# Exploration of Methadone and HIV Treatment for Injecting Drug Users in West Java, Indonesia: Lessons from Practice

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#### **Abstract**

Over the last decade, Indonesia became one of the fastest growing injecting drug user (IDU) driven HIV epidemics in Asia. Among strategies to prevent and control the HIV epidemic in Indonesia, methadone maintenance treatment (MMT) has been established and could become an entry point for HIV testing and treatment in IDUs. This study explored MMT and HIV treatment practices in West Java. An evaluation team visited six MMT clinics, interviewed staff and collected data on patient characteristics, methadone dose, and HIV testing and treatment practices. By October 2011, from 203 IDUs entering MMT (range 7–73 per clinic), 95% were male with the average age of 31 years (range 19–60 years), 92% had a senior high school or higher diploma, 47% had a regular income, and 55% were married. The mean methadone dose was 79 mg/day (range 13–208 mg/day). About 85% of the MMT patients were tested for HIV, of whom 70% were found HIV positive (121/173), while 59% had a baseline CD4 count >200 cells/mm3 and 65% were receiving ART. In conclusion, few IDUs entered MMT in West Java and among those who did; high HIV and ART (anti retroviral treatment) rates were reported, stressing the need for active linking between harm reduction services and integrated MMT and HIV treatment for IDUs.

Key words: ART, clinical guideline, HIV, Indonesia, injecting drug user, methadone

## Eksplorasi Metadon dan Terapi HIV pada Pengguna Narkoba Suntik di Jawa Barat, Indonesia: Pelajaran dari Praktik

## Abstrak

Selama dasawarsa terakhir, Indonesia menjadi salah satu negara dengan pengguna narkoba suntik (*injecting drug users*/IDU) paling cepat dengan perjalanan epidemi HIV di Asia. Di antara strategi untuk mencegah dan mengontrol epidemi HIV di Indonesia, terapi rumatan metadon (*methadon maintanance treatment*/MMT) terlah dilaksanakan dan dapat menjadi *entry point* untuk uji HIV di Jawa Barat. Tim evaluasi telah mengunjungi 6 klinik MMT, mewawancarai staf dan mengumpulkan data mengenai karakteristik pasien, dosis metadon, serta uji HIV dan praktik terapi. Selama bulan Oktober 2011, dari 203 IDU mengikuti MMT (rentang 7–73 per klinik), 95% adalah laki-laki berusia rata-rata 31 tahun (rentang 19–60 tahun), 92% berpendidikan Sekolah Menengah Atas atau diploma yang lebih tinggi, 47% berpenghasilan tetap, dan 55% telah menikah. Dosis metadon ratarata 79 mg/hari (rentang 13–208 mg/hari). Sebanyak 85% pasien MMT diuji HIV, sebanyak 70% HIV positif (121/173), sedangkan 59% mempunyai jumlah CD4 dasar >200 sel/mm³ dan 65% mendapat ART. Simpulan, hanya sedikit pengguna narkoba suntik yang berobat di klinik MMT di Jawa Barat dan di antaranya meninggal, HIV tinggi dan dilaporkan ART (*anti retroviral treatment*) *rate*, serta ditekankan *active linking* antara pelayanan untuk mengurangi efek yang merugikan dengan integrasi MMT dan terapi HIV untuk pengguna narboba suntik.

Kata kunci: ART, HIV, Indonesia, injecting drug users, metadon, pedoman klinis

#### Introduction

In the last decade, Indonesia became one of the fastest growing injecting drug user (IDU) driven HIV epidemics in Asia.1 Current as well as former IDUs were engaged in unprotected sex will potentially spreading HIV to the non-injecting population.2,3 Through the years, the proportion of IDUs contributing to the officially reported Indonesian HIV/AIDS cases have increased up to 52% in 2009,1 whereas in 2010 and 2011 a decreasing trend has been reported. However during that time, there was an increase of heterosexual and mother to child transmission.4 In Indonesia, methadone maintenance treatment (MMT) was initiated in 2003 to contribute to HIV prevention and control in IDUs. It has since expanded into a nationwide program encompassing 68 MMT services covering 173 cities and districts, serving 2,548 patients by June 2011.4 On average there were 37 patients per MMT clinic. MMT in IDUs could become an effective entry point for HIV counseling, testing and antiretroviral treatment (ART). The result from this program can reduce injecting drug and risk practices, HIV transmission, and has proven to lead to an improved health outcomes.5,6 Among Indonesian IDUs who retained in MMT during six months period it was found that opiate use, injecting risk practices and criminal activities decreased while the general wellbeing improved.7,8

## Methods

A limited practice-based information MMT and HIV treatment is already available in Indonesia. With technical and financial support from the Netherlands, healthcare professionals at the Dr. Hasan Sadikin Teaching Hospital (RSHS) and the Medical Faculty at the Padjadjaran University (FK-Unpad) in Bandung, developed the MMT Program Evaluation Questionnaire for Indonesian (MEPQ-I). They visited six MMT services in healthcare settings in West Java in July 2010 and October 2011, and interviewed staff to study the implementation of MMT, the combination of MMT and HIV, and what kind of routine data was collected. The results of this study were used to explore further on to what extent official MMT policies and guidelines were implemented and suitable for the day-to-day clinical practice.9 Based on this study, we present MMT and HIV treatment practices in IDUs in West Java.

