THE DIFFERENCES OF ANXIETY AND DEPRESSION SYMPTOMS LEVEL BETWEEN COMMERCIAL SEX WORKERS WHO SUFFER HIV/AIDS WITH NOT SUFFER HIV/AIDS

RINI GUSYA LIZA, FREDDY SUBASTIAN, ELMEIDA EFFENDI

Psychiatry Department of Medical Faculty of Sumatera Utara University
email: rinigusya@yahoo.com

ABSTRACT

HIV/AIDS is a deadly disease in the world who later became an international outbreak or world disaster since the first presence. Risky sexual behavior is a major factor associated with HIV/AIDS. A person with HIV/AIDS can bring a variety of psychological problems such as fear, despair accompanied by prejudice and discrimination from others, which then can lead to anxiety and depression. The aims of this study is to determine the differences of anxiety and depression symptoms level between commercial sex workers who suffer HIV/AIDS with not suffer HIV/AIDS.

Unpaired categorical analytic study, using nonprobability sampling technique, the type is cluster sampling. Subjects were women who worked as commercial sex workers in red light district of commercial sex workers in Kecamatan Mandau and Kecamatan Pinggir, Kabupaten Bengkalis, cooperative, willing to be interviewed. Location is in red light district of commercial sex workers in Kecamatan Mandau and Kecamatan Pinggir, Kabupaten Bengkalis and in VCT clinic of general hospital of Kecamatan Mandau Kabupaten Bengkalis. Sample size were 96 women, 48 suffer HIV/AIDS and 48 not suffer HIV/AIDS. Data on HIV/AIDS status are collected from the report of VCT clinic of general hospital of Kecamatan Mandau Kabupaten Bengkalis. Measuring instruments is the Hospital Anxiety and Depression Scale, consists of 14 questions, each of the 7 questions for anxiety (HADS-A) and depression (HADS-D). Analysis of the data by using the Kolmogorov-Smirnov test facility SPPS program for windows.

It was found the proportion of anxiety in all sex workers is 22.9%, in sex workers who suffer HIV/AIDS is 31.2% and in sex workers who not suffer HIV/AIDS is 14.6%. While the proportion of depression in all sex workers is 25%, in sex workers who suffer HIV/AIDS is 27.1% and in sex workers who not suffer HIV/AIDS is 22.9%. There was no significant differences the level of anxiety and depression symptoms between commercial sex workers who suffer HIV/AIDS with not suffer HIV/AIDS.

We get the high proportion of anxiety and depression symptoms among commercial sex workers themselves. Beside to being a prostitute in addition to having HIV/AIDS will increase the severity of symptoms of anxiety and depression.

Key words: anxiety, depression, HIV/AIDS, commercial sex workers.

INTRODUCTION

One of the world's deadliest diseases which later became an international outbreak or disaster world since the first presence is the HIV/AIDS (human immunodeficiency virus / acquired immunodeficiency syndrome).\(^3\) Based on the statistical results of HIV/AIDS cases in Indonesia were reported cumulatively by Ditjen PPM & PL Depkes RI (Division of Ministry of Health of Indonesia Republic) from April 1\(^{st}\) 1987 to June 1\(^{st}\) 2013, the total are 108.600 people living with HIV, 43.667 people living with AIDS, 8.340 deaths.\(^2\)

Risky sexual behavior is the main factor associated with HIV/AIDS. Frequently changing sex partners and not using condoms which are risky sexual activity are the major risk factors of HIV/AIDS. Anal sex is also a factor in sexual behavior that facilitate the transmission of HIV/AIDS.\(^3\) CSW (commercial sex workers) are known spread of HIV/AIDS due to unprotected sex behavior (condom).\(^4\) Someone who was told that HIV-positive or also called “people living with HIV/AIDS" can be a very stressful, painful and traumatic. Dealing with death is inevitable, sooner or later, and the stigma attached to this disease, making HIV/AIDS one of the most dreaded of all diseases. Living with HIV means having to cope with a combination of various kinds of psychological challenges caused by fear, anxiety, loss, uncertainty, feelings of shame, guilt, self-blame and social stigmatization.\(^5\)
A number of studies have shown high prevalence of anxiety disorder, mood disorders and adjustment disorders and disorder of mix anxiety and depression among patients with of HIV. The prevalence of depression and anxiety in patients with HIV is varied, the prevalence of depression in HIV patients ranged from 15-40%. Research conducted Morrison et al., investigated the prevalence of depression in HIV-infected women was 19.4% people experienced a major depressive disorder and 26% experience anxiety disorder.

