

2012

CAHR China Report



Pavlo Smyrnov

International HIV/AIDS Alliance

09.11.2012

Content

Background	2
MMT.....	3
NSP	4
VCT and ART access	4
Outreach	4
Visits to sites	5
MMT/CDC site in Chengdu	5
Visit to community center in Chengdu	5
Visit to CDC in Xindu	5
Visit to syringe exchange in Xindu.....	6
R&R day 1	7
R&R day 2	7
Visit to MMT in Chengdu.....	7
Visit to community center in Chengdu	8
Recommendations	9
Peer-driven intervention to increase program reach	9
PDI model description.....	9
PDI experience in Ukraine	10
Application of PDI in China	10
Support of peer-groups and provision of syringes through peers at the MMT clinics	11
Rapid HIV testing introduction as routine practice	11
Scale up HIV treatment for IDUs.....	12
Bibliography	13

Background

This report is prepared by Pavlo Smyrnov. It covers the period from September 3rd to September 7 of 2012. During this trip I visited two methadone maintenance treatment clinics (MMT clinics), and three syringe exchange sites. I participated in R&R session of Alliance China. In addition I reviewed published papers on MMT and harm reduction in China.

China is placed close to two largest heroin producing regions (Myanmar and Afghanistan via Pakistan) and in addition to having a large illegal drug market inside country, it serves as main trafficking route from drug producing regions to the rest of the world. Historically China had experienced large opiate use during various periods. By 1906 13.5 million adults were using opioids (Liu, Liang, Zhao, & Zhou, 2010). It is estimated that in 1949 there were 20 million opium users (J. Li, Ha, Zhang, & Liu, 2010; Qian, Schumacher, Chen, & Ruan, 2006). Currently China has the largest number of IDUs in the world. Number of registered drug users (tested positive by urine test by PSB) in 2010 reached (Ruan et al., 2007) 1.33 million with majority of them injecting heroin (Ministry of Health People's Republic of China, Joint United Nations Programme on HIV/AIDS, & World Health Organization, 2011). At the same time estimated number of drug users is much higher, for example UNODC estimated 2.3 million opiate users in 2009 (HRI, 2012; UNODC, 2011), and other sources indicated 3.5 million drug users in 2007 (Lin, Wu, Rou, Pang, et al., 2010).

Amphetamine type stimulants have been popular among youth from late 1990s (Lu, Fang, & Wang, 2008; Suwanwela & Poshychinda, 1986). Proportion of synthetic drug users is increasing in China from 2008 and in 2010 has reached 28%. In 2010 China had the largest number of methamphetamine tablets seizure in the world (58.4 million tablets); the same year 382 kg batch of "ecstasy" was seized (UNODC, 2012).

Most of HIV cases among IDUs are registered in so-called high transmission areas. According to surveillance data overall prevalence of HIV among IDUs is 5%, while in some areas of Yunnan, Xinjiang, Guangxi, Jiangxi, Guizhou, Sichuan provinces HIV prevalence among IDUs is as high as 50% (Na & Detels, 2005). It is estimated that about 29% of total number of people living with HIV in China are people who use drugs (WHO, 2009).

According to the Law on the Prohibition of Narcotics drug users who are registered for the first time should go to voluntary detoxification center (run by Health bureau) which cost 2,000 - 5,000 Yuan and may include short term methadone or buprenorphine use, if it is not successful, relapsing patients identified by PSB are sent to compulsory rehabilitation and detoxification center for 3-6 months and up to 1 year (run by Public Security Bureaus, PSBs), and those with multiple relapses or those who unable to cover cost of detox center are detained to re-education through labor centers (run by Justice bureau) for 1-3 years (Sullivan & Wu, 2007). This traditional approach is widespread despite it had limited effectiveness in addressing drug dependence and HIV transmission (relapse rate after release is between 65-90%) and has negative impact on harm reduction (IHRA, 2010; Larney & Dolan, 2010; Lin, Wu, Rou, Pang, et al., 2010).

It is estimated that there are 1200 detox centers in China (700 compulsory, 300 camps, 200 voluntary centers) (IHRA, 2008). Overall there are about 300,000 drug users detained (WHO, 2009).

From June 1st, 2008 new Drug Control Law had significantly reformed the drug abuse response in China. This new law prioritized prevention activities, community-based model of drug treatment and waived requirement for drug users to stay in detoxification centers, and gave them right to select treatment and other services instead. Thus new law gave IDUs more choices of "treatment" than just bringing them to "justice" (J. Li et al., 2010; Liu et al., 2010).

