

Prevention, Control and Treatment of HIV-AIDS Among Injecting Drug Use in Bandung, Indonesia

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ABSTRACT

Indonesia is facing a growing HIV-epidemic that in many areas is driven by injecting drug use (IDU). IDUs underutilize health services, partly because of legal aspects which also cause that many are held in prison, where further HIV-transmission may take place. Most HIV-infected patients present with advanced HIV-AIDS and many deaths before starting antiretroviral treatment. The growing HIV-epidemic in Indonesia has socio-economical implications for individual patients as well as for the health system and for society.

IMPACT, a multidisciplinary university-based program in Bandung, West-Java, integrates HIV-prevention and treatment, combining research and implementation. Biomedical, public health and sociobehavioral expertise is used for educational programs for adolescents; scaling-up HIV-testing, harm reduction strategies and care for HIV/AIDS in hospital, community and prison; and institutional as well as individual capacity building related to IDU and HIV/AIDS. It is expected that these activities can make a significant contribution to control of HIV-AIDS in the context of injecting drug use in West-Java and Indonesia as a whole.

Key words: HIV/AIDS, HIV prevention, injecting drug use.

INTRODUCTION

Indonesia is facing an increasing problem with HIV/AIDS given the fact that 2682 AIDS subjects were identified in 2004, while up to 16.110 cases have been reported at the end of 2008.¹ Estimates indicate that in the year 2010, 400.000 persons will have been infected with HIV, of whom 100.000 will probably have died and 250.000 will be in need for health care.¹ Presently, the prevalence in general population is still low at 0.20%, but among vulnerable subgroups, prevalence has been found at high rates such as 9.4% among commercially sex workers, 5.2% among homosexual men and the highest rate of 52.4% among the Injecting Drug Users (IDUs).²

The emerging problem of HIV is already noticed in several referral HIV clinics which are increasingly burdened by high numbers of HIV-infected patients in need for care. Most of them, around 60% to 80%, are related to drug use. Only in the last two years, an increased proportion of heterosexual spouses, sex-workers and their children are seen in the HIV clinics. Apart from increasing numbers, the HIV referral clinics are also faced with patients that often present in late stage disease and with low CD4 cell counts (median CD4: 47/mm³; range 11-276)³. These figures indicate that the barrier for HIV testing is high and/or adequate testing facilities are lacking. Indeed, in the present facilities, more than 50% of the HIV tests yield a positive result.

Access to care is limited in many countries in the world while drug use is illegal and often associated with mental problems. As a consequence, IDUs often do not seek medical care and/or are discriminated by the health care worker.⁴ Although not studied, similar situations may

exist in Indonesia. For effective control of the HIV epidemic, barriers for testing and treatment should be removed for IDUs. This is urgent because the number of IDUs have increased dramatically in recent years and HIV prevalence is high among them. It can be estimated that there are around 150.000 IDUs in Indonesia, using the available limited data from the different departments and NGOs. Specific figures related to regions, city or municipality are, however, often lacking.⁵ Estimates on occasional injecting drug use, especially among peers at younger ages, are even more difficult to give. Most IDUs start injecting drug administration in junior or senior high school at an age of 14-15, while most of them are unaware of the risks of HIV transmission.⁶

Injecting drug use is a very efficient way to transmit HIV, more than sexual transmission, and sharing needles is therefore an important factor in the dynamics of the present HIV epidemic. The spreading of HIV outside the group of IDUs takes place through sexual contact: a substantial proportion (48%) of IDUs are known to have multiple partners or buy sex from commercially sex workers (40%).^{7,8} Since drug use is illegal, a considerable proportion of IDUs can be found in the prisons. Prisoners incarcerated for drug crime usually do not know their HIV serostatus and HIV-infected prisoners present therefore mostly with late stage disease.⁹ Several sentinel surveys have confirmed the HIV prevalence of >6% among prisoners.¹⁰ Selective counseling and testing among HIV suspected cases in Banceuy Narcotic prison in Bandung showed that >30% of these subjects were HIV positive.¹¹

In brief, Indonesia is facing an emerging problem of HIV, which is especially related to injecting drug use but increasingly also because of sexual transmission. Improved access for testing and care is needed to control the HIV problem. IDUs are presently hard to reach except in specific settings like prisons. HIV prevention programs should also address adolescents also since risk behavior starts at an early age.

TOWARDS AN EFFECTIVE RESPONSE

To address this urgent problem, a comprehensive and multidisciplinary program has been developed in the last 2,5 years, focusing on HIV-prevention and care especially focused on IDUs. The overall aim of this program, called IMPACT, is to improve the control of the HIV/AIDS epidemic in Bandung and West Java (40 million people). Specific objectives are 1) to reduce HIV-related risk behavior through gender-sensitive, evidence-based prevention programs in young adolescents, inside and outside school, 2) to establish comprehensive and evidence-based prevention and care of HIV/AIDS for IDUs in Bandung and 3) to establish the capacity to conduct, replicate, scale-up interventions that are tailored towards the local situation and evidence based. In the figure below, a framework of the current situation in West Java is given. In this framework, the different groups that are involved and their interventions that IMPACT is focusing upon, are represented as well.

