

SEX WORK & HIV INDONESIA



Although the prevalence of HIV in the general population is low (0.2%) and is mainly concentrated

among injecting drug users (IDUs) in Jakarta, West Java and Bali, the epidemic has now spread to other key populations at higher risk such as non-injecting partners of IDUs, sex workers and their clients [1].

The number of reported cases attributable to sexual transmission increased from 17.6% in 1987-1990 to over half of the reported cases in 2009 [3],[4]. The estimated proportion of new HIV infections attributed to sexual transmission is projected to reach 58% by 2014 [5] and 42-43% of new HIV infection will be attributable to female sex workers (FSWs) and their clients in 2012-2014 [6].

Since 2000, the HIV epidemic has been concentrated in four particularly vulnerable sub-populations (with prevalence >5%): IDU, sex workers (male and female), and men who have sex with men (MSM) including 'waria' who sell sex [2].

In Papua and West Papua, the estimated and reported number of cases are the highest in Indonesia [7]. In Tanah Papua, high-risk sexual behaviour (unprotected sex and frequently changing partners) is responsible for over 90% of HIV transmission both in urban and more isolated rural areas [2],[5]. Modelled estimates also showed that between 2009 and 2014, the proportion of female sex workers among total people living with HIV would be between 9-10% [5]. In a survey conducted in

2006, HIV prevalence among the general adult population was estimated at 2.4% and reached 3.2% in the remote highlands and 2.9% in the less accessible lowlands [2],[5],[8].

SEX WORK

The sex industry in Indonesia has a long history dating back to pre-colonial times [2]. Javanese rulers were allowed concubines and the kings had sexual rights over low caste widows in Bali. During the Dutch colonial period, the sex industry expanded and became more organized [2]. Common drivers of sex work include poverty, low levels of education and the lack of employment opportunities.

FSWs are classified mostly as direct (those who work in brothels and street-based sex workers) or indirect (such as women working in karaoke bars or massage parlours). It is estimated that there are 95,000-157,000 direct sex workers and 85,000-107,000 indirect sex workers as of 2009 [5],[9]. In 2006, the figure was put at 221,000 women working in the sex industry, serving an estimated 4 million clients per year [2],[5].

Table 1. Estimated size of sex worker populations.

Indicator	Year	Size of sex worker population	Ref.
Sex workers (overall)	2008	200,000 – 300,000	[2]
	1993-1994	140,000 - 230,000	[10]
FSWs	2006	221.000	[9]
Direct FSWs	2008	95,000 - 157,000	[9]
Indirect FSWs	2008	85,000 – 107,000	[9]
Waria	2007	21,000 - 35,000	[9]
Clients	2006	4 million	[9]

¹ 'Waria' refers to an identity, behavior, and performance that is associated with being female by someone who was born male.

Classifications of the types of sex work in urban Indonesia include the following [12]:

- Brothel-based (lokasi) FSWs.
- Rumah I bordil unofficial (unregistered) brothels
- Freelance sex workers
- Street-based sex workers
- Call girls (wanita panggilan)
- Part-time sex workers normally work as tea or drinks sellers and are paid a monthly salary and commission for the sale of drinks. Sexual services are provided on the side.
- Indirect sex workers waitresses at truck stops, roadside beer-halls, food stalls and snack bars. Also massage parlours, beauty salons and spas.
- Indirect sex workers with business arrangements with expatriates in Indonesia. The women are married to the expatriate and assume the role of 'contract wife' for the duration of his tenure.
- Pecun or perempuan percuma (literally translated to mean 'woman for free') – young urban females who engage in sex work voluntarily despite being highly educated and/or having other economic opportunities. Sexual services are often given in exchange for high amounts of cash or expensive gifts.
- 'Secretary Plus' Professional secretaries who provide additional sexual services to a company's clients and business contacts.

Male sex workers and waria

Among MSM, the buying and selling of sex with male partners is reportedly common. Up to 20% of MSM surveyed in the IBBS 2009 reported buying sex from and 47% selling sex to a male partner in the past year [5]. In addition, 10% reported buying sex from a female partner and 14% reported selling sex to a female partner [5].