MMT

Methadone was used for short term detoxification in China from 1993. Long term methadone therapy was used with research purposes from 2002 and in 2004 government started 8 methadone maintenance clinics (MMT) for drug users at 8 pilot sites (Meise et al., 2009). MMT scaled up to more than 738 sites by the end of 2011 covering 344,000 clients. It is estimated that 240,000 of them are IDUs (30% of registered IDUs) and 103,200 non-IDUs (20% of registered non-IDUs). Estimated HIV prevalence among MMT clients is 6%, while prevalence of HCV is 60%. The HIV prevalence among MMT clients is not significantly different from HIV prevalence among non-clients (Zhuang, Liang, et al., 2012). This suggests that MMT program should make additional efforts to attract HIV positive IDUs. Also all HIV positive MMT clients should have access to ART.

The cost of the daily methadone despite the dosage is 10 Yuan (\$1.20). The criteria for inclusion in MMT are age, local registration with PSB and registration with local administration (Zhuang, Wang, et al., 2012).

National training center for clinical support and education of MMT staff was established at the Yunnan Institute of Drug Abuse. Numerous studies were conducted during these years to provide scientific evidence for effects which MMT program has on drug use and infections among IDUs. Decreased drug use, frequency of injection and decrease in criminality as well as increase in quality of life and employment of MMT patients were well documented (Chen & Fujiwara, 2009; Du et al., 2008; Pang et al., 2007; Ruan et al., 2007; Xiao, Wu, Luo, & Wei, 2010). Although heroin use is concurrent to methadone treatment in 45% of cases, proportion of those who use heroin and proportion of those who inject decreased after two years of MMT program particularly with higher methadone dosage (L. Li, Lin, Wan, Zhang, & Lai, 2012). At the same time ephedrine use increased (L. Li, Sangthong, Chongsuvivatwong, McNeil, & Li, 2011). It was also observed that concurrent heroin use is 2.8 times higher among those who have heroin using friends comparing to those who have no friends using drugs (L. Li et al., 2012).

Zhuang et al. indicated that many researchers reported high drop-out rates from MMT program (25%-45% during 6 months) with the main reasons for drop-out being relapsing drug use and infection-related stigma and treatment complications. Another paper (Sullivan & Wu, 2007) suggests that lower dosages of methadone may contribute to the high dropout rate. Number of researches call for integrating HIV/HCV prevention programs, targeting young drug users, including needle-exchange, psychological treatment, social support, nursing care into MMT programs (Zhuang, Wang, et al., 2012). Such additional services are also reported to increase retention and coverage of MMT (Lin, Wu, Rou, Yin, et al., 2010).

Despite large number of sites MMT scale up is limited since it can only be started at the clinics with minimum of six staff members which makes it is cost effective only in areas with more than 500 registered drug users. Another limitation is that to start on methadone drug users have to be registered with Public Security Bureaus (PSB) and have residency in the area at least 3 months.

Due to large scale MMT program China has very peculiar situation with harm reduction. Unlike in many developing countries with widespread epidemic of illegal drug use Chinese government has a "dramatic ... commitment to harm reduction" (IHRA, 2008). Methadone treatment is widely available and due to payment by clients the program is self-sustaining and potentially can be profitable. In this way clinics potentially can generate some additional funds which later can be used for funding additional client oriented services including NSP, HIV prevention services and proactive outreach to IDUs who are not clients of the clinics yet, offer them participation in MMT or provide services to those who have no intention to receive MMT. For example, local CDC at some sites provide some support to needle exchange sites and also host small groups of peer outreach workers. The payment for MMT has implication on access since some IDUs would not afford payment if they don't have permanent work or another source of regular earnings.

NSP

Needle and syringe program (NSP) was introduced in China from 2000 with international support; all sites were supervised by local CDCs (Smith, Bartlett, & Wang, 2012). In 2008 China had 775 NSP sites in 17 provinces of China regularly visited by 45,121 IDUs, in 2011 there were more than 900 sites (HRI, 2012; IHRA, 2008). Harm reduction strategies including methadone and needle-syringe programs were described in 5 years plan to control HIV/AIDS (2006-2010). Cost-effectiveness and population benefits of NSP in terms of new HIV cases prevention were demonstrated (Ni, Fu, Chen, Hu, & Wheeler, 2012; Zhang, Yap, Xun, Wu, & Wilson, 2011). Nevertheless NSP are not so well accepted as MMT as many of stakeholders and in particular by Public Security (PSB) view these programs as encouraging drug use and have not supported implementation of NSP (Reid & Aitken, 2009; Sullivan & Wu, 2007). There was some tension reported between NSP sites and local drug law enforcement police operations. It has been reported that police waited near NSP site and arrested clients and outreach workers. This has adverse effect on clients' willingness to participate in HIV prevention interventions (Hammett et al., 2005; IHRA, 2008). At the same time use of NSP does not require registration of drug users with PSB and is thus a lower threshold service than MMT. Also NSP can be opened and operate at the sites where MMT cannot be opened due to lack of coverage of IDUs, which is particularly relevant to remote rural areas.

