

Building partnerships to address the HIV epidemic

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ABSTRACT

Introduction: Batam is one of the islands comprising the Riau Province in Indonesia, and is closest to Singapore. It is a popular destination of many Singaporeans. Surveillance reports among commercial sex workers conducted in Batam showed the prevalence rate of human immunodeficiency virus (HIV) is 16.2 percent. At the end of 2006, the total number of HIV-infected Singaporeans was 3,060, the majority being infected via heterosexual transmission. The aim of the Indonesian government is to rapidly scale up HIV treatment to those needing it. One of the factors critical to the rapid scale-up is healthcare worker training.

Methods: An intersectoral collaboration addressing the issue of HIV care and treatment with a hospital in Batam was created. The first activity of the collaboration was a two-day HIV training course conducted in February 2007. The aim of the course was to provide a basic understanding of HIV, as well as knowledge on common opportunistic infections that may present to a general hospital or clinical setting.

Results: 34 doctors from 23 institutions in Batam and three doctors from two hospitals in the Riau Islands attended the two-day HIV training course. The participants found the training very useful and highly relevant.

Conclusion: This first HIV training provided a foundation to build on further HIV education. It is our belief that through the HIV training programme, there will be more awareness of HIV among the various medical institutions in Batam. As the HIV epidemic knows no borders, working with neighbouring countries is one strategy that deserves attention.

Keywords: acquired immunodeficiency syndrome (AIDS), health education, human immunodeficiency virus (HIV), infectious disease, sexually transmitted disease

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INTRODUCTION

The Riau archipelago is one of the provinces in Indonesia and bordered by three countries: Malaysia, Singapore and Vietnam. Geographically, the Riau islands are located on the international trading route, and in Indonesia, this province is the second largest tourism destination for Singaporeans and Malaysians.⁽¹⁾ Batam, together with Bintan, Karimun, Natuna, Lingga Regencies and Tanjung Pinang, make up the Riau Province in Indonesia; it is the closest to Singapore, a mere 20 km away or 20 min by ferry. Batam has a land area of 415 km², and its population has risen during the last ten years from 106,667 in 1990 to 439,971 in 2000.^(1,2) According to the 2006 UNAIDS report on the global acquired immunodeficiency syndrome (AIDS) epidemic, there are currently 176,000 people living with human immunodeficiency virus (HIV)/AIDS in Indonesia. The prevalence rate among adults aged 15–49 years is 0.1%.⁽³⁾ Surveillance reports among commercial sex workers conducted by the local department of health in Batam showed that in 2006, the prevalence rate of HIV is 16.2%, an increase from 3% in 2000.⁽⁴⁾

Because of its proximity, the Riau Islands is a popular destination among Singaporeans. A recent survey conducted by Action for AIDS, a Singapore non-governmental organisation involved in HIV prevention, revealed the demographics of Singaporean men who engaged in high-risk sexual activities overseas, in particular those in the nearby Riau Islands.⁽⁵⁾ The survey was conducted between July 2005 and September 2005 on a sample of 979 Singaporean male travellers at ferry terminals and hotels in the Riau Islands, including Batam. Results showed that about 40% of the survey participants had travelled to the Riau Islands 1–2 times in the last six months, with a mean average stay of about two days. 70% of the respondents said they were in the Riau Islands to have sexual intercourse with a girlfriend and/or with commercial sex workers. Close to 70% of the respondents said they never or rarely use condoms when they have intercourse there. Sen et al noted in their review on the rising trend of sexually-transmitted infections (STI) and HIV infections in Singapore, that the Riau islands follows only Singapore as the source of primary contacts of patients diagnosed with gonorrhoea.⁽⁶⁾

At the end of 2006, the total number of HIV-infected Singaporeans was 3,060, with the majority being infected via heterosexual transmission.⁽⁷⁾ As the HIV epidemic

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knows no borders, working with neighbouring countries is one strategy that deserves attention. The provision of HIV care and treatment in resource-limited settings is rapidly expanding. In Indonesia, anti-retroviral treatment (ART) has been subsidised by its government since August 2004. There are 25 designated HIV referral hospitals throughout Indonesia.⁽⁸⁾ The aim of the Indonesian government is to rapidly scale up HIV treatment to those needing it. One of the factors critical to the rapid scale-up is healthcare-worker training. HIV training is required by healthcare workers who are faced with patients with HIV infection. This is one of the objectives of this intersectoral collaboration.

