

Literature Reviewed: Methadone Maintenance Treatment Program in China

Jiaorui Ouyang, The Hong Kong University of Science and Technology, Hong Kong

The Asian Conference on Asian Studies 2021
Official Conference Proceedings

Abstract

The two literature I have reviewed are both studies of the methadone maintenance treatment program in China, with significant differences in their timing. The two articles are similar in that they both focus on the factors that influence clients retention, but differ in the specific subject matter. The former was undertaken in 2009 when the program was still being explored and the authors were also exploring whether the administration of methadone doses affected client retention. The latter study will be carried out in 2019, which will show how the project has evolved over the years. The subject of the study is not the client, but the staff involved in providing the service. The reason for choosing these two articles, their reasons and conclusions can be mutually reinforcing and give us a more comprehensive view of the methadone maintenance treatment program in China. While both teams understand that the drug problem in China is more of a moral issue, they focus too much on the exact data in their specific analyses, neglecting the possibility of exploring other aspects of data collection such as interviews. The methadone maintenance treatment regimens are still at a rudimentary stage in China and more research is needed on how to use them more effectively to achieve harm reduction.

Keywords: Methadone Maintenance Treatment, Harm Reduction, China

iafor

The International Academic Forum
www.iafor.org

Background Introduction

The drug problem has a long history in China, dating back to the Opium Wars. According to official data, by the end of 2016, there were 2,505,000 drug abusers in the country (excluding the number of people who had not relapsed after three years of abstinence, the number of deaths, and the number of people who had left the country). Among them, 955,000, or 38.1 percent, were abusers of opiates such as heroin (Office of China National Narcotics Control Commission, 2017).

In China, the drug problem and AIDS are closely linked. Heroin users often end up using injections to get more pleasure, and China's drug users, who are predominantly of low educational background and low wages, often share needles. This leads to an extremely high risk of HIV infection. In 2003, the news showed that drug use was still the main route of infection for 61.6% of reported HIV infections in China, but sexual transmission and mother-to-child transmission were on the rise (Gong, 2003).

Therefore, to combat the growing HIV epidemic within China's borders, the methadone maintenance treatment program has been implemented jointly by the Chinese Ministry of Health, the Ministry of Public Security, and the State Food Supervision Administration since 2004. The first batch of eight clinics was tested in five provinces between March and June 2004. The five provinces are Guangxi, Guizhou, Sichuan, Yunnan, and Zhejiang, most of which are located close to China's national borders. Four of these provinces are in the southwestern part of China and have a high number of drug users because of their frequent contact with areas of the "Golden Triangle" where the traditional drug culture prevails, such as Myanmar.

There is an important premise that, for some unknown reason, the annual anti-drug report for China, which has been published every year since 1998 by the Office of the National Narcotics Control Commission of China, has become the China Drug Profile since 2018. The focus has shifted from the people who use drugs to how much of the substance drugs are manufactured and seized. As a result, according to currently available data, by the end of 2016, there were already 789 clinics with 162,000 clients in China receiving relevant drug treatment and maintenance therapy (Office of China National Narcotics Control Commission, 2017). This measure has achieved outstanding results in its first decade (2004-2014). The national HIV prevalence among people who inject drugs has fallen from 10.9% to 6.0%, and the proportion of newly diagnosed HIV infections due to intravenous drug use has fallen from 44.2% to 6.0% (National Health Commission, 2015; Wang et al., 2015).

At the end of 2014, drawing on successful practical experience, the National Health and Family Planning Commissions, the Ministry of Public Security, and The State Food and Drug Administration has jointly issued the Measures for the Administration of Drug Rehabilitation and Drug Maintenance Work. This is a very comprehensive document, which stipulates that the management of this work is mainly organized by provincial health and family planning commissions, and that public security organs are responsible for the registration of information on treatment personnel in their jurisdictions. Provincial food and drug regulatory authorities are responsible for the audit and determination of maintenance drug preparation units within their jurisdictions, the supervision and management of the preparation and supply of maintenance drugs, and the monitoring of drug abuse among treatment personnel. Medical institutions specifically carrying out maintenance therapy work shall, upon approval by the provincial health and family planning administrative department, promptly file a record with

the public security organ at the same level. The provincial health planning administrative department shall notify the public security authorities and food and drug supervision departments at the same level as the relevant information. The provincial health and family planning, public security and food, and drug supervision departments shall each report to the administrative department at the next higher level for the record (National Agency for Disease Control and Prevention, 2014).