In 2006, it was estimated that there were between 21,000 and 35,000 *waria* in Indonesia [5].

Sex work and the economy

The financial turnover of the sex sector is estimated at US\$1.2 - 3.3 billion per year; or between 0.8 and 2.4% of the country's GDP [2]. Much of sex workers' earnings are remitted from the urban brothel complexes where they work to the villages where their families live. In Jakarta alone, there was an estimated annual turnover of US\$91 million from activities related to transactional sex [2].

At the higher end of the spectrum, the personal incomes of high-range sex workers in large cities (such as call girls working in high-priced discos and nightclubs) can be as high as US\$ 2,500 per month, exceeding the earnings of middle-level civil servants and other occupations requiring a high level of education [10]. In contrast, the earnings and working conditions are low at the bottom end of the market: sexual transaction in cheap brothels can cost as little as US\$ 1.5 and prices on the streets of slums or alongside market areas and railroad tracks are even lower [10].

Men without enough money to purchase the sexual services of a sex worker may group together and negotiate for lower-priced sex [5]. This practice, termed 'sequential sex", is the negotiated, consensual act in which a woman allows several men to have sex with her, often associated with money, alcohol and drugs [5],[19].

In Papua, the expansion of the mining, oil and timber industries, as well as the arrival of security forces in large numbers have been accompanied by the development of commercialized and organized sex work [2], [5].

Clients of sex workers

Presently there are approximately 95 million people in Indonesia's workforce, with 7-9 million men considered as potential clients of sex workers [2]. In Papua, 1.6% of the population reported that their first sexual experience was with a sex worker [2]. Approximately 16% of the population had had sex with a non-regular partner in the last year, and for more than half of these, some sort of payment was involved [2].

In the 2007 IBBS four occupational categories of men with perceived high-risk behaviours were surveyed: truck drivers (in Deli, Serdang and Batang), seafarers (in Batam, Medan, Semarang and Surabaya), dock workers (in Jakarta, Merauke and Sorong), and 'moto-taxi' drivers (in Medan, Banyuwangi and Jayapura) [5]. Thirty-six percent of men in these high risk occupation groups reported having had sex with a FSW in the last year. Consistent condom use in the last year was 17% [13].

Outside of Papua, 60% of truck drivers and 46% seafarers reported having had sex with a FSW in the past year [5]. In Tanah Papua, sex with FSWs was quite common among moto-taxi drivers (34%) and dock workers (43%) [5].

A separate IBBS conducted among military personnel in 2007 found that, among those who were unmarried, more than 40% reported having bought sex from a sex worker, compared to 18% among widowers/divorced men and 4% among those who were married [5]. The survey also found that, on average, personnel sent to a new post would abstain from sex for only two months before buying services from a sex worker or getting married [5].

Sex Work and the Law

Although selling sex is not technically a criminal act, other aspects of the industry are illegal, such as pimping and soliciting [16].

Brothel-based FSWs reside and trade their services in establishments also called 'lokasi' [12]. At one time, these were mostly managed by the local Social Affairs Office (Dinas Sosial) which regulated working hours and conditions. Each Dinas Social also imposed regulations which controlled and prevented sex workers from leaving the lokasi without the approval of the brothel owner [12]. Currently however, brothel-based FSWs and other groups of sex workers such as freelance FSWs, street-based, call girls and other indirect FSWs operate outside the government's administration [12].

In 2007, the *Anti-trafficking law no 21/2007* was enacted, prohibiting all forms of trafficking in persons,

including sexual exploitation [17]. Penalties range from 3 to 15 years of imprisonment.

Notwithstanding the existence of legislation, there is often a disconnect between the law and conflicting policies, as well as a lack of coordination among government bodies and weak law enforcement. Despite whatever type of legal environment that exists, police and local authorities have been known to take punitive or more restrictive actions against sex workers based on outdated or unrelated laws and policies. Each of these issues acts as a barrier to HIV intervention programme implementation by making sex workers hidden for fear of being apprehended and by hampering their health-seeking behaviour.

