrawal. The only people who are recruited are those who have actively sought out the movements and who have shown themselves to be suitable for admission.

Within the cult there are different levels of commitment such as "devotees, adepts, patrons, and…. clients" (Beckford 1985, p. 119). While in cults, people do disengage from them for various reasons whether it be disillusionment or other reasons. Joining cults is through networks and is costly as unusual dress, different diet, communal living, deviant lifestyles (e.g. unusual sexual practices) were their features (stigma). Cults encouraged members to "withdraw from secular society and severely limit[ed] communication with family and friends" (Iannaccone 2006), i.e. high sacrifice.

In the MN and FL model people segregate themselves from the influence of the outside world for 28 days or longer which is a costly proposition. Once graduating from the program, they are encouraged to engage with the local AA type programs to maintain sobriety. AA is one of the more successful programs as it uses stigma (identify as alcoholic) and sacrifice (abstain from alcohol, attend regular meetings, etc.) (Lembke 2013). However, over time, many leave these programs. Having come home, they come to an environment with numerous cues for drug craving and they can re-engage with old connections in the drug community and lose sobriety (Biernacki 1986, p. 79; Burroughs 1977, 72ff). The self-reported sobriety rate is between 5 to 20% at the one-year mark for the MN and FL type models (Hunt, et al. 1971). A study regarding AA suggests that at the end of one year 95% of newcomers have departed, but if one discards those newcomers who leave within 90 days (the "introductory interval"), then the effectiveness or retention rate is 55% at one year and 50% at 5 years (McIntire 2000, Finberg 2015). However, it is not clear why the 90-day benchmark is used, as ignoring the first 90 days would create a biased sample. Further, even secularized versions of AA like LifeRing have similar success rates of around 5 to 10% at the one year mark (Hull 2019).[10] These numbers are similar to what the cults face with their recruitment efforts. Data from the Moonies show that at the end of one year, only 7% membership was retained and at two years only 5% retention (Barker 1984, p. 146). Figure 1 shows the retention rates for AA and Moonies. Those who stayed in cults were those with close social attachments (e.g. close friends in the cult) resulting in positive social benefits, but those who left, primarily it was because "a person maintained strong attachments to a network of non-members" (Iannaccone 2006). Those who stay in AA or Narcotics Anonymous do so due to the com-

munity of mutual support that exists and where there is a "sense of acceptance and belonging" (White 2017, p. 164) and in a sense their whole life belongs there. This is because highly sectarian groups impose corner solutions (Iannaccone 1992, p. 287).

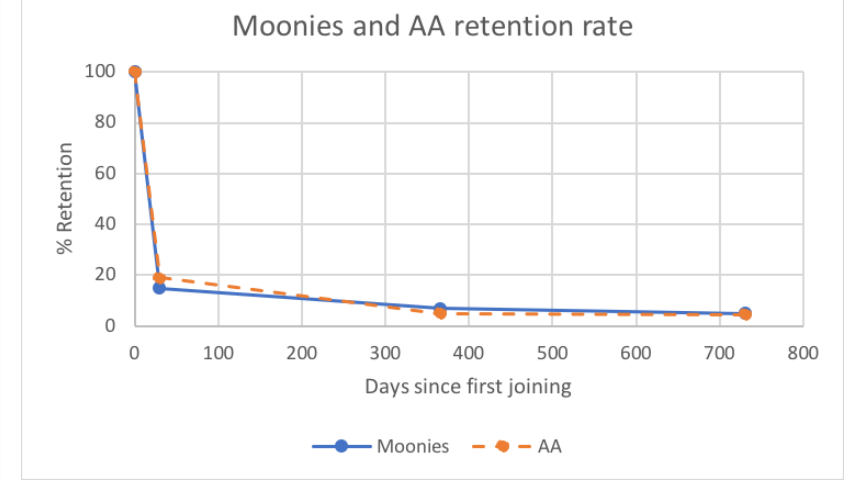

Figure 1: The retention rate of Moonies and Alcoholics Anonymous over a period of 2 years.

