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THE SOCIAL AND ENVIRONMENTAL DETERMINANTS OF HIV INFECTION IN FEMALE SEX WORKERS IN INDONESIA

DETERMINAN SOSIAL DAN LINGKUNGAN INFEKSI HIV PADA WANITA PEKERJA SEKS DI INDONESIA

ABSTRACT

Background: Human Immunodeficiency Virus (HIV) infection is one of the emerging infectious diseases which adult prevalence is almost 1% from the total population in the world. Female sex workers (FSWs) are one group of population who at risk on this epidemic. Many factors are make FSWs more vulnerable to HIV compared to other groups in the population.

Method: This is a literature review to learn about the social and environmental determinants of HIV infection in FSWs in Indonesia. Three databases were searched and reference lists of pertinent articles were checked.

Results: National AIDS Commission Republic of Indonesia reported 333,200 people living with HIV (PLHIV) as estimated at the end of the year of 2009. Integrated Behaviour Biological Survey in 2007 stated the prevalence of HIV infection were from 6% to 16% among direct FSWs and from 2% to 9% among indirect FSWs. Social determinant that influenced the vulnerability of FSWs on HIV infection included economic pressure and poverty, educational and personal life background, women role, legal aspect and policies, and trafficking and violence. Whereas, the environmental factors are workplace location, health care services, and mobility.

Conclusion: Several social and environmental determinants are contributed the HIV vulnerability among FSWs in Indonesia both directly and indirectly. These factors and determinants frequently collaborate with each other to facilitate HIV transmission. Several barriers and enablers for FSWs to change their risky behaviour to be less risky are also detected which very important in FSWs-HIV prevention programs.

Keywords: Determinants, Environmental, Female Sex Workers, HIV, Indonesia, Social

ABSTRAK

Latar belakang: Infeksi HIV merupakan salah satu penyakit infeksi dengan prevalensi pada dewasa mencapai 1% dari total populasi di dunia. Wanita pekerja seks (WPS) merupakan salah satu grup yang berisiko tinggi tertular penyakit ini. Banyak faktor yang membuat WPS lebih rentan tertular HIV dibandingkan grup lainnya di populasi.

Metode: Metode yang digunakan dalam makalah ini adalah review dari literatur yang ada untuk mempelajari tentang determinan sosial dan lingkungan dari infeksi HIV pada WPS di Indonesia.

Hasil: Komisi Penanggulangan AIDS Nasional Indonesia memperkirakan 333.200 orang hidup dengan HIV di akhir tahun 2009. Survei Demografi dan Kesehatan Indonesia tahun 2007 menyatakan prevalen infeksi HIV dari 6-16% untuk WPS langsung dan 2-9% untuk WPS tidak langsung. Determinan sosial yang menyebabkan WPS lebih rentan tertular HIV diantaranya tekanan ekonomi dan kemiskinan, pendidikan dan latar belakang kehidupan pribadi, fungsi wanita, aspek legal dan aturan yang ada, serta kekerasan dan pejualan perempuan. Di lain pihak, faktor lingkungannya meliputi lokasi pekerjaan, pelayanan kesehatan yang tersedia, dan mobilitas.

Kesimpulan: Beberapa determinan sosial dan lingkungan memberikan kontribusi pada kerentanan WPS terhadap HIV, baik langsung maupun tidak langsung. Faktor tersebut biasanya saling berkaitan sehingga terjadi transmisi HIV. Beberapa faktor penghambat dan pendukung bagi WPS untuk mengubah perilaku berisiko mereka menjadi kurang berisiko juga dikenali, dimana hal ini penting dalam upaya pencegahan HIV khususnya pada WPS.

Kata kunci: Determinan, Lingkungan, Wanita pekerja seks, HIV, Indonesia, Sosial

INTRODUCTION

Human Immunodeficiency Virus (HIV) infection is one of the emerging infectious diseases which adult prevalence is almost 1% from the total population in the world. Female sex workers (FSWs) are one group of population who at risk and affected by this growing epidemic. The paper presents risks factors and determinants of HIV infection among FSWs. The major parts of this paper will be describe the situation of HIV infection in Indonesia and it also will be discuss the risk factors, social and

environmental determinants as well as barriers and enablers factors which lead FSWs more vulnerable to HIV infection.