SEX WORK AND HIV

Data from various sentinel surveillance sites in 2006 showed that HIV prevalence among FSW ranged from 1-22% [2]. The 2007 IBBS in Indonesia found, that among all groups of sex workers, the HIV prevalence was 10.2%, (but ranging from 7.8% among female sex workers to 24% among waria). No difference in HIV prevalence was detected between sex workers aged less than 25 years as compared to those aged 25 years and above (10.4% vs. 10.1%, respectively). [5]. The proportion of FSWs getting infected in their first six months of selling sex is high, indicating that they get infected very quickly after initiating sex work [9].

Sentinel data in 2008 showed HIV prevalence of 4% in Bali and 6% in East Java [5]. Although the trends of HIV prevalence among FSWs are not consistent across cities, the aggregated trend shows an increasing pattern of HIV prevalence (represented as adjusted weighted averages in Fig. 1).

Table 2. Vulnerability of sex workers

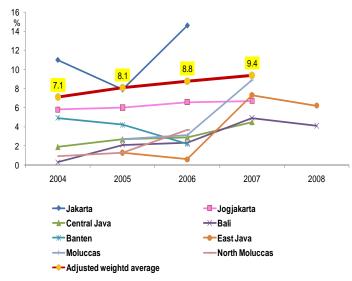
Indicator	Percentage (%)	Year
HIV prevalence among sex workers	-Sex workers (all):	2007
Sex workers who used a condom with their last client [5]	-FSW: 66.0% -MSW: 79.1%	2007
Sex workers reached by HIV prevention programmes [5]	-Sex workers: 51% -FSW: 23.9% -MSW: 55.2%	2007
Sex workers who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission [5]	-FSW: 25.2% -MSW: 36.7%	2007
Sex workers who received an HIV test and know their results [5]	-Sex workers: 32.6% -FSW: 27.8% -MSW: 57.2%	2007

There are differences in HIV prevalence between direct and indirect FSWs. In the 2007 IBBS, the HIV prevalence among direct FSWs was 10.4% (ranging from 6%-16%, depending on province), and among indirect FSWs it was 4.6% (ranging from 2%-9%) [5],[9]. Among direct FSWs, the highest prevalence of HIV was recorded in Tanah Papua (22%) and Bali (15.9%), whereas the highest prevalence among indirect FSWs was found in Batam (9%) and Jakarta (5.7%) [1],[2]'. In Tanah Papua, the number of HIV infections in the province is expected to continue to increase as sex work continues to expand

² Direct Sex Worker: A person, male or female, selling sex as an occupation or main source of income. Direct Sex Workers may be either street-based or based in a brothel or other fixed location.

and the availability and consistent use of condoms remain low [2].

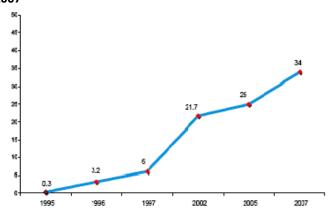
Figure 1. Trends of HIV prevalence among female sex workers in selected sentinel sites, 2004-2008.



Source: HIV sentinel surveillance, 2004-2008_Ministry of Health

The HIV prevalence among waria was 34% in Jakarta, 14% in Bandung and 25% in Surabaya (Fig. 2) [1].

Figure 2. HIV prevalence among waria in Jakarta, 1995 – 2007



Source: IBBS: Integrated Biological-Behavioral Surveillance among Most-at-Risk Groups (MARG) in Indonesia, 2007. Surveillance Highlights. Female Sex Workers. 2008.

³ Indirect Sex Worker: A person, male or female, working in the entertainment business, such as in bars, karaoke centers, beauty salons or massage parlors, who to increase their income also sell sex. It should be noted that not everyone working in these places sells sex.

⁴ 'Male sex workers' in the 2007 IBBS included *waria* who sold sex.