Within the community, Health Promotion activities are especially focused on adolescents in Bandung, in

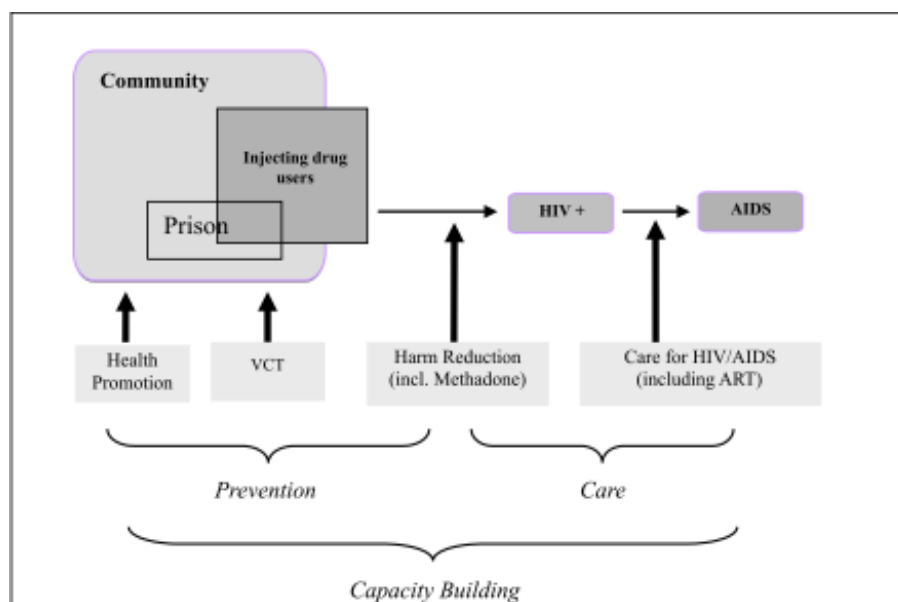


Figure 1. Schematic drawing of the process of HIV transmission, disease progression and program directed towards it. Concept of IMPACT

order to improve their knowledge on HIV and other blood-borne diseases, like Hepatitis B and C. Appropriate strategies and media will be developed to meet the needs of these adolescents and the program aims to reach 67.500 adolescents in Bandung. The Voluntary Counseling and Testing as well as Harm Reduction activities focus mainly on the high risk group of drug users, while Health Care activities will address all possible HIV-infected subjects in Bandung. Harm Reduction mostly involves the support of the Methadone Maintenance Treatment program that is now in operation in several clinics in West Java. Key beneficiary of the non-educational activities are IDUs in the community (n=1300) and in the prison (n=800).

Teratai is the referral HIV clinic of Hasan Sadikin Hospital Bandung and IMPACT envisages that care for ~1300 HIV-infected patients will be covered not only for their medical care but also with psychosocial support. Teratai mostly focuses on care but research is also taking place to monitor, evaluate and improve interventions. For this, an open cohort of HIV-infected patients has been established. Also the laboratory has been strengthened by building the capacity to measure CD4-cell counts and viral loads using an in house developed assay. Within IMPACT, there is also special attention on the costs and efficient use of funds.

Within Padjadjaran University, the Hasan Sadikin General Hospital and the collaborating institutions, multidisciplinary teams that include biomedical experts, social and behavioral scientists and public health experts are operational. The biomedical team consists of infectious disease specialists, psychiatrists, dermato-venereologists, microbiologists, pharmacists and public health specialists. The Sociobehavioral team comprises of academic staff members of psychology, anthropology, education, epidemiology, and health economics. In regular meetings, information dissemination through newsletters and a website (www.impactbandung.org) cross fertilization between the different teams and IMPACT members is secured.

GUIDING PRINCIPLES FOR AN EFFECTIVE RESPONSE

The control of the emerging HIV epidemic in Indonesia faces many challenges and IMPACT has adopted five principles to overcome some of the challenges. *First principle* is to offer as much as possible, comprehensive services. For instance, methadone clinics can be equipped to provide “one-stop care” that includes methadone maintenance therapy, HIV-testing for IDUs and their spouses, promotion of

condom use, HIV-treatment as well as the care of opportunistic infections such as TB or other concurrent diseases and sexual transmitted diseases.^{12,13} Development of such comprehensive services is implemented in various settings like the addiction and methadone clinic, the prison clinic, community health centers and the HIV referral clinic. Because the problem is emerging and the tasks are diverse, some health care workers may need additional training. Specific needs are identified by all professionals involved and opportunities are offered as much as possible.