HADS (Hospital Anxiety and Depression Scale) is a self-report measurement that are specifically designed to assess and to screen anxiety and depression in patients with medical illness. The absence of somatic items are the main advantages of this measure compared to another measuring tolls. HADS represents a self-report instrument measuring the best available today, HADS has proven as a valid and reliable tolls to assess anxiety and depression in patients infected with HIV. HADS consists of 14 items, 7 items assess anxiety and seven items assessing depression. This measure is simple and quick to do, so can be easily implemented in the routine care of HIV patients. Because there is overlap between the manifestations of HIV with somatic symptoms of anxiety and depression, it is important to use measuring tolls that do not contain somatic items which is valid and reliable to assess the psychological state of patients infected HIV.

Province of Riau is a province of the ninth highest cumulative number of AIDS cases from 1987 to September 2012 in Indonesia, while Bengkalis is a Kabupaten (region) which is the second highest HIV and AIDS cases in the Province of Riau. The number of HIV cases in the Province of Riau until June 1st 2013 are 1503 cases and 859 cases of AIDS cases, whereas in Bengkalis until March 2013 are 288 cases. Kecamatan (district) of Mandau and Kecamatan Pinggir is located in Bengkalis which is bypassed by traffic lane of east Sumatra, which are sold by vehicles such as cars, buses, trucks and others, so that the Kecamatan Mandau and Kecamatan Pinggir becomes a resting place for drivers and their vehicles. In addition, in these area place one of the big oil mining company “Chevron Pacific Indonesia (CPI)” which has hundreds of subsidiaries, so that the area is populated by many immigrants who did not reside which are the high-risk men. Men at high risk are that millions of men, in general, young / reproductive age who work separately from the family and the place where he used to societal (and often moved), among others, those who work in mining, agriculture and plantation, fishery, construction (roads, bridges, ports, and airports), forestry, and transportation over long distances (usually land or inter-island) and others. They generally tend to perform “risky sex” and other risky behaviors such as consuming alcohol, narcotics and drugs and others, so that high risk for transmission of HIV and other diseases.

Along with that rise the red light district (locations for prostitutes), okup (place for traditional massage), entertainment venues such as bars, club for karaoke, dimly lit stalls, hotels and lodgings. In Kecamatan Mandau and Kecamatan Pinggir more than 300 people prostitutes at red light district, entertainment venue, traditional medicine okup, bars and others. Cases of HIV / AIDS in CSW which is recorded in VCT (Voluntary Conseling Test) Clinic of Mandau General Hospital until March 2013 were 51 cases. This study aims to determine the differences of anxiety and depression symptoms level between commercial sex workers who suffer HIV/AIDS with not suffer HIV/AIDS. The advantage is by obtaining the level of symptoms of anxiety and depression on prostitutes who suffer from HIV / AIDS and sex workers who are not suffering from HIV / AIDS, it can be a guidance and feedback to health workers and psychiatrist that prostitutes should also concern about their mental health.