In summary, the methadone maintenance treatment program in China is a highly administrative and legalized program. Any doctor, nurse, or pharmacist working in the field of maintenance therapy needs to have the relevant qualifications approved by law and to attend the required training in maintenance therapy. This has led to problems in the implementation of the methadone maintenance treatment program, as people who use drugs in China are more likely to be treated not as consumers, but as deviants who need to be corrected.

For the methadone maintenance treatment program, it is true that increasing the number of clinics offering services nationwide will enable it to reach more people who use drugs; having more comprehensive behavioral guidelines and training measures is also a necessary factor in making the project more successful. However, given that it is not the same as the traditional Chinese compulsory residential detoxification, clients are eligible to withdraw from the service without being subject to additional legal sanctions. Therefore, it is of the utmost importance that clients' retention rates are increased.

The two articles I have chosen are both studies of the methadone maintenance treatment program in China, with significant differences in their timing. The two articles are similar in that they both focus on the factors that influence clients' retention, but differ in the specific subject matter. The former was undertaken in 2009 when the program was still being explored and the authors were also exploring whether the administration of methadone doses affected client retention. The latter study will be carried out in 2019, which will show how the project has evolved over the years. The subject of the study is not the client, but the staff involved in providing the service. The reason for choosing these two articles, their reasons and conclusions can be mutually reinforcing and give us a more comprehensive view of the methadone maintenance treatment program in China.

Approach

Both articles used questionnaires in their data collection. The study by Liu's team's (2009) group used a prospective cohort design. The main questionnaire used a Chinese version of the fifth edition of the Addiction Severity Index Scale (McLellan, Cacciola, Alterman, Rikoon, & Carise, 2006), plus some additional questions. Unfortunately, the article was not accompanied by the details of the questionnaire, so it is not known what the additional questions were. This was a more geo-referenced study of 1,003 clients from eight clinics in six cities in Guizhou province. They had to have been on methadone maintenance therapy for more than two and a half months and had not been transferred from another clinic. The longest-following clients in the entire study were for up to one year, the shortest for three months. The definition of retention in the study was as a client still taking methadone during the month prior to the study being completed.

The main methodological highlight of this team's (2009) study is the comprehensive examination of several variables:

Methadone dose, age, gender, education, ethnicity, religion, marital status, history of chronic

disease, history of drug use, drug use method, local residence, family support, employment, treatment goals, clinic hours of operation, clinic location, and clinic costs were the variables explored in the analysis. In the multivariate analysis, dummy variables were created for the categorical variables (p.305).

The team under Luo's team's (2019) leadership collected the data in a very different way. The survey covers a wider area than the more precise geo-analysis, with a total of four hundred and eighteen service providers in different positions in sixty-eight clinics in five provinces. The study provided written consent as the service providers were faced with a higher level of knowledge. Respondents will take an individual survey in a private room at the clinic using the computer assisted self-interviewing (CASI) method. In contrast to the objective quantification of the degree, this study, as it explores the emotional issue like stigma, respondents were mainly asked to answer a question on how they felt about a hypothetical situation:

The scale consisted of two sets of statements that were used to describe two hypothetical people (Xiao Zhang as a non-drug user and Xiao Wang as a drug user) who had both recently lost their jobs and broken up with their girlfriends. For each hypothetical person, participants were asked to read ten identical statements about whether the person deserved the adversity of his life, their empathy and understanding of the person, and their willingness to interact with the person in a different situation (p.74).

At the same time, Luo's team's (2019) research team supplemented their search for whether theoretical knowledge affects emotional judgment by asking and answering nineteen specialist questions about the methadone maintenance treatment. The research team adapted the guidelines originally developed by Caplehorn, Irwig, Saunders, and Chir (1996) to the relevant Chinese guidelines (National Health Commission, Ministry of Public Security of China, & State Food and Drug Administration, 2006), with the main aim of understanding the extent to which service providers know about these aspects of maintenance treatment goals, clients eligibility, appropriate dosage, management of overdose, and possible side effects of the methadone maintenance treatment.

I would argue that both of these methods of data collection have some shortcomings in terms of their effectiveness in achieving the objectives of the survey. In Liu's team (2009), if the main aim was to understand the difference that dose made to retention rates, what was the significance of setting so many of the remaining variables? Is it just to sort out up to a thousand respondents? I cannot see any further clarification of the relationship between the remaining variables and the dose of methadone used, are these factors influencing the dose at their compliance-related clinics? In addition, I think the starting point for selecting the six cities was to make the survey more widely used, but what is the relationship between clinic choice and dose? Do more remote clinics, for example, encounter greater obstacles to dose control and modification? Due to the cumbersome nature of the classification, very detailed data was obtained, but further links were lacking. Since there are sufficient sources of information about clients' personal backgrounds, it is also important to investigate and record their views on compliance with different methadone doses, since the methadone maintenance treatment program is a joint project between the provider and the clients.