III. THE PENNSYLVANIA MODEL AS A CHURCH

In the 1970s, several states mandated insurance coverage for inpatient and outpatient mental health care. Therefore, with the rise of third-party insurance reimbursements for mental health an opportunity/incentive arose to help people through the creation of a new model (McGuire and Montgomery 1982). This model is the psychopharmacology and psychotherapy model of addiction treatment. Further, the Diagnostic and Statistical Manual of Mental Health Disorders 3rd edition (American Psychiatric Association 1980) classified substance use disorders as primary mental health disorders, i.e., it regarded addiction as a mental illness. The overarching conceptual framework is that pharmaceutical agents are needed to help a substance abusing person and hence medications are integrated into treatment with counseling needed to redirect thinking (Volpicelli et al. 2001, p. 78). In opioid addiction, this method uses maintenance doses of methadone and buprenorphine (prescription opioids) to stabilize the disorganized life of the opioid using person.[11] Daily visits to the clinic are needed for methadone with fewer visits for buprenorphine to get the prescription and patients meet weekly with a licensed counselor and also meet once a week as a group requiring time commitments of about 1 to 2 hours per week. However, it is well known that patients receiving inpatient opioid detoxification via the methadone taper protocol or via buprenorphine, with counseling and case management, usually relapse once they leave the facility with a majority relapsing within a month, and 90% relapse after one year, rendering inpatient detoxification a moot choice (Nosyk et al. 2013, Weiss et al. 2011). While costs are around $6500 for methadone (Siegel 2016) ongoing medication assistance costs can last many years. The success rate is between 10 to 33.7% (Stewart, Gossop, and Marsden 2002), with success being defined as avoiding illegal opiates (Dennis, Foss, and Scott 2007) i.e. harm reduction.

Monitoring in the program occurs with random drug tests of at least eight per year with few consequences if one fails.[12] During counseling sessions, patient progress is noted. Hence program monitoring is minimal and generally without consequences.[13]

The PA model for opioids can be seen as church in the church-sect paradigm. Churches are low cost, suffer from free riders, and adopt positions closer to societal norms. Partly for this reason, this is the current national model. Being a member in a church with its low time commitment allows for commitment in

other organizations. For this reason we see between half the patients on methadone maintenance fortify themselves with cocaine and heroin (Cone 2012) to numbers as high as 92.3% using heroin found in earlier studies (Epstein 1974) indicating individuals having links with both treatment networks and illegal drug networks.

Similarly, Moderation Management (MM) proxies as a church, where drinking in moderation is the prevailing norm vs. abstinence in AA (Lembke 2013) this is similar to how many addicts continue to use illegal drugs and do not give it up. The PA model also focuses on reducing stigma (Volpicelli et al. 2001, p. 179). Satel (2007) writes that stigma helps individuals transform themselves and overcome their addiction, hence removing stigma, reduces success and in some sense a redefinition of what success is i.e. avoiding illegal drugs. Further, stigma has been an important component in ending the cocaine (early 1900s) and methamphetamines (1970s) epidemic (Stobbe 2017). The low cost and the emphasis on de-stigmatization results in low success rates in the PA model.

IV. THE MASSACHUSETTS MODEL AS SECTARIAN AND SECT-LIKE

The Massachusetts Model emerged in the 1990s with an emphasis on continuum of care. It was primarily a primary care-based addiction practice. It had four goals: 1) Withdrawal Management, 2) Relapse Prevention, 3) Preventive Health Education, and 4) Lifelong Primary Care. To achieve these goals, the model developed techniques for home and outpatient detoxification. In addition, lifelong surveillance of the disease state is afforded through primary care visits.[14] As a shelter in place model, it keeps people in the environment where drug use occurred to facilitate cue extinction and reinforce family and community support to live a drug free life. The sustained sobriety rate at one-year mark of the program had increased from 37% in 1990s to 60% in 2010 as the process was refined. Surveillance of the sober state was secured objectively via blood, urine, saliva, sweat, and hair samples (Selbrede 2014) in addition to face to face interactions and family reports. The model perceives addiction as a potentially lifelong illness and employs a standard public health approach to unremitting illnesses such as asthma. The first-year cost is around $11,000 subsequent year costs are between 10 to 20% of first year costs (Kishore 2010). Additional costs for medications need to be added and will depend on the patient.