VCT and ART access

There is increasing availability of testing for HIV in the country. There were already 3,037 free VCT sites operating in 2007 mostly in the regions with high HIV prevalence. At the same time very low number of IDUs actually do HIV testing, a lot of them don't return for results or disclose their status. The reason for this is high stigmatization of the HIV positive people even among IDUs themselves. (Sullivan & Wu, 2007). The estimated number of drug users on ART is 9,300 in 2010, which is about 3% of those drug users who are HIV positive (Mathers et al., 2010).

Outreach

Despite the wide availability of MMT and some of NSP the coverage of both interventions remains limited. The outreach effort is the weakest point in the China harm reduction program. The coverage of MMT and NSP programs is below 20% of the estimated number of IDUs nationwide and in some regions it is even lower. This low coverage significantly limits HIV prevention effect of harm reduction.

Existing coverage of MMT is based on PSB registered drug users. Outreach is mainly relying on peer outreach workers based at the MMT sites which mostly limit reach to those who are on MMT already (please see the analysis of peer outreach workers personal networks).

Visits to sites

September 3

MMT/CDC site in Chengdu

We visited one of the MMT sites in Chengdu and Community center nearby on Monday, September 3. At the MMT site there was a formal meeting with head of regional CDC, head doctor of psychiatric hospital, deputy head of CDC, also some doctors and nurses from the MMT clinic. At this MMT site they have a large conference room, room for screening, and two rooms for VCT. In the large meeting room one of the walls is used for displaying monthly plans for peer outreach workers who use this room for their coordination meetings. Tasks, achievements, and performance of each of the workers are marked in the displayed tables.

Rapid tests are not provided; blood is taken for HIV test once a year for all clients. Urine test for heroin is conducted occasionally. We had a formal introduction and general discussion in the conference room after which we had short overview of the MMT site. During short time we spent in the hall of the MMT clinic we observed a continuous traffic of people coming to clinic. Each shows ID card, pays 10 Yuan, receives a plastic cup of orange colored methadone drink, drinks immediately and dispose cup into large garbage basket standing just near the security guard who is sitting behind the desk observing the whole process. After this clients leave the clinic heading on their next destination.

Visit to community center in Chengdu

CAHR support peer outreach groups at two MMT sites. At this center we met with one of the two peer groups. All of them are current clients of MMT clinic.

In short conversation we learned that overall peer outreach workers are very satisfied with their current role. The peer group seems to be very motivated and energetic to do the work they have. They cannot distribute syringes in the community but they refer people to MMT and NEP. The main reasons why drug users are not initiating MMT is problem with registration and ID, many IDUs have problems with documents and fear to become registered. 90% of the drugs using friends of peers are clients of MMT. HIV stigma within IDU community is high. That is one of the reasons why it is not popular among IDUs to get HIV test. Those who have positive HIV status feel a lot of stigma from other drug users. This also can influence willingness of positive IDUs to receive ART. Outreach workers complained about recent requirement to take off driver license from MMT clients. A lot of clients have cars and we have seen few arriving to the MMT clinics on their cars and motorcycles.

September 4

Visit to CDC in Xindu

Meeting took place in a big conference room at the CDC building. The participants were head of Xindu CDC, director on HIV/AIDS, director on prevention, representative of police department. After formal introduction situation of HIV and drug use in Xindu was presented. The current scope of services is very basic and coverage is low but it can serve as starting point for services extension and coverage increase. There about 20 IDUs in detention center during one month on average. One NSP



covers about 50 IDUs. Number of HIV positive people is 271 and among them 38 IDUs. There are 101 people on ART, but only one of them is IDU. Estimated number of IDUs in Xindu is 2300 and number of registered is 404. Working plan on harm reduction is developed, peer-workers are recruited and they motivate for HIV testing, educate on harm reduction. Every month HIV testing is provided in detention center.

Xindu officials expressed interest in promoting harm reduction services in the city. Officials expressed interest in opening MMT site at Xindu. Current regulation is that MMT site can be open only when there is more than 500 IDUs registered/ or in detention. The possibility of opening site was discussed and one of the possible options is to open site as an extension site from Chengdu MMT clinic - or get waiver for 500 IDUs requirement from CDC.