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HIV infection in Female Sex Workers in Indonesia

Prior to discuss about HIV infection in FSWs in Indonesia, knowing the situation of this emerging disease in a wider community seem to be a good idea. After to be known as a new disease that emerge in the community since 1980s, the World Health Organization (WHO) has determine an epidemiological mapping to understand Acquired Immunodeficiency Syndrome (AIDS) as a pandemic¹. The epidemic of HIV is evolving, especially in Asia, which heterosexual activities are the main mode of transmission. In 2008, the overall HIV prevalence is 0.8% and relatively constant with the prevalence in 2001.² In some countries, a large number of FSWs are operating. They are considered to be the central community who transmit HIV to general population, for instance in India and Indonesia.³ In addition, their clients are judged as the “bridging population”, who facilitate the transmission to the population.

Indonesia has already been known as a fastest HIV epidemic country compared to other Asian countries.⁴ Based on the report of National AIDS Commission Republic of Indonesia,⁵ there were 333,200 people living with HIV (PLHIV) estimated at the end of the year of 2009. This report also explained that cumulative incidence of reported AIDS cases has increased dramatically to 19,973 by December 2009 from only 2,682 cases in 2004, which 25% of PLHIV are women. This increase are reflection of both spread of infection as well as the better reporting system available and the universal access of voluntary and counselling testing (VCT) system all over Indonesia.⁵ The mode of HIV transmissions in Indonesia remain from injecting drug and sexual behaviour, but actually there is evidence mentioned that the mode of transmission of new HIV infection in Indonesia shift from drug use to sex.⁶

In the Indonesian context, FSWs refer to “women who get paid for providing sexual services and are primarily employed” (7 p.181). Two types of FSWs are identified. First, direct FSWs, those who work in brothels and street-based and second, indirect FSWs which determined for those working as bar girls, massage worker and selling sex to supplement income.⁵ Based on 2007 Integrated Behaviour Biological Survey, the prevalence of HIV infection were from 6% to 16% among direct FSWs and from 2% to 9% among indirect FSWs.⁵

MATERIAL AND METHODS

Search Strategy and Selection Criteria

The references of this review were searched using the electronic databases PubMed, Medline, and Science Direct which focused original research articles on publications from 2000 to 2011. The search terms were “hiv”, “aids”, “female sex workers”, and in combination with “Indonesia”, “determinants”, “risk factors”, “social”, and “environment”. The search was limited to English language research articles, “grey literatures and books. Besides the primary studies, this review is also including publications and reports World Health Organization (WHO), UNAIDS, CDC, and Indonesia National AIDS Commission. Several books related were also included. The references list of publication and reports were reviewed and selected based on those which considered relevant to this review.

All original research articles, reviews, reports and books that met the following criteria were included: presented data on prevalence or incidence of HIV, social determinants of HIV infection, environmental determinant of HIV infection. There was no emphasis given to the study design of the original research articles.

DISCUSSION

Selection of Articles

The combined search retrieved 44 original research articles, reviews, reports and books. The duplication of the search results leaving only 13 primary studies, 2 books and 8 reports and reviews eligible to be included in this review. The original research articles found were cross sectional studies or surveys which were done in certain population groups or area in Indonesia. The reports were published by UNAIDS, WHO, CDC, ILO and Indonesian National AIDS Commission.

Risk Factors and Risk Behaviours

12 part will be present about multiple partners, unprotected sex, low condom use and having others sexually transmitted infections (STIs) as the risk factors and behaviour in HIV infection among FSWs.

Multiple Partners

Having multiple partners is one of risk factor for HIV infection. This risk factor together with low condom use gave enormous contribution to the transmission of HIV in FSWs. Every FSW usually have to entertain more than two clients per day and sometimes more than 9 client in one occasion ("group sex").³ Besides of unprotected sex, multiple partners make FSWs more vulnerable to HIV infection because the chance of vaginal epithelium trauma which ease HIV transmission.⁸

Unprotected Sex

Sexual intercourse (vaginal, anal). Types of sexual intercourse also have 16 important role in the mode of HIV transmission besides the unsafe sex itself. Several sources mentioned that there is a greater risk of HIV infection through heterosexual receptive anal intercourse compare to vaginal intercourse for women.⁹ It also mentioned in the same text that the risk of HIV infection in vaginal intercourse is less than 1% compares to 1 transmission every 3.1 acts of anal intercourse.