The MA model can be seen more as a mix of sectarian and sect-like model. While visits to the practices are quite often and costly the first month, they reduce in frequency over the course of the year. During the second year, there are usually fewer visits the clinics as patients maintain their sustained state of sobriety. In a sense the model is very sectarian at the beginning as it helps patients build new or reestablish old sobriety (treatment) based networks, and once those networks are built, and sobriety is achieved, the model moves towards a sect-like group where costs are lower. Behavior change is sought within the first month in part mediated by sacrifice in terms of money and time and by extensive monitoring, which enhances participation and augments club goods that make participation worthwhile. The increased costliness and monitoring results in closer ties with the sobriety groups and reduces involvement in competing illegal drug groups. Active monitoring/surveillance of the patient increases participation in treatment, this is unlike sects where monitoring of individual behavior is difficult (Iannaccone 1994, p. 1186). This model also focuses on reducing stigma (IUEast 2019) which may not be as important when the model uses sacrifice and monitoring. Additionally, some of the practices were co-located with the sheriff's office and the judge's office allowing for those on probation to work together as a team on behalf of the patient (IUEast 2019).

As stated earlier, monitoring is very high. Both covert and overt surveillance is used. Patients are tested regularly via urine, saliva, and sweat. Individuals are assessed individually and further, key persons (like the sober support person that the patient is to come with to their appointments) help with monitoring.

Due to high monitoring, this model falls somewhere in the middle of the cost-based continuum between the mainstream and radical sectarian/cult groups. One of the key features of the MA model is rebuilding treatment networks. In this model, someone from the home must be involved in bringing the patient to the centers for treatment. Further, home visits are completed by medical professionals to remove

drug related items. As a primary care system, there is continuity in care with continuing networks in place. People who are sober become ambassadors given token economies who then visit schools to talk about the dangers of addiction. Advocates such as "sober support people", ambassadors,[15] recovery coaches and pastors are also extensions of the practice thus involving wider social networks. For example, a person who has abused their mother when addicted, once sobered up might despair and seek drugs again and descent into the illegal drug networks, but the presence of a pastor and their counsel might be helpful to maintain sobriety (Kishore 2018).

Table 1 summarizes the features of the four models of addiction treatment using the lens of the sacrifice and stigma model.

Table 1: Overview of the features of the four models of addiction treatment for opioids.

	MN/FL Model	**PA Model**	**MA Model**
Sacrifice	Very high	Low	High
Stigma	Yes, in the AA component (Lembke 2013).	Deemphasized	Deemphasized (IUEast 2019)
Monitoring	Low level. MN Model: during 28 days not necessary, minimal surveillance after leaving. Surveillance with peers & mentors in AA (or Narcotics Anonymous). FL Model: Behavioral surveillance via curfews, and contracts.	Low levels. Random testing, and via counseling	High level. Urine, saliva, and sweat tests, frequent visits, and direct and covert surveillance.
Retention	Low	Medium	High
Measure of Success	Program completion. Sobriety based on self-reporting (Bose 2020).	Continued medication assistance and avoiding illegal opiates based on self-reporting (McKeganey et al. 2006, Zhu et al. 2018, Darke et al. 2015).	Sobriety based on toxicology testing and direct observation (Bose 2020).
Benefits (success at 1 year)	5 to 20% (Hunt, et al. 1971, McIntire 2000)	10% to 33.7% (Stewart, et al. 2002) (with medication assistance)	60% (Selbrede 2014)
Feature	Cult/Highly sectarian	Church like	Sect like

V. CONCLUSION

The MA model is very successful in helping people off drugs and part of the strength of the model is because it is modeled between a sect like and sectarian group encouraging strong social and sober networks. Further, since it is a primary care based model, lifelong monitoring is possible. Overall, a dynamic model

that avoids a one size fits all type of treatment would be the best model. For example, for those without good sober networks, a sectarian and hence costlier model would be appropriate to help develop those networks, but for those with good networks, a sect-like (less costly) model would work better. Even the PA model could enhance their model by incorporating programs that help addicts develop capital among those who are not addicts (Biernacki 1986, p. 196). Similar modifications to MN/FL models could be developed especially related to when patients return home to AA type models Development of all encompassing type AA models such that existed in the 1940s and 1950s would need to be available. Further, the AA network would need to be made up of primarily sober people or those seeking to be sober (Dufton 2020).