Visit to syringe exchange in Xindu

This is not stand alone NSP site. The syringes and condoms are distributed within community clinic (for general local public). The clinic has three rooms - entrance room - which is also used for syringe exchange purpose, room for medical examination and pharmacy. The personnel (two female doctors) who work in clinic are also serving as NSP staff and are distributing syringes. They keep client register with client names/nicknames, numbers, and materials recorded. Total number of clients at this site is slightly more than 50 IDUs. The names are asked but no ID is required, thus clients can provide not real names when coming for syringes. They don't have to be registered with PSB but at the same time the clinic is located just next to police office. We expressed concerns about this. The answer we received is that the reason for locating NEP near police station was that it is convenient for IDUs to come here because of location in the city. Also that it is good that police is near so IDUs will not hang out at this location, they take syringe and quickly disappear. Police closeness is also providing security for doctors who distribute syringes, so overall NSP is better at this place. The information materials with hotline number for HIV are displayed at the stand in the front of the entrance room. There is information stand with a lot of various types of brochures on HIV and risks of transmission. The poster on the door is also informing about risks of injections. All information materials have an HIV hotline number. No clients were observed while we



have been standing near the NSP (30 min).

September 5

R&R day 1

I presented PDI model as possible outreach strategy to rapidly expand the harm reduction programs coverage. Despite some difficulties with translation the concept was well understood and has potential to be useful in the local context.

September 6

R&R day 2

Concerns on UIC system: it is not useful for MMT clients but can be used for NSP clients and for PDI clients.

September 7

Visit to MMT in Chengdu

At the second MMT clinic we came to the meeting room where peer outreach group have participated in psychological training. I asked peers present at psychological training to answer 6 questions by writing numeric responses on piece of paper (short self-administered questionnaire). I explained that the reason for asking these questions is to understand who are people attending peer group and learn about their friends. I also explained that I am not interested in individual information but rather the group profile so no names should be written on the questionnaires. After all participants agreed to participate the following questions were asked:

1. How many years do you use drugs?
2. How many years you participate in MMT?
3. How many friends who use drugs they have?
4. With how many of them they talked last week?
5. How many of those friends are younger 25 years old?
6. How many of those friends are also attend MMT?

Answers are presented in the Table 1

Table 1

Respondent #	Years in drug use	Years injecting	Years in MMT	Friend who use drugs	Friends met during last week	Less than 25 years old	On methadone	% on MMT	% of young	% met during last week
1	20	4	5	100	12	0	90	90%	0%	12%
2	20	3	2	50	5	2	15	30%	4%	10%
3	20	14	2	450	30	3	50	11%	1%	7%
4	20	8	6	100	10	0	100	100%	0%	10%
5	20	10	7	150	11	0	100	67%	0%	7%
6	10	8	1	50	20	0	30	60%	0%	40%
7	2	2	2	10	10	1	5	50%	10%	100%
8	18	18	6	50	10	0	15	30%	0%	20%
9	15	15	6	50	10	0	25	50%	0%	20%

10	8	8	2	30	5	8	15	50%	27%	17%
11	15	15	5	100	5	1	30	30%	1%	5%
Average for group	15	10	4	104	12	1	43	52%	4%	23%

Doctor present at the site said that at the MMT clinic there is no client who is younger 30 years old. When asked what is required to start MMT she explained that to become client you need to register at local administration office (to confirm that you are resident of this location) and come to MMT clinic where they issue a list of medical examinations/tests to complete prior to receiving client card. Usually biochemical blood analysis incl. electrolytes (to assess liver and kidney health) and XR for TB is required. (No PSB registration was mentioned).

This MMT clinic has 450 clients on daily average.

Visit to community center in Chengdu

This is second NSP site which we visited in Chengdu. The site just moved to another location which (we were said) is not as good as previous one. The financing of the site is going down and currently is received only from CDC. The site initially was funded by Doctors of the World. We were said that police is “letting

alone” clients which come to NSP and one kilometer from NSP. This is not a written policy but more like verbal agreement. NSP keeps register of names and code-numbers of clients. Code-numbers are given as order numbers of clients when they come. The number is fixed on the paper card which is given by NSP to each new client (the card is a paper visit card for the site; the number of such cards are freely available at front desk at the NSP). The site is funded by CDC and has three and half people employed right now. 10 syringes are given to each client as maximum. Usually the amount of distributed syringes is equal to the returned. But when client has no syringes to return it is possible to distribute anyway but they encourage clients to bring syringes next time. The size of syringes is 1 or 2 ml. Condoms are also available. It is not possible to distribute syringes on outreach routes (there are several of them marked on the wall map along with MMT and community NSP sites). Nevertheless it is possible to distribute syringes at the distance of one kilometer from the site. Again it is not formal regulation but rather unofficial agreement with police. Clients can carry new syringes and when searched by police they will not have trouble if they don't have any drugs on them in addition to syringe. Used syringes may be more problematic as police can arrest clients. It is more likely to happen when there are special anti-drug raids or police have to improve statistics on drugs. Syringes are collected in the large plastic yellow containers which are located at the entrance to the NSP and transported to CDC for utilization (it is likely that they have regulation to disinfect them first). On average 30-40 clients are coming each day and 7,000 syringes are distributed monthly. We have checked the register which confirmed that the 30 clients are coming each day on average. The record keeping is similar to other sites and contains hand written notes with names, numbers and quantities of distributed goods for each day. There is no requirement to show ID. No clients were observed during this visit (40 min).