The shortcomings of Luo's research team (2019) are all more unfortunate because I think they have made a logical error, or rather a scientifically dogmatic, mistake in assuming that the data would be more credible than the narrative. If you need to study an emotionally dimensional variable, it helps to do so by way of hypothetical situations. However, as many of the service providers are highly educated and professionally trained, it is difficult to prove that their choice

of the answer was not induced behavior when they were aware of the survey and answered the questions in a separate room on a computer, especially if the answers to the questionnaire were multiple choice. I believe that a more empirical form of research, such as field notes of service providers' specific movements and facial expressions towards clients, or one-on-one story-based interviews with them, where service providers are able to reveal more of their innermost views, would make the data more credible as a source.

Theoretical Commitment

Although the second article was published much later, the theoretical commitment behind it is a more traditional one - the phenomenon of stigmatization. What needs to be refined is that the focus of the research in this article is not on the stigma that people who use drugs feel about their behavior. The focus is on the service providers in the relevant treatment clinics providing methadone maintenance services, their perceptions of this behavior of drug use, and the stereotypical perceptions of people who use drugs, which impact specific work behaviors. The behavior of the service providers influenced client retention, which, given that it was not a compulsory process, could lead to early withdrawal from treatment and failure to achieve abstinence from the drug.

As Luo's research team (2019) has recognized, the reasons for the stigma that service providers feel towards people who use drugs are quite varied. A number of scholars have pointed out that it is because substance abuse is seen more as a moral issue than a health issue (Li, Wang, He, Fennie, & Williams, 2012), a factor that is particularly salient in the case of China. China's modern history has been marred by a drug problem, and therefore the importance of drugs has been promoted in the national education sector. In my personal experience, from primary school onwards, there is an organized program of anti-drug films, documentaries on drug addicts, and regular police visits to schools to promote the dangers of drugs. This is a rather subtle psychological influence which, combined with China's strict drug restriction laws, has created a mainstream attitude towards drugs among Chinese citizens. It is illegal to take any kind of drug anywhere in China. It is a crime to sell drugs, to allow others to take drugs, or to possess a certain amount of drugs.

Having made such a dominant attitude explicit, it can be seen that the focus of this paper is not to examine exactly why service providers stigmatize clients who use drugs, but rather to examine the extent to which it does. And whether the degree of knowledge gained through additional knowledge about the methadone maintenance treatment can change service providers' attitudes towards clients. In other words, what Luo's team (2019) wanted to reveal was whether professional medical knowledge would enable service providers to divest themselves of their established national political and economic identities and instead operate under more medically driven professionalism, which would have a significant impact on improving clients' retention.

The data from the first hypothetical scenario demonstrates that service providers have a bias against clients who use drugs and that drug users, especially heroin users, are often associated with a high prevalence of HIV. It is difficult for service providers with occupational exposure to establish a positive interaction with their clients.

But I think the first validation conclusion is perhaps not one that can be reached by hypothetical questions, the same hypothetical questions such as whether the level of sympathy for his unemployment and brokenness changes because he is a drug addict, whether he would not

allow his children to go to the other person's home and be too personal and life-affirming. The reasons for the reluctance to connect with clients on a more primary level are not clear from a service provider's point of view, for instance, Is the drug addict poorly compliant? Does he/she come to the clinic unpunctual? Is he/she not dressed neatly enough? Is it more difficult to talk to him/her than to ordinary people? Luo's research team (2019) did not carry out further research in these areas. And their supplementary question was actually based on the belief that more expertise could influence the attitudes of service providers from previous scholars (van Boekel et al., 2013, 2014).

The conclusion, however, was that there is a huge difference between theory and reality and that such a conclusion could not be linked to the knowledge quiz scores by the answers to the hypothetical questions. More specifically, whether and in what specific ways the attitude of the service provider is influenced by vocational training is the core of the question. Moreover, Chinese drug users would not be alienated or desperate or find it difficult to accept stigmatization based on mainstream Chinese values, which seems to be very different from the Western context. So, with psychological expectations, what exactly are the initiatives of service providers that can affect their retention rates? Obviously, it is not about whether the other person has enough expertise, or whether deep down they despise them. It is my belief that the idea of Chinese drug users who want to be recognized and understood by their service providers while undergoing methadone maintenance treatment have such an emotional appeal to each other is not valid.

Luo and her team's (2019) research made some creative suggestions around the further professionalization and stigma-reduction of methadone maintenance, such as directing service providers to view the drug problem more as a health issue than a moral issue, scaling up training on methadone maintenance and, in particular, adding the need for stigma-reduction.