Low condom use 2

The both 4 consistent and correct use of condom may reduce the risk of STIs include HIV transmission.¹⁰ Inconsistent condom use can lead to STIs acquisition because transmission can happen only with 4 single intercourse with an infected partner. In the same way if condom is incorrectly used, protection effect may be diminished even if they are used consistently.¹⁰ Ford and Wirawan,¹¹ found that reported condom use among direct FSWs (brothel based) in Bali was increasing from 19% in 1993 to 78% in 1999. However this proportion is still far from 100%. Differ from the research conducted in Bali, data from National AIDS Commission of Republic Indonesia stated that only 2% of Jakarta's nearly 33,100 FSWs used condom with each of their clients (as cited in 6). In national context, Indonesia even be one of the lowest rates of condom use in Asia which only 35% of FSWs was reported to use condoms consistently compare to more than 90% in Thailand.⁶

Other Sexually Transmitted Infections (STIs)

Suffering from other STIs both ulcerating and non-ulcerating increased the risk of HIV acquisition among FSWs (Miller as cited in 8). Miller and Shattock,⁸ stated that STIs make inflammation in genital tract which may led to ulceration and eliminating the barrier effect of vaginal mucosa, therefore facilitate the HIV transmission. Sarkar, et al,³ found that FSWs whose having other sexual transmitted infection in the previous year was related to their HIV status.

Social Determinants

The social determinants which contribute HIV transmission in FSWs such as economic pressure, background, women role, legal aspect, and trafficking are discussed as follows.

Economic pressure and poverty

Economic pressure and poverty sometimes push FSWs to more vulnerable to HIV infection. Rao, et al (as cited in 12) mentioned that FSWs who are consistently negotiating condom to their clients have to lost around 70% of their income¹⁵ compare to less consistent condom users. In Indonesia context, poverty and family debts underlie some women's decision to take up sex work.¹³ Educational and personal life background: It has been stated by Utomo,¹⁴ it is very common for women to engage in sex work after divorce as a result of unhappy and unsuccessful married. They have to support the children by her selves. It is near impossible for them to earn enough money in a lower class employment in order to ensure their children going to school.⁵ Without any other choices they likely to migrate to urban area and "making the best of what you've got" as FSWs (7 p.173). On the other hand, FSWs education achievement also plays important role HIV vulnerability indirectly. Lack awareness on HIV/AIDS is considered a major risk factor.⁵

Women role

Supporting parents and children. Sometimes, as mentioned in personal life background, women who have been divorce have to take care all the children by their selves.¹⁴ Therefore, if women loose all the support, they have to take over all the responsibilities to their children and parents. In order to fulfil all the needs, there are no many choices available for illiterate or low educated women to earn enough money except become sex workers. Low of power and negotiate skills. Women including FSWs generally have less social liberties than men. Consequently, women have less power with respect to most of risky behaviour such as alcohol use as well as sexual activities.¹⁵

Legal aspects and policies

Government's law. As state by Harcourt and Donovan,¹⁶ laws designed to control and limit prostitution are available almost everywhere. The same authors also maintained that law against sex workers may reduce the activity temporarily, but as well as drive them into more covert forms which difficult to reach by public health programs. Pimps (Brothel owners) pressure and policies. Similarly to law above, this pressure and policies are undergone by managers or brother owners based on location context. Different brothel has different policies and pressure. "Legalized" brothel may have different policies to un-licensing ones.⁷

Trafficking and violence

Beyond the previous determinants, HIV infection in FSWs can also influence by trafficking. It is already known that 43% of human trafficking is due to commercial sex⁸ exploitation (17). International Labour Organization,¹⁸ was also mentioned that the condition of the people's movement in trafficking increase the risk of these people to be expose by HIV regardless the nature of exploitation which been faced by them. A part from trafficking, violence which sometimes happens in women life is more precise to determine the HIV risk. Decker,¹⁹ study found that STI and HIV diagnosis as well as increase sexual risk in female was associated with sexual violence from their men partners.

Environmental Determinants

Location, health care services, and mobility are environmental determinants of HIV infection in FSWs. These determinants are explained as follows.

Location

The location and conditional contexts of sex work are very important factor in assessing the potential hazards which can be faced by FSWs.¹⁶ As stated in the similar source, trafficked FSWs are often enforced to service large numbers of clients in order to increase the pimps or traffickers profit. This condition may also give more risk for FSWs to get HIV infection. Sometimes, Harcourt and Donovan,¹⁶ mentioned that implicit coercion by minder, brothel owner and corrupt officials are forced them to work more intensively than in more tolerant environment such as bars or massages parlours in which indirect FSWs “work”.