Recommendations

Peer-driven intervention to increase program reach

The low outreach of NSP and MMT programs in China substantially undermine HIV prevention effect of both interventions. Current reach is mostly based on the PSB registered drug users and is probably the maximum coverage that can be reached by such means. Lack of community-based NGOs which build trustful relationship with unregistered drug users limits coverage scale-up through social workers outreach. Peer-outreach based on MMT clients' involvement is limited as most of the MMT clients will have friends who are already on MMT with limited access to younger drug users who have never been registered with PSB.

In this situation one of the optimal ways to increase program reach is introducing peer-driven intervention (PDI) at the existing service sites (NSP or MMT).

PDI model description

The PDI is a "chain-referral" outreach model developed for accessing and educating injection drug users (IDUs) in the community to prevent HIV and related diseases. With special recruiting coupons and existing peer networks PDI model provides access to IDUs not involved in harm reduction (HR) projects and to hidden populations in closed drug scenes. Incentives and bonus-rewards are provided to target specific sub-groups of IDUs, such as youth, women or stimulant users.

Of all outreach methodologies, the PDI uniquely relies on IDUs to educate their peers in the community and recruit them for risk-reduction services. All recruits are invited to serve as peer-educators and recruiters. In this way, the recruitment process expands exponentially.

IDUs receive nominal cash reward (20 UAH - less than 2 euro) for coming to the PDI site for the interview. Each IDU is taught by professional interviewer to become a peer educator and is given 3 recruit coupons and is eligible to invite 3 friends IDU to the project. Recruiters are offered nominal cash rewards for successfully educating and recruiting each peer. Incentives and bonus-rewards are provided for recruiters to target specific sub-groups of IDUs: women and young IDUs.

Recruiters' educational efforts are measured by an 8-item knowledge test administered to their recruits when they arrive at the PDI storefront for intervention services. Recruiters' rewards are earned based on their effectiveness at recruiting and passing-on this set of prevention information. For example, in Ukraine the maximum reward of 60 UAH (5 euro) the recruiter gets for inviting 3 women <25 years and maximum reward for quality education being 72 UAH (6 euro) the recruiter can get if all three recruits get right answers on 8 questions.

PDI model is effective for attracting and quality prevention education of large numbers of IDU with the help of only 2 or 3 professional workers working at one site (150 new IDUs a month in 1 PDI site). The model works well in the closed drug scenes, where social workers have little access to hidden subgroups of women and teenagers IDUs. This model targets hard-to-reach populations: young IDUs, women, stimulant users and is based on peers providing services to each other in the community by teaching peer IDUs new skills of safer drug use and recruiting each other into the project for HR services and medical care on PDI site.

PDI is a powerful instrument to outreach to hidden groups. At the same time projects which implement PDI should also be making additional efforts to keep the recruited IDUs in HR programs as regular clients. Depending on the type of groups which are reached and their needs (which can be assessed as part of PDI survey) projects need to develop services to keep clients returning after PDI is over.

PDI experience in Ukraine

Harm reduction (HR) projects for IDUs throughout Ukraine have been operating for years, offering needle-exchange, peer-educators, HIV-test counseling, and other traditional services. These projects depend on service providers and have become stagnant, catering mostly to older male IDUs and long-term project clients who hang-out at the project sites. Peer-educators' enthusiasm for their work is also highly variable, due to the fact that their ability to help drug users is highly limited, and they seldom succeed in gaining access to new IDU-networks.

To infuse new recruits into HR projects, with support from the Global Fund, pilot peer-driven interventions (PDIs) were started-up in 5 HR projects in 2006 to determine whether they would: (1) recruit 500 entirely new IDUs in need of HR services within 6 months at each site; (2) recruit IDUs under-served by HR projects - women in general, and men & women <25 years age; (3) measure significant increases in recruits' knowledge of HIV and its transmission.

It became obvious that PDI was successful in significantly increasing recruitment rate even in well-established community based harm reduction project. Although all project where PDI was piloted had well-functioning outreach through peers and social workers, PDI was able to recruit 2,162 new IDUs in the 5 sites within six months and educated each of them on new HIV prevention information. This is 455 new respondents in 6 months on average for each site which is 6.3 times more than projects managed to recruit before PDI was introduced. In addition to rapidly recruiting large number of IDUs it was also able to recruit more female and younger IDUs, groups which are usually hard to reach by harm reduction projects (Smyrnov, Broadhead, Datsenko, & Matiyash, 2012).