The question is, does addressing these components really improve clients' retention, and Liu's research team (2009) early studies seem to offer a particular but more effective entry point to methadone dosing. Dose selection in the methadone maintenance treatment program was not an inherent value at the time of the survey conducted by Liu and the team's research team in 2009.

As we can also see from Liu's research team (2009) survey, they investigated different ranges. Like Luo's (2019) team, Liu's (2009) research team study also builds on a Chinese search for ideas in the West, where multiple studies have demonstrated that methadone doses are associated with higher retention rates (Booth, Corsi, & Mikulich-Gilbertson, 2004; D'Ippoliti, Davoli, Perucci, Pasqualini, & Bargagli, 1998; Faggiano, Vigna-Taglianti, Versino, & Lemma, 2003; Strain & Stitzer, 1999). In the specific investigation by Liu's team, methadone doses of less than 45 mg were not associated with retention rates, and increasing the dose beyond 45 mg was significantly associated with a gradual decrease in withdrawal time. Higher doses resulted in better retention rates, and there was a positive dose-response relationship between methadone dose and client retention.

As the specific effect of methadone is to help users of opiates such as heroin through withdrawal reactions, the choice of the dose appears to have a greater impact on retention rates than the attitude of the provider. No healthcare service is pleasure-oriented, or will not be as customer focused as commercial practices. This view is common to all clients who use drugs, and the dose of help has a greater impact on retention rates, which directly affects the clients' assessment of the effectiveness of this treatment. It is interesting to note that in the previous

research (Lin, Lan, Li & Rou, 2018) it was shown that only 15.8% of providers would not change the dose of methadone at the clients' request. This results in what I would call a correlation between the findings of the two above articles, when in fact the giving of this dose is a very mobile behavior. Even if the guideline only suggests a range of 60-80mg, the dose is often lower than recommended in practice, according to the traditional Chinese mentality of "it's the medicine that counts". Drug users do not want to move from one drug of abuse to methadone abuse, as seen in Liu's (2009) research team's study, where 88.7% of clients intended to eventually stop using methadone. This brings the relationship between dose use and service delivery into a more complex situation, and how to manage the degrees of this to create an effective link. The methadone maintenance treatment program can really help clients, rather than creating another less harmful form of drug dependence.

As I mentioned earlier, Liu's team steam collected several variable, but were not able to uncover any link between them and dose selection. Does gender, ethnicity, history of drug use, family support or lack of it, or current residence influence their desire for a dose of medication? Which ultimately leads to their different retention rates?

Even the attitude of the services provider is a variable that affects the dose, and if one provider will make changes at the clients' request, while the other does not, even rudely, treat his request, this will undoubtedly influence whether the clients drop out of the program or not. In spite of the expected stigmatization of drug users in China, they are still vulnerable and need to be protected. In the Chinese context, the willingness to participate in methadone maintenance treatment program can be seen as an attempt to "get back on track" and requires a great deal of courage, not only from the people who use drugs themselves but, as Liu's (2009) research team's study shows, from the support of 94% of the families. In a Chinese society where the individual family is the core social network and most drug users do not receive understanding from their families, the use of methadone maintenance treatment has an important role to play in alleviating family conflicts and promoting a sense of inclusion and love. In this perspective, the dose may also influence the attitude of non-drug using family members towards the program.

Therefore, in conjunction with these two studies, training on the methadone maintenance treatment program should be targeted not only at service providers but also at the families of clients who come for treatment. The tripartite relationship between dose and provider attitudes, as well as the client, needs to be further studied, and various factors such as gender, education, religion, class, should be taken into account. Although the methadone maintenance treatment is a scientific program, it is more culturally relevant in China, and emotional factors are necessary to understand and improve the program.

Conclusion

Although Liu's (2009) team and Luo's (2019) team's study differed in the specific way in which the data were collected and in the choice of objects regarding what factors influenced client retention in the methadone maintenance treatment program in China, what both studies had in common was the confirmation of the feasibility of a Chinese context for some successful Western experiences and ideas.

It should not be overlooked that Liu's team (2009) has recognized the importance of dosing on retention rates eleven years ago when the program was under construction in China and that this has led to scientific judgments on dose ranges in future guidelines. The team of Luo (2019)

recognized that the aim of a more effective methadone maintenance treatment program was not only to increase the hard power aspects, such as the number of clinics, but also the soft power aspects, such as the attitudes and professionalism of the service providers.