A 2006 report, Estimates of Adult Populations at Risk of HIV Infection, stated that 4-8 million people in the country were at high risk of contracting HIV, most of whom belong to two sub-populations: clients of sex workers (3.1 million) and the partners of clients of sex workers (1.8 million) [2]. Among the number of people living with HIV, 18% are estimated to be clients of sex workers (making 20% of new HIV infections) [6]. In terms of the cumulative percentage of HIV infections among clients of voluntary counseling and testing (VCT) services, 6.7% are among FSWs and 13.1% are among clients of sex workers [15].

Surveillance among clients of sex workers that was conducted in six cities (including high risk men such as truck drivers, ship crews longshoremen and taxi drivers) found that the overall prevalence of HIV among them was 0.8%, ranging from 0.2% to 1.8% [5],[9].

Among high-risk men outside of Papua, 0.2% of truck drivers and 0.5% of seafarers were infected with HIV [5]. In Tanah Papua, the prevalence of HIV was higher, at 1% among moto-taxi drivers and 3% among dock workers [5].

Half of the direct FSWs in Bali reported having at least 14 clients in the past week [1]. Elsewhere the median number ranged from five to eight in the past week. Indirect FSWs had fewer reported numbers of clients per week, ranging from one to six [1]. A survey conducted in 10 cities of Indonesia revealed that the average number of clients per week was 6.6 (8.7 among direct FSWs and 4.7 among indirect FSWs) [1].

Among waria who sell sex, the median number of reported clients in the last week prior to survey ranged from one to four (survey conducted in 5 cities) [1],[5].

The percentage of sex workers who have received an HIV test and know of their results doubled from 15% in 2004-2005 to 31% in 2006-2007 (noting differences in survey methodologies) [2]⁵. Among those aged less than 25 years, 27% have been tested, compared to 33%

⁵ Data on sex workers cited from the 2008 UNGASS report were based on surveys of female sex workers in 14 cities and MSM who sell sex (MSW) in 4 cities and *waria* who sell sex in 5 cities.

among those aged 25 years and above [2]. The percentage of male sex workers (MSW) who had received an HIV test was twice as high as for female sex workers (54% compared to 25%)⁶ [2].

Condom use

Between 1996 and 2002, condom use in commercial sex in Jakarta was consistently low. In 2002, one in two sex workers in massage parlours and discotheques reported using a condom at last sex, but fewer than one in five used them consistently [9]. Among sex workers in brothel areas, the rate of condom use with all clients in the previous week was low, at just 4% [9].

Data from the 2007 IBBS states that $68\%^7$ of all sex workers reported the use of a condom with their most recent client (66% among female sex workers and 79% among male sex workers) [5]. The percentage for condom use is roughly similar for different age groups: among those aged less than 25 years, 64% used a condom with their most recent client, compared to 70% among those aged 25 years and above [5]. The government's target for condom use among key populations at higher risk (including sex workers) was 80%.

The 2007 IBBS reported that *waria* tend to engage in risky sexual behaviours and have high HIV prevalence [1]. The majority (80%) of *waria* sell sex to male customers and consistent condom use in receptive anal sex with clients during the past month ranged from 15% in Jakarta to 50% in Bandung [1].

There is often resistance from male clients of sex workers regarding the use of condoms. It has been reported that indirect sex workers who do not use condoms could charge around 20% more, on average,

⁶ The 2010 UNGASS report states that the lack of gendersensitive services may be one possible explanation for this higher level of testing among MSWs as compared to FSWs. The report also indicates that FSWs have little incentive for being tested given the stigma that surrounds women in sex work and women with HIV.

⁷ Potential bias exists as survey respondents tend to be those already exposed to intervention programmes.

than those who do use condoms [9]. Among men between the ages of 15-49 surveyed in the 2007 IBBS, 51% of those who reported having had sex with a sex worker had used a condom at the last paid sexual intercourse [5]. Consistent condom use in the past three months ranged from 37%-46% among high-risk men from the different occupational groups in Tanah Papua and from 7%-21% outside of Tanah Papua [5].