**METHODS**

This is an unpaired categorical analytic study. Location in red light district of commercial sex workers and in okup in Kecamatan Mandau and Kecamatan Pinggir of Kabupaten Bengkalis, also in VCT (Voluntary Counseling Test) of Mandau General Hospital. Timing is March 1st 2013 to 30 Maret 30 2013. The population was female CSW (commercial sex workers) who work at red light district and okup in Mandau and Pinggir. It is non-probability sampling types of cluster sampling. Sample size were the first group 48 women with HIV/ AIDS, and the second group were 48 women without HIV/ AIDS, so the total were 96 women. Inclusion criteria include: women who worked as prostitutes (commercial sex workers), prostitutes in red light district and in okup, cooperative and able to be interviewed. Exclusion criteria include: general medical illnesses (besides HIV/ AIDS), previous psychiatric disorders, a history of drug use except cigarettes and alcohol. Secondary data about HIV / AIDS status was taken from VCT clinic, and questionnaire “Hospital Anxiety and Depression scale” is given to the CSW. HADS questionnaire each have 7 questions are divided into point A to anxiety (ie the question no. 1, 3, 5, 7, 9, 11 and 13) and points D for depression (ie question no. 2, 4, 6,
8, 10, 12 and 14). The total score of 0 to 7 show the normal range, 8 to 10 show almost abnormal (borderline) and 11 or more indicate a mood disorder. After all questionnaires filled performed the data processing is done editing, coding, tabulation and analysis of data. Data were analyzed using statistical test Kolmogorov-Smirnov test facility SPSS program for windows.

All study subjects will be asked to consent in advance before included as a subject of study. This study was approved by the Research Ethics Committee of Faculty of Medicine, University of North Sumatra, Medan.

RESULT
This study was conducted in 6 location in Mandau and Pinggir. Tabel 1 show the name of location of prostitute. Tabel 2 show the mean age of subject is 29 (SD: 5.02) years old, the most married status is unmarried (56.3%), the most education level is low education (67.7%), most of them is smoker is 57.3% and alcohol drinker (83.33%), 1 subject have AIDS diagnosis, means total score HADS for anxiety is 8.91 (SD: 5.39), means total score HADS for depression is 8.11 (SD: 5.53). Tabel 3 show the comparison of sociodemographic factor between CSW who suffer HIV/ AIDS and who not suffer HIV/ AIDS.

From tabel 4, we get the proporsion of anxiety among CSW who suffer HIV/ AIDS is 31.2%, and among CSW who not suffer HIV/ AIDS is 14.6%. Proporsion of anxiety of all CSW is 22.9%. From statistical analysis by Kolmogorov-Smirnov has significanec value: 0.161 (p>0.05), so it does’nt has significant difference of anxiety level between CSW who suffer HIV/ AIDS and who not suffer HIV/ AIDS. From tabel 5, we get the proporsion of depression among CSW who suffer HIV/ AIDS is 27.1%, and among CSW who not suffer HIV/ AIDS is 22.9%. Proporsion of depression of all CSW is 25%. From statistical analysis by Kolmogorov-Smirnov has significanec value: 1 (p>0.05), so it does’nt has significant difference of depression level between CSW who suffer HIV/ AIDS and who not suffer HIV/ AIDS.

DISCUSSION
The Aim of this study is to compare the level of symptoms of anxiety and depression among commercial sex workers (CSW) who suffer from HIV/ AIDS and who not suffer HIV/ AIDS. We get the proportion of sex workers who suffer from anxiety on HIV/ AIDS was 31.2%, this result is lower than the result of study by Tostes et.al., got proportions of anxiety in patients with HIV/ AIDS using the HADS was 36.8%. The results of our study is higher than the study done by Pappin et.al., got proportions of anxiety in patients with HIV/ AIDS who have obtained antiviral therapy is 30.6%, it is possible effects of the use of antivirals so that decrease the level of anxiety of patients with HIV / AIDS.

From the results, the proportion of CSW who suffer from depression on HIV/ AIDS was 27.1%, lower than the result of study by Tostes et.al., got proportions of depression in patients infected with HIV/ AIDS was 30.3%, and also lower than the study by Sale et.al., got the proportion of depression in patients with HIV/ AIDS is 39.91%, but the result of this study is higher than the study done by Ndu et.al., got the proportion of depression in HIV patients was 21.3%. The results of this study are lower than the study done by Alegria et.al., also investigated symptoms of depression in prostitutes with HIV but using different measuring devices, namely the Center for Epidemiologic Studies Depression Scale, they got 70 % sex workers with HIV experience depression.