2

Availability and accessibility of health care services

Availability and accessibility of clinical services are very crucial for FSWs since the high prevalence of STIs in this population. Regular screening coupled with prevention messages among FSWs are associated with the increase of condom use and reduction of STIs include HIV prevalence.²⁰ Most of STIs in women do not present any symptoms, therefore, if there is no regular screening available; FSWs who suffer from STIs without any symptom or sign, have a higher risk of HIV infection since STIs facilitated the HIV transmission.

Migration and Mobility: Lots of women have to migrate for economic reasons. These women, especially in younger age are more easily fall prey to sexual exploitation and become sex workers.¹⁸ Moreover, it is mentioned that both FSWs and their clients could be economic migrants who travel and search for work which make FSWs even more vulnerable to HIV infection since the effective and sustainable prevention difficult to reach them.

Barriers to Behaviour Change

Apart from determinants explained above, there are several barriers which hamper FSWs to change their risky behaviour as mentioned below.

Alcohol consumption: Alcohol consumption is also not a single thing. This behaviour could be a part of both social and environmental determinants. It has been clearly mentioned that alcohol¹⁴ is inhibiting of positive behaviour among FSWs and pushing certain kinds of sexual activity such as unprotected casual sex, group sex and anal sex which lead them more vulnerable with HIV infection.^{15,21} The same source is also clearly mention that the conditions stated above are usually prevalent in many places and settings where FSWs offered their services either as direct (in brothels) or indirect FSWs (in bars and nightclubs). A study conducted in Lombok Island, Indonesia found that FSWs and their clients are commonly drink alcohol prior to sexual intercourse.²² This study also established that the use of alcohol depend on the venue where FSWs meet their clients. It was clearly stated that indirect FSWs who are mostly freelancers are more likely to use alcohol compare to direct FSWs. Furthermore, FSWs whose aged 25 or older and have better education achievement (more than elementary school) tend to use alcohol prior to entertain their clients compare to younger and less education FSWs.²² This situation could be explained that older and better educated FSWs are often work as indirect FSWs.

FSWs' health belief model and practice: Even though intervention programs already conducted due to make FSWs have a better understanding about HIV, ineffective and misinterpretation preventive strategies are still being used by FSWs, such as medication (antibiotics) was used prior to sexual intercourse based on FSWs' belief that these medicine can prevent them from getting STIs and HIV.¹¹ Former research in Bali done by Reed,²³ found that inappropriate genital cleansers such as soap and toothpaste were used daily by FSWs before and after giving service to their clients. Female sex workers in this study believe that genital cleansers may prevent them in getting vaginal infection. The use of

drying agent or irritants may increase the potential of epithelium trauma during intercourse which may elevate the risk of getting STIs as well as HIV infection.⁸

Availability of condom: Condoms availability is one of the most essential materials in preventing STIs including HIV. Lack of condom access is also another main problem in order to reduce HIV sexual mode of transmission in Indonesia. Even though the Indonesian National AIDS Commission known has submitted a strategy to the House of Representative in order to install 22,000 condoms outlets in 12 provinces with highest HIV prevalence, however, less than 50% of the women working in brothels and massage parlours report having access to condoms and only 15% of FSWs working on the street stated that condom are available in their area.⁶

Enablers to Behaviour Change

Besides barriers, there are also several enablers which make FSWs less risky to HIV infection as explained as follows.

Outreach project

In Indonesia, many non-profit organisations in partnership with government have been conducted to overcome the FSWs' problems related to HIV. As mentioned by Ford and Wirawan,¹¹ group education by outreach workers and peer educator are two main strategies being use in focus of FSWs in Bali to make them have better understanding about HIV and condom apart from their clients. On the other hand, indirect FSWs are less likely to get benefit from the programs since they are more difficult to be identified than direct FSWs.¹⁶

Empowerment

Female sex workers empowerment was focused on improving the status and agency of FSWs which commonly addressed by economic development (Kabeer as cited in 12).¹³ means that there are opportunities to FSWs to get a better job, better working environment, and better access to health services which may lead to the decreasing of their HIV vulnerability.

CONCLUSION

In conclusion, several risk factors, risk behaviours, social, and environmental determinants are contributed the HIV vulnerability among FSWs both directly and indirectly. These factors and determinants frequently collaborate with each other to facilitate HIV transmission. However, most of these factors and determinants can be modified, thus the prevention program can be easily determined and focus on these modifiable factors. In addition, there are several barriers and enablers for FSWs to change their risky behaviour to be less risky which also very important in FSWs-HIV prevention programs.

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