While both teams understand that the drug problem in China is more of a moral issue, they focus too much on the exact data in their specific analyses, neglecting the possibility of exploring other aspects of data collection such as interviews. The methadone maintenance treatment regimens are still at a rudimentary stage in China and more research is needed on how to use them more effectively to achieve harm reduction.

Reference

- Booth, R. E., Corsi, K. F., & Mikulich-Gilbertson, S. K. (2004). Factors associated with methadone maintenance treatment retention among street-recruited injection drug users. *Drug and Alcohol Dependence*, 74(2), 177–185.
- Caplehorn, J. R., Irwig, L., Saunders, J. B., & Chir, B. (1996). Attitudes and beliefs of staff working in methadone maintenance clinics. *Substance Use & Misuse*, 31(4), 437–452.
- D'Ippoliti, D., Davoli, M., Perucci, C. A., Pasqualini, F., & Bargagli, A. M. (1998). Retention in treatment of heroin users in Italy: The role of treatment type and of methadone maintenance dosage. *Drug and Alcohol Dependence*, 52(2), 167–171.
- Faggiano, F., Vigna-Taglianti, F., Versino, E., & Lemma, P. (2003). Methadone maintenance at different dosages for opioid dependence. *Cochrane Database System Review*, 3, CD002208.
- Gong, X. (2003). Drug use dominates HIV infection in China, sexual transmission on the rise. *Warp and weft*, p.2003-A.
- Li, X., Wang, H., He, G., Fennie, K., & Williams, A. B. (2012). Shadow on my heart: A culturally grounded concept of HIV stigma among Chinese injection drug users. *Journal of the Association of Nurses in AIDS Care*, 23(1), 52–62.
- Lin, C., Lan, C., Li, L., & Rou, K. (2018). Service providers' adherence to methadone maintenance treatment protocol in China. *International Journal Of Drug Policy*, 56, 1-5. doi: 10.1016/j.drugpo.2018.02.018
- Liu, E., Liang, T., Shen, L., Zhong, H., Wang, B., Wu, Z., & Detels, R. (2009). Correlates of methadone client retention: A prospective cohort study in Guizhou province, China. *International Journal Of Drug Policy*, 20(4), 304-308. doi: 10.1016/j.drugpo.2008.09.004 (Liu et al., 2009)
- Luo, S., Lin, C., Feng, N., Wu, Z., & Li, L. (2019). Stigma towards people who use drugs: A case vignette study in methadone maintenance treatment clinics in China. *International Journal Of Drug Policy*, 71, 73-77. doi: 10.1016/j.drugpo.2019.06.005
- McLellan, A. T., Cacciola, J. S., Alterman, A. I., Rikoon, S. H., & Carise, D. (2006). The Addiction Severity Index at 25: Origins, contributions and transitions. *American Journal of Addiction*, 15(2), 113–124.
- National Agency for Disease Control and Prevention. (2014). Measures for the Administration of Drug Rehabilitation and Drug Maintenance Work. Retrieved 03 December 2020 from: <http://www.nhc.gov.cn/jkj/s3584/201501/c41fb31e2ed44e859a97b43b46cb8259.shtml>

- National Health Commission. (2015). China AIDS response progress report. Retrieved 03 December 2020 from http://www.unaids.org/sites/default/files/country/documents/CHN_narrative_report_2015.pdf.
- National Health Commission, Ministry of Public Security of China, & State Food and Drug Administration. (2006). Work plan of community maintenance treatment for opioid addicts. Retrieved 03 December 2020 from http://www.gov.cn/zwggk/2006-07/20/content_340907.html
- Office of China National Narcotics Control Commission. (2017). Annual report on drug control in China. Retrieved 3 December 2020 from http://www.nncc626.com/2017-03/30/c_129521742.htm.
- Strain, E. C., & Stitzer, M. L. (1999). Methadone treatment for opioid dependence. Baltimore, MD: The John Hopkins University Press.
- van Boekel, L. C., Brouwers, E. P., van Weeghel, J., & Garretsen, H. F. (2013). Stigma among health professionals towards patients with substance use disorders and its consequences for healthcare delivery: Systematic review. *Drug and Alcohol Dependence*, 131(1-2), 23–35.
- van Boekel, L. C., Brouwers, E. P., van Weeghel, J., & Garretsen, H. F. (2014). Healthcare professionals' regard towards working with patients with substance use disorders: Comparison of primary care, general psychiatry and specialist addiction services. *Drug and Alcohol Dependence*, 134, 92–98.
- Wang, L., & Guo, W., & Li, D., & Ding, Z., & McGoogan, J. M., & Wang, N. China National HIV/ AIDS Surveillance Program. (2015). HIV epidemic among drug users in China: 1995–2011. *Addiction*, 110, 20–28.