Special tools and protocols such as educational module, knowledge test and structured interview, software and databases were developed and tested during the project implementation.

After 2006 and till 2012 the PDI was extended to more than 50 sites in various regions of Ukraine. As result of this in projects implementing PDI the coverage of female IDUs doubled, and more than 60% of reached IDUs have been teenagers and young people up to 25 years old. In comparison, before PDI harm reduction projects reached only about 20% of women and 30 % of young IDUs. Overall coverage was increased up to 10 times in some sites in comparison with the same sites before PDI. More than 40,000 new clients (IDUs who never accessed harm reduction projects before) were reached and thoroughly educated in a complex of prevention information all over Ukraine.

Application of PDI in China

PDI in China can be applied to reach drug users who are not yet clients of MMT and NSP programs. It can increase reach for heroin users but also outreach for AST users, young users, and female users. PDI potentially can be used to non-injecting drug users. Recruitment criteria and reward structure should be set to address any of these or other parameters (such as younger than 25 years old, using stimulants, smoking, sniffing, using tablets).

PDI goals may include increasing coverage for MMT and NSP programs, peer education in HIV prevention, anti-stigma messages in regard to HIV and ART, research on profile and risk behavior of heroin users who are not MMT clients and stimulants users. Immediate result would be increase in number of MMT clients. Long-term results will include development of preventive interventions for drug users who don't want to start MMT or get registration.

Through PDI questionnaire programs can assess reasons why IDUs are not starting MMT as well as assess motivational profile of respondents who are not initiating MMT similar to work Li et al. conducted for clients

seeking MMT (L. Li, Ding, Lai, Lin, & Luo, 2011). This assessment can be used in further motivational counseling for treatment and retention of IDUs when they will consider starting MMT.

Prior to start of PDI minimal package of services for those who participate should be offered and may include counseling, distribution of condoms and syringes, rapid test for HIV and other infections.

For each site strategy can be different. For example in Xindu it may be scale up of coverage of drug users to at least 500 IDUs to be able to open MMT site. In this case registration of drug users and voluntary agreement to undergo community treatment may become a part of motivation counseling for PDI clients. In Chengdu strategy may include expansion of existing MMT clients as well as development of HIV prevention programs for those who are not considering MMT.

It is important to ensure that drug users participation in PDI and other services offered during PDI would be totally voluntary and with informed consent of drug users. They should be given a choice of registration and initiating MMT or remain anonymous and participate in NSP programs, or any other choice including choice not to choose any service and discontinue participation at any time. Police should be informed about such project and provide political support without intervening, approaching and arresting PDI clients. Even one case of police intrusion and arresting any of PDI participants will have dramatic adverse effect on PDI capacity to recruit new clients.

Alliance Ukraine can assist Chinese program to develop PDI tuned to specific needs and goals of Chinese harm reduction program in selected areas. Sampling criteria and seeds selection, recruitment strategy, priority group, reward scheme, educational module, questionnaire, as well as logistics of intervention should be fine-tuned to the local context and requirements.

Alliance Ukraine can provide tools, software, and other support in development of project documentation, plan and budget as well as training for the PDI key personnel prior to the project start.

Benefits which PDI can bring to harm reduction programs in China should be carefully assessed in pilot projects which CAHR can finance.

Support of peer-groups and provision of syringes through peers at the MMT clinics

The evidence is that among MMT clients injection frequency is decreasing but it is still concurrent for at least some time when clients start MMT (L. Li et al., 2012). Some MMT clients have friends who inject heroin (from personal communication with MMT clients; L. Li et al., 2012). Establishing secondary syringe exchange through MMT clients will contribute to lower HIV transmission among MMT clients and their drug injecting peers.

Introduce secondary exchange and outreach with needles and syringes (may involve some policy work with local police and CDC to relief policy on arresting people who carry use and new syringes).

Rapid HIV testing introduction as routine practice

At MMT and NSP sites and outreach routes.

Scale up HIV treatment for IDUs

The access to ART for IDUs is very limited. The reasons should be further explored. From short conversations with peer group there is an impression that IDUs are concealing their HIV status and don't want to start ART to avoid stigmatization within IDU groups. Strategies to address this can be organizing strictly confidential setup of ART provision (like a VCT room at MMT clinic where client can meet with doctor and get treatment), as well as stigma reduction education among IDUs and establishing self-help groups of HIV positive IDUs. Care and support for IDUs on ART and increase motivation counseling for HIV positive IDUs to start ART.