Vulnerabilities

Knowledge and awareness

Sex workers showed relatively low levels of comprehensive knowledge about HIV – that is, were able to both correctly identify ways of preventing the sexual transmission of HIV and to reject major misconceptions about HIV transmission (27% of sex workers; 37% among MSWs and 25% among FSWs) [5]. A more detailed review of the responses showed that, while almost all have good knowledge about condoms, most only have partial knowledge about HIV [2]. According to the findings from a survey conducted among 5,947 FSWs in 10 cities, 89% of FSWs knew that condom use during vaginal sex could protect against HIV transmission and 76% believed that condom use during anal sex can prevent HIV transmission [18].

There were also some differences in knowledge levels between regions. Among direct FSWs, 17% in Bali and 53% in Jakarta did not know that condoms protect against HIV infection [1]. Among indirect FSW, the lack of knowledge about the use of condoms in HIV prevention ranged from 21% in Batam to 49% in Jakarta [1].

Waria are generally knowledgeable about the risks of HIV transmission. Over 90% of waria in four of the five cities surveyed in 2007 knew that condoms protected against HIV infection [1]. Waria in Jakarta, however, showed lower levels of knowledge about HIV prevention.

Injecting drug use

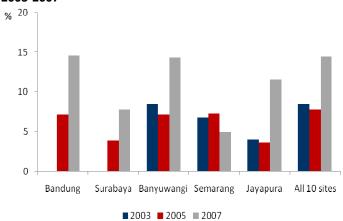
It has been estimated that 50% of IDUs have paid for sex [2].

Among sex workers, the proportion who inject drugs is believed to be low, but the use of methamphetamines is substantial. Up to 32% of indirect FSWs in Batam, and 19% in Jakarta reported using methamphetamines [1],[5]. Injecting drug use among *waria* was reportedly low, ranging between 0.5% and 2.8% who have ever injected drugs [1].

Other sexually-transmitted infections

Though HIV prevalence among FSWs is not as high as in other Asian countries, STI prevalence among FSWs is reported to be the highest among Asian countries [18]. In 2007, syphilis prevalence among FSWs was high across 10 major cities and the prevalence of active syphilis was 7.5% among direct sex workers. Overall syphilis prevalence increased significantly from 2005 (7.8%) to 2007 (14.5%) (Fig. 3) [11]. The prevalence of other STIs such as gonorrhoea and chlamydia was 24.6% and 32.8%, respectively, for both direct and indirect sex workers [11].

Figure 3. Prevalence of syphilis among brothel-based sex workers in selected cities, and average over 10 survey sites, 2003-2007



Source: Majid, N., et al., Syphilis among Female Sex Workers in Indonesia; Need and Opportunity for Intervention, Sex Transm Infect sti. 2009.041269 Published Online First: 3 June 2010

Among high-risk men in Tanah Papua, the prevalence of both chlamydia and gonorrhoea are high. Among mototaxi drivers in Tanah Papua, the prevalence was about 7% for both chlamydia and gonorrhoea, while the prevalence of syphilis was 9.3% [5]. Among dock workers in Tanah Papua, syphilis prevalence was 4.5% [5].

Among waria, the prevalence of either rectal gonorrhoea or chlamydia ranged from 42% in Jakarta to 55% in Bandung, and syphilis prevalence ranged from 25% in Jakarta and Bandung to 30% in Surabaya. While the prevalence of syphilis is among the highest recorded in Asian countries in recent years, prevalence of urethral STIs was low (0-2%) [1].

NATIONAL RESPONSE

The priority of the national response remains focused on key populations such as IDUs, sex workers, *waria*, and MSM [5]. The National HIV and AIDS Action Plan 2010-2014 now serves as a national guideline for HIV programmes. Among the key objectives include the aim to reach the sex worker sub-populations as well as their clients [5]. The National Plan sets the target of 80% of key populations at higher risk to have good access to prevention, care, support and treatment [5].