METHODS

In May 2006, the National University Hospital (NUH), Singapore, was invited by the World Health Organisation team in charge of HIV monitoring and surveillance in Indonesia, to join them in a site visit to Budi Kemuliaan Hospital in Batam, Indonesia. Since August 2004, the Indonesian government has provided subsidised ART. There are an estimated 11,806 HIV patients being followed-up, as of September 2006. The total number of patients who have received ART in Indonesia is estimated to be 8,084.⁽⁸⁾ Budi Kemuliaan Hospital is one of the 25 designated referral hospitals for HIV care and treatment in Indonesia and serves the surrounding Riau Islands. There are 118 patients being actively followed-up in the hospital, and as of July 2006, 52 patients were receiving ART.⁽⁴⁾ One of the challenges of local doctors taking care of HIV patients is the lack of experience and expertise in HIV medicine, including management of opportunistic infections. After this initial visit, both Budi Kemuliaan Hospital and the NUH mutually expressed their interest in forming a collaboration that would be beneficial to both parties.

Through the National University of Singapore (NUS) Leadership in Academic Medicine Mentoring Programme, a small fund was granted to support this initiative to build and develop an intersectoral collaboration between the academic (NUH), public (Communicable Disease Centre [CDC]-Tan Tock Seng Hospital [TTSH], Singapore) and private non-governmental (Budi Kemuliaan Hospital) organisations. This was co-funded by the Department of Infectious Diseases, TTSH.

In June 2006, the medical team from Budi Kemuliaan Hospital visited Singapore for a site visit of both NUH and TTSH, where they were shown the care and management of HIV patients in Singapore. Subsequent meetings were held discussing details of collaboration and eventually a memorandum of understanding was signed by the

National Healthcare Group (CDC-TTSH and NUH) and Budi Kemuliaan Hospital on December 15, 2006 in Batam, Indonesia. The memorandum of understanding expresses the interest of both parties for collaboration in infectious disease training and education, provision of bilateral exchanges of information with the aim of supporting and improving patient care delivery, as well as exploring mutually beneficial collaboration in the area of research. Focus group sessions were held with local general practitioners. One of the identified needs was the lack of awareness and training in HIV management among the local general practitioners in Batam and surrounding Riau Islands. The first activity of the collaboration was a two-day HIV training course conducted in February 2007. The aim of the course was to provide a basic understanding of HIV as well as knowledge on the common opportunistic infections that may present to a general hospital or clinical setting.

RESULTS

34 doctors from 23 institutions, including hospitals, clinics, the local Ministry of Health office in Batam, and three doctors from two hospitals in the surrounding Riau Islands, attended the two-day HIV training course. The list of the hospitals and clinics taking part in the course are listed in Table I. Topics in the HIV training were: epidemiology of HIV including local, regional and international data; pathogenesis of HIV; voluntary counselling and testing for HIV in Batam, Indonesia; introduction to the continuum of care for HIV patients in Batam; prevention of maternal to child transmission; ART; tuberculosis and HIV; chest radiograph findings and pulmonary manifestations of HIV-related opportunistic infections; neurological manifestations of HIV-related opportunistic infections; gastrointestinal opportunistic infections; and dermatological manifestations of HIV-related infections. Speakers were consultants from CDC-TTSH, NUH and Budi Kemuliaan Hospital. Participants received six CME credits for the course, endorsed by the Indonesian Medical Association.

A pre-test was conducted to assess the baseline knowledge of HIV among the participants. After the two-day training, a post-test was conducted to assess understanding of the lectures given. The test consisted of 15 multiple-choice questions covering the topics presented on HIV as detailed above. Pre-test results showed a mean score of 4.10 (range 1–6) and post-test results revealed an improved mean score of 7.04 (range 4–9). The participants found the training very useful and highly relevant, giving an average score of 4.47 (5: excellent; 4: very good; 3: good; 2: unsatisfactory; 1: poor).