#### Results

In table 1 the characteristics of patients at 6 MMT clinics in West Java are shown. By October 2011, cumulatively, 203 IDUs were in treatment (range 7–73 per setting) while 3 settings had less than 25 IDUs in treatment. Most patients were male, in their early thirties, highly educated, and around half were married and had a regular income. The mean methadone dose was 79 mg/ day (range 13-208 mg). The mean methadone dose in patients taking ART (123 mg/day) was twice as high as in patients not taking ART (64 mg/day).

At all MMT clinics HIV testing was offered to patients. At 3 MMT clinics, for those known or tested HIV negative upon enrollment, repeated HIV testing was suggested annually, however the offer was less frequent at the other clinics. At RSHS Bandung, MMT and HIV treatment and adherence counseling were provided as a service at one-stop service with weekly visits of internists to the MMT clinic. At the other 5 MMT clinics, patients were referred to local HIV clinics, however the collaboration was very limited.

Of the 203 patients, 85% was tested in which 70% were found HIV positive (121/173). From all HIV positive patients, 59% had a baseline CD4 count >200 cells/mm<sup>3</sup>, and 65% were receiving ART. At the primary care-based MMT service 31% of 32 HIV positive patients was taking ART while 64-100% in 4-35 HIV positive patients at hospital-based settings had taken the drug regiment. It was unknown whether MMT patients at the primary care-based setting were different compared to other clinics in terms of health status or travel distance. It was also unclear whether local staff at the HIV clinic were reluctant to treat MMT patients, or patients had to pay higher HIV treatment fees, than those at the hospital based MMT clinic settings.

## Discussion

Few IDUs accessed MMT programs in West Java and those who did had high HIV prevalence rates. These findings are comparable with results reported in countries with comparable IDU driven HIV epidemics and recently established MMT services. 7,10 Prevention of HIV transmission

Table Characteristics of Patients in MMT Clinics in West Java, October 2011

Variable	Bandung	Cirebon	Bogor	Bekasi	Tasik	Sukabumi	Total	
Total patients	73	24	44	42	13	7	203	
Referral source							1000000	
Self-referral	23	21	31	25	5	0	105	52%
Family	33	O	o	o	O	0	33	16%
NGO harm reduction	15	O	О	4	8	7	34	17%
Other MMT clinic	1	1	11	13	O	0	26	13%
Jail/prison	1	2	2	o	O	O	5	2%
Demographics								
Female	3	1	4	2	o	1	11	5%
Average age in years (range)	32	31	35	27	30	31	31	(19– 60)
High school or higher education	72	22	44	30	12	7	187	92%
Regular income	25	14	35	18	3	1	96	47%
Married	29	11	22	34	11	4	111	55%
HIV status and baseline CD4								
HIV unknown	12	4	O	O	O	3	19	9%
HIV negative	26	6	12	18	1	0	63	31%
HIV positive	35	14	32	24	12	4	121	60%
CD4 unknown	0	3	O	O	O	0	3	2%
CD4 <200	12	5	10	7	10	3	47	39%
CD4 >200	23	6	22	17	2	1	71	59%
HIV positive taking ART	29	9	10	19	8	4	79	65%
Methadone treatment								
mean dose in mg	74	95	100	80	77	45	79	
mean dose and ART in mg	100	150	220	114	91	60	123	
mean dose without ART in mg	60	65	85	80	53	43	64	

Source: Van Laere et al., 20129

starts with early contact with high-risk groups. However, Indonesian studies reported a period of 8-10 years between the onset of injecting drugs and entering MMT.5,8 This delay indicates that the benefits of harm reduction programs came too late for those who injected and hence were ineffective to prevent HIV transmission in IDUs. For early contact, in general, NGOs providing harm reduction services are the first in line to meet with (new) drug injectors. However, only 17% of the 203 MMT patients in the study were reported as being referred by

harm reduction NGOs, and almost half of them were referred in Bandung (Table 1). Therefore, strengthening the collaboration between harm reduction NGOs and MMT clinics, and active linking between professionals in the field, are crucial to reach IDUs as early as possible. Those actions are important to apply HIV prevention measures and provide MMT and HIV treatment for those eligible and to reduce the HIV viral load in the community.11

In West Java a high proportion of the HIV positive MMT patients were taking ART (65%). This figure appeared higher than the national ART rates in HIV positive IDUs reported in Indonesia (6%) and in five countries in the East and South-East Asian Region (4%; range 2-8%), from which data were available.10 However, only at RSHS in Bandung, MMT and HIV treatment were provided as a one-stop service, where health outcomes and survival rates in HIV positive IDUs were as good as in HIV positive non-IDUs.5 At provincial level the situation depended on limited capacity and efforts undertaken by MMT and HIV service providers to share their services.