One complication when understanding costs (or sacrifice) is that some of the costs are subsidized or paid by third party payors like insurance or government. For this reason, the relative success of the models could change without the role of the third-party payors. This is similar to government funding of churches that results in churches going from religious and innovative firms into rent seekers and inefficient (Iannaccone and Bose 2010). Similarly, an Iowa community based program to help alcoholics, once it became funded by the state and federal government, immediately resulted in costing double and resulted in helping less alcoholics (Peele 1990).

Another area of study that needs to be analyzed is the issue of spontaneous remission. One of the reasons over half of the addicts give for giving up substance abuse on their own (without medical intervention) is finding new relationships and avoiding old relations plus support from family and friends, etc. (Walters 2000). This indicates the importance of social networks, and the right type of social networks that are important for success. For this reason, treatment models that are catalysts to building new social networks would see increases in their success rates.

Further, it will be interesting to see what the socio-economic status of patients are who try different models. Iannaccone (1992) finds that sects have members that are poorer, less education, and with less opportunities than those who attend churches. However, in sectarian environmental groups we see wealthier individuals joining them. This seems to contradict the opportunity cost (substitution effect) argument of Iannaccone, however, this is because the income effect dominates the substitution effect (Bose 2018). A final extension of this paper is to look more in depth at faith-based treatment centers to see if there is any variation in how they operate and what role sacrifice, stigma, and monitoring might play (Neff, et al. 2006).

NOTES

1 https://www.kff.org/other/state-indicator/opioid-overdose-death-rates/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D (accessed January 11, 2020).

2 Today, some treatment centers mix the models they use.

3 Although the examples provided here are true for highly sectarian groups, even groups that are moderately sectarian have costly restrictions such as limitations on smoking, drinking, and sex outside of marriage. While these private activities might be hard to monitor, members can be kept in line via feelings of guilt (Iannaccone 1992).

4 Conduct such as selling sex for drugs in the illegal drug world would not be compatible with treatment community norms (Bourgois 1998) .

5 When dealing with opioids, Narcotics Anonymous (NA) is the organization.

6 https://castlecraig.co.uk/blog/2014/06/11/why-28-days-for-inpatient-addiction-treatment/ (accessed November 20, 2018).

7 https://www.npr.org/sections/health-shots/2016/10/01/495031077/how-we-got-here-treating-addiction-in-28-days (accessed November 20, 2018).

8 https://www.businessinsider.com/best-celebrity-rehab-centers-2011-9#wonderland-los-angeles-calif-8 and https://drugabuse.com/luxury-rehab-centers/ (accessed November 24, 2018).

9 Due to the heterogeneous nature of firms, there can be a wide variation in success rates, but overall, the MN/FL type models have low success rates (see Table 1).

10 A recent meta study suggests success rates (primarily based on self-reports) are higher for AA when dealing with alcohol, but not when narcotics are involved (Kelly, et al. 2020) (Bøg et al. 2017).

11 Anti-craving meds are used for alcoholism.

12 https://medmark.com/resources/comprehensive-guide-to-methadone-clinics/ (accessed January 31, 2020).

13 Consequences could be more frequent visits for buprenorphine, and even cessation of prescribing.

14 As primary care system, the patient could be seen for various other ailments beyond substance abuse, e.g. heart health. During visits for other ailments, one can continue to monitor patients for substance abuse.

15 https://ambassadorarticles2004.wordpress.com/ (accessed December 17, 2018).

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