Table I. List of institutions who participated in the HIV training course

Batam	RS Elizabeth RS Harapan Bunda RS Otorita Batam RS Budi Kemuliaan RSUD Batu Aji RS Awal Bross RS Harapan Bunda PKM Sei Panas PKM Bulang PKM Baloi Permai PKM Sei Pancur PKM Sekupang PKM Sungai Panas PKM Sei Lekop PKM Sei Pancr Klinik Ginjal RA Habibibie Klinik McDermott Klinik Prima Dati Klinik Kimia Farma KF Kampung Utama IDI Batam/Sagulung Clinic Din Kes Kota Batam (government) Yonif 134 (military hospital)
Tanjung Balai Karimun	RS Umum Daerah
Tanjung Pinang	RS Angkatan Laut (navy hospital)

RS: rumah sakit or hospital; PKM: pusat khumat medis or poly-clinic/general clinic; Din Kes: dinas kesahatan or Ministry of Health; Yonif: military unit

DISCUSSION

This first HIV training provided a foundation to build on further HIV education. All participants expressed their interest in additional training and follow-up. Discussions during the first HIV training included how to ensure patient confidentiality in settings where this could be difficult; e.g. in the military, where military doctors may be forced by more senior officers to disclose the HIV status of their patients. Several doctors expressed concern regarding occupational risk while managing HIV patients, and these were addressed and clarified. In general, the training provided a better understanding and awareness on various HIV issues of concern to the local practitioners.

Two more modules of HIV training were planned for 2007, following the successful first HIV training. The goal was to have the same participants in modules two and three. Module two covered other topics, such as ART and its principles; side effects and drug interactions; ART monitoring; infection control, occupational post-exposure prophylaxis, prevention of maternal to child transmission and women's issues; and children and HIV. Module three included topics such as counselling and support to people living with HIV/AIDS. The first HIV training module was conducted in English as most of the participants are familiar with the English language. However, based on feedback received, a Bahasa Indonesia speaker was included in the subsequent modules to enhance the understanding of the lectures. In addition, subsequent training modules also included nurses and other paramedical staff. Aside from

the formal lectures and training, short-term postings for Indonesian doctors to CDC-TTSH or NUH as observers were planned. Long-term plans also include possibilities for medical research that are mutually beneficial to both countries.

It is our belief that through the HIV training programme, there is more awareness of HIV among the various medical institutions in Batam. Aside from the medical management of the HIV infection, there is also more awareness and understanding of the social aspects of the infection. Fear and stigma remain one of the main barriers to HIV care and treatment from society as well as from medical personnel. Knowledge that treatment for HIV is available can help transform public attitudes about HIV. As a follow-up from the first module, participants were asked to bring medical cases and non-medical problems that they encounter in their institution to be discussed at the next module. Another advantage of this collaboration is the establishment of a means to refer patients for ART in Indonesia. Most non-Singaporeans do not have access to subsidised medical care, and thus, the cost of medical care and treatment in Singapore can be quite expensive. Likewise, immigration laws in Singapore do not allow non-resident non-Singaporeans with HIV infection to remain in Singapore. Through our relationship with Budi Kemuliaan Hospital, our Indonesian patients can be followed-up for their HIV infection. Moreover, we are able to follow-up on their care as well as provide advice on complicated medical cases when needed.

Ultimately, better care and treatment of HIV patients benefit the whole population. It has been well accepted that in order to control the HIV epidemic, there should be a concerted effort on both prevention and treatment.⁽⁹⁾ Indeed, it is important to emphasise that with effective treatment, there is indirect benefit to the sexual partners. According to clinical studies, ART suppresses HIV viral levels in body fluids and has been shown not only to increase survival in HIV patients, but also to reduce rates of mother-to-child transmission and heterosexual transmission.⁽¹⁰⁾ Therefore, ART should be seen as a means for both reducing morbidity and mortality among HIV patients, and also for lowering rates of transmission within populations.⁽¹¹⁾ Data supporting and verifying this argument was reported by Fang et al, who showed decreased transmission of HIV after a policy of providing free ART.⁽¹⁰⁾ HIV infection does not recognise any borders; and when we speak of populations at risk, we need to see beyond populations within countries. It is important to reiterate the proximity of Singapore and Indonesia, and the number of travellers that cross these two countries on a daily basis. We hope that this initiative will be recognised as a strategy to address the HIV epidemic and that support in developing this partnership will be maintained.

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