For the **policy** work: withdrawal of driving license from drug users is raising concerns among MMT clients and is priority issue to address.

Data which should be clarified: estimated numbers of IDUs - sources, numbers on MMT clinics as well as in community centers, number of HIV positive IDUs, and prevalence of HIV among IDUs, number of IDUs on ART, cost of daily dose of street heroin and average daily cost of MDMA and "ice", other street drugs.

Bibliography

- Chen, G., & Fujiwara, T. (2009). Impact of one-year methadone maintenance treatment in heroin users in Jiangsu province, China. *Substance Abuse: Research and Treatment*, 3(1), 61-70.
- Du, W. J., Xiang, Y. T., Wang, Z. M., Chi, Y., Zheng, Y., Luo, X. N., . . . Gerevich, J. (2008). Socio-demographic and clinical characteristics of 3129 heroin users in the first methadone maintenance treatment clinic in China. *Drug and Alcohol Dependence*, 94(1-3), 158-164. doi: 10.1016/j.drugalcdep.2007.11.009
- Hammett, T. M., Bartlett, N. A., Chen, Y., Ngu, D., Cuong, D. D., Phuong, N. M., . . . Des Jarlais, D. C. (2005). Law enforcement influences on HIV prevention for injection drug users: Observations from a cross-border project in China and Vietnam. *International Journal of Drug Policy*, 16(4), 235-245. doi: 10.1016/j.drugpo.2005.05.009
- HRI. (2012). The Global State of Harm Reduction 2012. Towards an integrated response. In C. Stoicescu (Ed.). London: Harm Reduction International.
- IHRA. (2008). The Global State of Harm Reduction 2008. Mapping the response to drug-related HIV and hepatitis C epidemics. In C. Cook & N. Kanaef (Eds.). London: International Harm Reduction Association.
- IHRA. (2010). The Global State of Harm Reduction 2010. Key issues for broadening the response. In C. Stoicescu (Ed.). London: International Harm Reduction Association.
- Larney, S., & Dolan, K. (2010). Compulsory detoxification is a major challenge to harm reduction in China. *International Journal of Drug Policy*, 21(3), 165-166. doi: 10.1016/j.drugpo.2009.05.001
- Li, J., Ha, T. H., Zhang, C., & Liu, H. (2010). The Chinese government's response to drug use and HIV/AIDS: A review of policies and programs. *Harm Reduction Journal*, 7. doi: 10.1186/1477-7517-7-4
- Li, L., Ding, Y., Lai, W., Lin, C., & Luo, W. (2011). Motivational profiles of clients seeking methadone maintenance therapy in China. *Drug and Alcohol Dependence*, 118(2-3), 335-340. doi: 10.1016/j.drugalcdep.2011.04.014
- Li, L., Lin, C., Wan, D., Zhang, L., & Lai, W. (2012). Concurrent heroin use among methadone maintenance clients in China. *Addictive Behaviors*, 37(3), 264-268. doi: 10.1016/j.addbeh.2011.11.004
- Li, L., Sangthong, R., Chongsuvivatwong, V., McNeil, E., & Li, J. (2011). Multiple substance use among heroin-dependent patients before and during attendance at methadone maintenance treatment program, Yunnan, China. *Drug and Alcohol Dependence*, 116(1-3), 246-249. doi: 10.1016/j.drugalcdep.2010.12.007
- Lin, C., Wu, Z., Rou, K., Pang, L., Cao, X., Shoptaw, S., & Detels, R. (2010). Challenges in providing services in methadone maintenance therapy clinics in China: Service providers' perceptions. *International Journal of Drug Policy*, 21(3), 173-178. doi: 10.1016/j.drugpo.2009.09.002
- Lin, C., Wu, Z., Rou, K., Yin, W., Wang, C., Shoptaw, S., & Detels, R. (2010). Structural-level factors affecting implementation of the methadone maintenance therapy program in China. *Journal of Substance Abuse Treatment*, 38(2), 119-127.
- Liu, Y., Liang, J., Zhao, C., & Zhou, W. (2010). Looking for a solution for drug addiction in China: Exploring the challenges and opportunities in the way of China's new Drug Control Law. *International Journal of Drug Policy*, 21(3), 149-154. doi: 10.1016/j.drugpo.2009.10.002
- Lu, L., Fang, Y., & Wang, X. (2008). Drug abuse in China: Past, present and future. *Cellular and Molecular Neurobiology*, 28(4), 479-490. doi: 10.1007/s10571-007-9225-2
- Mathers, B. M., Degenhardt, L., Ali, H., Wiessing, L., Hickman, M., Mattick, R. P., . . . Strathdee, S. A. (2010). HIV prevention, treatment, and care services for people who inject drugs: a systematic review of global, regional, and national coverage. *Lancet*, 375, 1014-1028.
- Meise, M., Wang, X., Sauter, M. L., Bao, Y. P., Shi, J., Liu, Z. M., & Lu, L. (2009). Harm reduction for injecting opiate users: An update and implications in China. *Acta Pharmacologica Sinica*, 30(5), 513-521. doi: 10.1038/aps.2009.30
- Ministry of Health People's Republic of China, Joint United Nations Programme on HIV/AIDS, & World Health Organization. (2011). 2011 Estimates for the HIV/AIDS Epidemic in China. Beijing.
- Na, H. E., & Detels, R. (2005). The HIV epidemic in China: History, response, and challenge. *Cell Research*, 15(11-12), 825-832. doi: 10.1038/sj.cr.7290354
- Ni, M., Fu, L., Chen, X., Hu, X., & Wheeler, K. (2012). Net financial benefits of averting HIV infections among people who inject drugs in Urumqi, Xinjiang, Peoples Republic of China (2005-2010). *BMC Public Health*, 572. doi: 10.1186/1471-2458-12-572
- Pang, L., Hao, Y., Mi, G., Wang, C., Luo, W., Rou, K., . . . Wu, Z. (2007). Effectiveness of first eight methadone maintenance treatment clinics in China. *AIDS*, 21(SUPPL. 8), S103-S107. doi: 10.1097/01.aids.0000304704.71917.64