In 2007, there was no budget allocation for prevention interventions among sex workers and their clients whereas, in 2008, US\$ 1.9 million (8 % of the prevention budget) was spent on this [5].

Surveillance

Indonesia has implemented second generation surveillance including systematic sero-surveillance among sex workers in 16 sentinel sites [2]. By 2005, Indonesia had had two years of behavioural data for sex workers and clients in 10 sites, data for six years in three sites and data for nine years in another three sites [2].

Routine STI surveillance was previously non-existent. Sex workers who are included in HIV surveillance are also tested for syphilis, not for other infections that reflect risk behaviour, such as gonorrhea, chlamydia, and to a lesser extent trichomonas [2].

Condom use programmes

Prevention of sexual transmission of HIV has been carried out through condom promotion and STI services. By 2008, 245 STI service units had been provided by community health centres, private clinics and company clinics [5]. The implementation of a 100% condom use intervention is underway, but is presently limited to the distribution of condoms in pre-identified hotspots and localized brothel areas.

Coverage of intervention programmes

In 2007, surveys show that 29% of the sex worker populations were reached by HIV intervention programmes (55% of MSWs and 24% of FSWs) [5]. The National HIV and AIDS Action Plan puts the targeted coverage at 50% for 2008. Of the sex workers who were reached, 93% received condoms through an outreach service, drop-in centre or sexual health clinic [5]. By 2008, condom promotion programmes have reached about 68% of sex workers (over 27,000 female sex workers) [5]. The programmes have also reached about 400,000 of their clients, and almost 28,000 *waria*. As many as 20 million condoms had been distributed [5]. The overall reach of intervention programmes in 2009 to sex workers was estimated to be about 51% [5].

In terms of treatment access, of the total estimated number of sex workers living with HIV in need of antiretroviral treatment, only 45% have access to the drugs [5].

Community-based organisations and the civil society

There are more than 300 local HIV support groups. The non-governmental organisations that are key players include Spiritia, Positive After-Care Foundation,

Indonesian Network of People Living with HIV/AIDS, the National Network of Positive Women, Indonesia national network of MSM and Waria community organizations and Indonesia Sex Workers Network.

An example of a collaborative effort by the civil society and the local government comes from the district of Banyuwangi (East Java). In 2004, an agreement was set out to guide the work of several local NGOs to be incorporated as the Banyuwangi District AIDS Commission. The programme implementation targeting key populations at higher risk, including sex workers, covers outreach and advocacy, regular STI and HIV tests, care, support and treatment, harm reduction, peer education and condom distribution [5]. One particular NGO in the area, KKBS, coordinated the representation of nine brothels in the area to act as condom distributors. Condoms are thus made available in sex workers' rooms or given free to clients in the parking lots of the brothel areas, with the condom price included in the parking fee [5]. As a result, the data collected by local NGO showed that syphilis prevalence among FSWs decreased from 29.1% in 2005 to 4% in 2007 [5].

KEY ISSUES FROM THE DATA

Enhancing HIV prevention through condom use

Despite high HIV prevalence among sex workers as well as the target of reaching 80% of key populations with prevention programmes, only around half of sex workers had been reached by the end of 2009. Correspondingly, consistent condom use in commercial sex is low, and there was no sign of condom use having increased during the 2002-2007 period during which it was surveyed. Thus, despite the national campaign on condom use, too few sex workers are using condoms consistently enough to protect them from HIV infection and other STIs [5]. According to data from the 2007 IBBS, between 6% to 16% of direct FSWs, and 2% to 9% of indirect FSWs were infected with HIV, depending upon the province. Moreover, there is little evidence of declining STI prevalence among FSW over the past five years.

Leadership and commitment to increasing condom use among sex workers and their clients remain one of key challenges. Furthermore, some religious groups oppose prevention strategies because these are viewed as promoting promiscuity [14].

The particular cases of Papua and West Papua

While more resources have been made available in Papua and West Papua, and the numbers of condom outlets have increased, challenges remain to ensure the stable supply of condoms and consistent condom use, especially among indirect sex workers [5].