The proportion of depression and anxiety among CSW with HIV/ AIDS is higher than CSW who do not suffer HIV/ AIDS. In addition to being a CSW and also having HIV/ AIDS will increase the severity of symptoms of anxiety and depression, because the proportion of anxiety and depression among themselves is high, proportion of anxiety is 22.9% and the proportion of depression 25 % among them.

The proportion of sex workers with HIV / AIDS at the age of 20 to 30 years, this is according to the reports by Ditjen PPM & PL Depkes RI in 2013 that the proportion of HIV / AIDS cases highest in the age group 20-29 years. Most of CSW have low education levels (67.7%). The reason someone do prostitute due to low levels of education and poverty so have no choice to have the proper jobs.

Statistical tests found no differences in levels of symptoms of anxiety and depression among CSW with HIV / AIDS compare with CSW who are not suffering from HIV / AIDS, this may be due to the prostitutes themselves have high level of anxiety and depression symptoms. Anxiety disorders and depression disorders among commercial sex workers partly due to the stigma, discrimination and isolation of society against prostitutes, physical or psychological violence to commercial sex workers obtained either from the client or from the owners
of bars and entertainment venues and also lack of legal protection to commercial sex workers. Anxiety can also be encouraged because prostitution itself is illegal so it can be caught by the law and was arrested by security forces. Besides that anxiety among CSW can occur because their fearless will get the sexually transmitted disease such as HIV.  

The weakness of this study is difficult to exclude mental and behavioral disorders due to use of alcohol and cigarettes, because generally the lifestyle of women at the bar and in the localization of prostitute can not be separated from alcohol and cigarettes. Need further study about the causes of high anxiety and depression symptoms among CSW and study to determine the role of HIV antivirals against the symptoms of anxiety and depression levels.

REFERENCES


Appendix

Tabel list

Table 1. Description localization of prostitution

<table>
<thead>
<tr>
<th>No</th>
<th>Name of localization</th>
<th>Name of village (desa)</th>
<th>Bars (n)</th>
<th>CSW (n)</th>
<th>Sample size CSW with HIV/ AIDS</th>
<th>CSW no HIV/ AIDS</th>
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<tbody>
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<td>Desa Pinggir</td>
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Table 2. Sosiodemographic status of subject

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<th>Sosiodemographic status</th>
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<tr>
<td>1 Age [Mean (SD)] Year</td>
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<tr>
<td>2 Married status [n (%)]</td>
<td>Married 2 (2 %) Unmarried 54 (56.3 %) Widow 40 (41.7 %)</td>
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<tr>
<td>3 Education level</td>
<td>High 1 (1 %) Middle 30 (31.3 %) Low 65 (67.7 %)</td>
</tr>
<tr>
<td>4 Smoker [n(%)]</td>
<td>Not Smoker 41 (42.7 %) Smoker 55 (57.3 %)</td>
</tr>
<tr>
<td>5 Alcohol drinker [n(%)]</td>
<td>Never 16 (16.67 %) Alcohol drinker 80 (83.3 %)</td>
</tr>
<tr>
<td>4 Diagnosis AIDS [n %]</td>
<td>1 (1.04 %)</td>
</tr>
<tr>
<td>5 HADS anxiety [mean (SD)]</td>
<td>8.91 (5.39)</td>
</tr>
<tr>
<td>6 HADS depression [mean (SD)]</td>
<td>8.11 (5.53)</td>
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</table>
Table 3. Distribution subject based on Sosiodemographic status

<table>
<thead>
<tr>
<th>Sosiodemographic status</th>
<th>CSW with HIV/AIDS</th>
<th>CSW without HIV/AIDS</th>
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<tr>
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<td>n</td>
<td>%</td>
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<tr>
<td>Age (age)</td>
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<td>20 - &lt;30</td>
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<td>34.4</td>
<td>31</td>
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<tr>
<td>30 - &lt;40</td>
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<td>11.5</td>
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<td>Education level</td>
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<tr>
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<td>Middle</td>
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<tr>
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Table 4. Distribution subject based on the level of anxiety symptoms

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<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
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<td>7</td>
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Table 5. Distribution subject based on the level of depression symptoms

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