- Qian, H. Z., Schumacher, J. E., Chen, H. T., & Ruan, Y. H. (2006). Injection drug use and HIV/AIDS in China: Review of current situation, prevention and policy implications. *Harm Reduction Journal*, 3. doi: 10.1186/1477-7517-3-4
- Reid, G., & Aitken, C. (2009). Advocacy for harm reduction in China: A new era dawns. *International Journal of Drug Policy*, 20(4), 365-370. doi: 10.1016/j.drugpo.2008.10.004
- Ruan, Y., Qin, G., Yin, L., Chen, K., Qian, H. Z., Hao, C., . . . Shao, Y. (2007). Incidence of HIV, hepatitis C and hepatitis B viruses among injection drug users in southwestern China: A 3-year follow-up study. *AIDS*, 21(SUPPL. 8), S39-S46.
- Smith, K., Bartlett, N., & Wang, N. (2012). A harm reduction paradox: Comparing China's policies on needle and syringe exchange and methadone maintenance. *International Journal of Drug Policy*, 23(4), 327-332. doi: 10.1016/j.drugpo.2011.09.010
- Smyrnov, P., Broadhead, R. S., Datsenko, O., & Matiyash, O. (2012). Rejuvenating harm reduction projects for injection drug users: Ukraine's nationwide introduction of peer-driven interventions. *International Journal of Drug Policy*(23), 141-147.
- Sullivan, S. G., & Wu, Z. (2007). Rapid scale up of harm reduction in China. *International Journal of Drug Policy*, 18(2), 118-128. doi: 10.1016/j.drugpo.2006.11.014
- Suwanwela, C., & Poshyachinda, V. (1986). Drug abuse in Asia. *Bulletin on narcotics*, 38(1-2), 41-53.
- UNODC. (2011). World Drug Report 2011.
- UNODC. (2012). World Drug Report 2012. Vienna.
- WHO. (2009). Assessment of compulsory treatment of people who use drugs in Cambodia, China, Malaysia and Viet Nam: An application of selected human rights principles
- Xiao, L., Wu, Z., Luo, W., & Wei, X. (2010). Quality of life of outpatients in methadone maintenance treatment clinics. *Journal of Acquired Immune Deficiency Syndromes*, 53(SUPPL. 1), S116-S120. doi: 10.1097/QAI.0b013e3181c7dfb5
- Zhang, L., Yap, L., Xun, Z., Wu, Z., & Wilson, D. P. (2011). Needle and syringe programs in Yunnan, China yield health and financial return. *BMC Public Health*, 11. doi: 10.1186/1471-2458-11-250
- Zhuang, X., Liang, Y., Chow, E. P. F., Wang, Y., Wilson, D. P., & Zhang, L. (2012). HIV and HCV prevalence among entrants to methadone maintenance treatment clinics in China: a systematic review and meta-analysis. *BMC Infectious Diseases*, 12. doi: 10.1186/1471-2334-12-130
- Zhuang, X., Wang, Y., Chow, E. P. F., Liang, Y., Wilson, D. P., & Zhang, L. (2012). Risk factors associated with HIV/HCV infection among entrants in methadone maintenance treatment clinics in China: A systematic review and meta-analysis. *Drug and Alcohol Dependence*. doi: 10.1016/j.drugalcdep.2012.05.028