Stigma, discrimination and human rights

Reducing the stigmatization among FSWs, waria and MSM will also contribute to reducing HIV transmission. This can be effectuated by increasing high risk populations' access to information on reproductive health, including HIV prevention.

Raising the awareness and responsibility of local governments to take appropriate action in addressing HIV prevalence among key populations at higher risk with a human rights-based approach is also needed.

Access to prevention programmes for women

While MSWs have a higher HIV prevalence than female sex workers (24.4% vs. 10.2% in 2007), more MSWs are now reached with HIV prevention programmes, more receive testing, more have comprehensive knowledge about HIV and more reported having used a condom at last sex with a client. These disparities point to the need for gender-sensitive prevention programmes that take into account stigma and obstacles to access that are particular to women.

Access to information for young people

Ensuring access to information on sexuality and reproductive health for young people, especially among most at risk young people, will contribute to reducing HIV prevalence.

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REFERENCES

- [1] Indonesia, IBBS: Integrated Biological-Behavioral Surveillance among Most-at-Risk Groups (MARG) in Indonesia, 2007. Surveillance Highlights. Female Sex Workers. 2008.
- [2] National AIDS Commission Indonesia, UNGASS Indonesia: Country report on the Follow up to the Declaration of Commitment on HIV/AIDS. 2008, National AIDS Commission Indonesia.
- [3] Laporan Triwulan Situasi Perkembargan HIV & AIDS di Indonesia sd 31 Desember 2009 (Situational Development Quarterly Report; Ministry of Health)
- [4] Ministry of Health Indonesia, Cases of HIV/AIDS in Indonesia: Reported thru' December 2009, Directorate General CDC & EH, Editor. 2009.
- [5] National AIDS Commission Indonesia, Republic of Indonesia - Country Report on the Follow up to the Declaration of Commitment On HIV/AIDS (UNGASS): Reporting Period 2008 - 2009. 2009, National AIDS Commission Republic of Indonesia.
- [6] Directorate General Communicable Disease Control and Environmental Health, Ministry of Health Indonesia, Mathematic Model of HIV Epidemic in Indonesia, 2008-2014
- [17] US States Department, *Trafficking in Persons Report*. 2008.
- [18] Magnani, R., et al., Sexual Risk Behaviors, HIV and Other Sexually Transmitted Infections among Female Sex Workers in Indonesia, Sex Transm Infect sti.2009.038059Published Online First: 3 June 2010
- [19] Butt, L., et al., *Preventing AIDS in Papua. Revised research report.* 2002.

- [7] UNDP, Papua Needs Assessment: An Overview of Findings and Implications for the Programming of Development Assistance. 2005.
- [8] Ministry of Health and Central Statistics Agency, *Risk Behavior and HIV Prevalence in Tanah Papua 2006:*Results of the IHBS 2006 in Tanah Papua. 2006.
- [9] UNAIDS, *Report on the Global AIDS Epidemic*. 2008, The Joint United Nations Programme on HIV/AIDS.
- [10] ILO (1998) Sex industry assuming massive proportions in Southeast Asia.
- [11] Majid, N., et al., Syphilis among Female Sex Workers in Indonesia; Need and Opportunity for Intervention, Sex Transm Infect sti. 2009.041269 Published Online First: 3 June 2010
- [12] Surtees, R., *Traditional and Emergent Sex Work in Urban Indonesia* Intersections: Gender, History and Culture in the Asian Context, 2004. 10.
- [13] Mustikawati, D E., et al., Sexual Risk Taking, STI and HIV Prevalence among Four High Risk Occupational Groups of Indonesian Men, Sex Transm Infect 2009;85:391-396
- [14] JUNIMA (2010) Joint United Nations Initiative on Mobility and HIV/AIDS (JUNIMA) in South East Asia. Indonesia.
- [15] VCT monitoring and surveillance, November 2006 June 2009, Ministry of Health.
- [16] WHO, Sex Work in Asia. 2001, World Health Organisation.