The Indonesian MMT guideline (Ministry of Health, 2010),12 as well as the WHO guidelines on opioid dependence for the South East Asian Region (2008),13 recommend HIV testing and linking with HIV treatment services, however, the guidelines lack standards to do so. In anticipation of these needs in day-to-day practice, healthcare professionals at FK-Unpad and RSHS has developed and implemented standard operational procedures on HIV testing in patients at the MMT clinic. The assessment of addiction issues in patients at the HIV clinic Teratai is also conducted in order to boost integrated care for IDUs.

In conclusion, few IDUs entered MMT in West Java and among those who did high HIV prevalence rates were reported, stressing the need for active linking between MMT and harm reduction services for IDUs in the community. It is also need clear policies for HIV testing and integrated MMT and HIV treatment for IDUs.

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## References

- 1. National Aids Commission Indonesia. Country report on the Follow up to the Declaration of Commitment on HIV/AIDS. UNGASS Reporting Period 2008-2009. Jakarta: 2010.
- 2. Iskandar S, Basar AEP, Hidayat T, Siregar IMP, Pinxten L, van Crevel R, et al. High risk behavior for HIV transmission among former injecting drug users: a survey from Indonesia. BMC Public Health . 2010;10:472.
- Pisani E, Dadun Sucahya PK, Kamil O, Jazan S. Sexual behaviour among injection drug users in 3 Indonesian cities carries a high potential for HIV spread to non-injectors. J Acquir Immune Defic Syndr. 2003; 34(4):403-6.
- Presentation of National Aids 4. Mboi N. updates on HIV/AIDS Commission prevention and control in Indonesia. IFNGO World Conference Kuala Lumpur Malaysia,
- Achmad YM, Istiqomah AN, Iskandar S, Wisaksana R, van Crevel R, Hidayat T. Integration of methadone maintenance treatment and HIV care for injecting drug users: a cohort study in Bandung Indonesia. Acta Medica Indonesia. 2009;41 (supplement 1):23-7.
- 6. Wolfe D, Carrieri MP, Shepard D. Treatment and care for injecting drug users with HIV infection: a review of barriers and ways forward. Lancet. 2010;376(9738):355-66.
- 7. Lawrinson P, Ali R, Buavirat Chiamwongpaet S, Dvoryak S, Habrat B, et al. Key findings from the WHO collaborative study on substitution therapy for opioid dependence and HIV/AIDS. Addiction. 2008;103(9):1484-92.
- 8. Sarasvita R, Tonkin A, Utomo B, Ali R. Predictive factors for treatment retention in methadone programs in Indonesia. J Subst Abuse Treat. 2011; Sep 21. [E-pub ahead of

print]

- 9. Van Laere IR, Diana A, van Crevel R, Pinxten WL, van der Ven A, Istigomah AN, et al Methadone and HIV treatment for injecting drug users in West Java, Indonesia: from practice to policy. Bandung/Nijmegen: FK-Unpad, Indonesia/NISPA, Radboud University, the Netherlands, Aids Fonds Program, 2012. Available from: http://new.ahrn.net/methadone-and-hivtreatment-for-injecting-drug-users-in-westjava-indonesia-from-practice-to-policy
- 10. Mathers BM, Degenhardt L, Ali H, Wiessing L, Hickman M, Mattick RP, et al. Reference Group to the UN on HIV and Injecting Drug Use. HIV prevention, treatment, and care services for people who inject drugs: a systematic review of global, regional, and

- national coverage. Lancet. 2010;375(9719): 1014-28.
- 11. Wood E, Kerr T, Marshall BD, Li K, Zhang R, Hogg RS, et al. Longitudinal community plasma HIV-1 RNA concentrations and incidence of HIV-1 among injecting drug users: prospective cohort study. BMJ. 2009;338:b1649.
- 12. Ministry of Health Indonesia. Pedoman penyelenggaraan program terapi rumatan metadon. Edisi revisi. Jakarta: Kemenkes, Indonesia; 2010.
- 13. WHO. Operational guidelines for the treatment of opioid dependence. World Health Organization, Regional Office for South-East Asia, 2008. Available from: www.searo.who.int/hiv-aidspublications.