Second principle is to integrate biomedical and non-biomedical expertise as much as possible. HIV is often not a pure biomedical problem but involves different social-behavioral aspects such as stigma, adherence to treatment etc.¹⁴ The complexity of the problems certainly applies to IDUs that often face increased mental, psychiatric, financial and legal problems. IMPACT combines therefore the expertise from different areas in a comprehensive and integrated program.

Third principle is that interventions should be evidence based as far as possible and that operational research is not only a powerful tool to develop locally tailored evidence based interventions but may evaluate the implementation process itself as well. Methadone maintenance therapy is, for instance, an internationally recognized evidence based intervention but issues like access, misuse, side effects, adherence depend very much on local circumstances.¹⁵ Operational research is a tool to overcome these challenges. In addition to that, various costs are involved in different interventions and health authorities should have insight in financial consequences of the program. Cost-effective analysis will provide such information and these data are necessary for the sustainability of the program and can also be used to implement (some of) the interventions outside West Java. Monitoring and evaluation aspects are, therefore, integrated as much as possible in any new developed intervention.

Fourth principle is good access. High risk behavior is mostly not very visible in the general community and access to care may be limited. IMPACT is trying to put comprehensive services that are easily accessed by the high risk behavior community, either in the community close to the intravenous drug use, or in prison for inmates needing testing and therapy.

Fifth principle is that active participation of all relevant stakeholders and institution is needed. As stated before, interventions for IDUs involve medical, financial and legal issues and professional from

different background may not always share the same view. Involvement of stakeholders, tuning of activities, open communication and shared decision taking is mandatory to implement the program successfully and secure sustainability. A steering committee and advisory board, in which the stakeholders are represented, oversee, therefore, all activities. In addition to that, national authorities such as the Department of Health and the National AIDS Committee are well informed of the program and represented in the advisory board.

Principles of effective response:

1. Comprehensive approach
2. Integrated expertise
3. Evidence-based interventions
4. Good access
5. Active participation of stakeholders

PROGRESS; FIRST RESULTS

Since its start in early 2007, IMPACT has established a comprehensive program, which is well-embedded and supported by public and private stakeholders at local and national level. The whole range of prevention, care and treatment is covered by a multidisciplinary program. The needs for primary prevention among adolescents were identified and a tailored made education package about prevention of HIV has been developed and awaits trials.¹⁶ The behavior of adolescents was included in these studies and this information was also used to complete the educational package.¹⁷

In another study, the barriers for HIV testing were explored and we found that costs, perceived lack of confidentiality, stigma and perceived lack of benefit were all barriers for HIV testing.¹⁸ Furthermore, it was found that the follow-up of patients that were tested positive is very important and is among others determined by the readiness of the health institution to provide care.¹⁹ Much information has been gathered on the profile of current and previous IDUs and this has greatly increased our understanding of the risk behavior.²⁰ The information is also crucial for implementation of the methadone maintenance program that is operational in a specialized clinic in Bandung where over 100 IDUs are treated.²¹

HIV treatment has been evaluated retrospectively and standard operational procedures for treatment of HIV and opportunistic infections have been developed. Presently, more than 500 patients are receiving HIV care and most patients are treated with ARV in the Teratai clinic. Over time, mortality rates have dropped and

treatment practices have become, therefore, more effective.³ Many patients have complex medical problems and different services have improved over time such as laboratory support, treatment of TB, management of skin disease and drug eruptions.²²⁻²⁴

Medical practices in the prison and community clinic have also been evaluated and improved. VCT and PITC were practiced for new inmates in Banceuy prison with 94% acceptance rate. Comprehensive health services including ARV and treatment for opportunistic infection became available in Banceuy Narcotic prison.^{25,26} Apart from the prison, also community clinics have been addressed, such as Salam Community Health center that has a long history on providing care to IDU.²⁷

In addition to all of this, the risk that health care worker (HCW) are facing, has also been addressed. A knowledge, attitude and practice survey among health care workers in Hasan Sadikin Hospital has found that sharps injuries are common, including among the medical and nursing students.^{28,29} Finally, costs and cost-effectiveness studies have been included.³⁰

CONCLUSION

Injecting drug use is the main route of transmission of HIV in Indonesia, and a comprehensive and integrated approach is needed to control the emerging HIV epidemic. Improvement of access for testing and treatment have been established. Educational programs are being developed and we hope that all these measures will lead to a significant reduction of HIV transmission among IDUs and as such contribute to the control of the HIV epidemic in West Java. The increase of patients that acquired HIV through sexual contact is however, worrisome and needs further attention.

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