

Knowledge profile about HIV/AIDS and clinical features of oral mucosal lesion in Persatuan Waria Kota Surabaya (PERWAKOS) community: a qualitative study

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Abstract

Introduction: Transgender is a term used for individuals who have different gender identities at birth with current gender identities. Members of the male-to-female transgender community in Indonesia often refer to themselves as "waria", which stands for *wanita* (women) and *pria* (men). Transvestites are 18 times more at risk of HIV infection than the general population. The high prevalence of HIV/AIDS and sexually transmitted infections in transvestites is in line with the lack of knowledge, lack of understanding of health services and poor support for transvestites with HIV.

Material and Methods: This research is an observational descriptive study with cross-sectional design. The research subjects were all members of Persatuan Waria Kota Surabaya (PERWAKOS) in Wonokromo region, Surabaya. This research was attended by 20 respondents. Research subjects were taken blood samples for HIV and STI tests. A pre-test and post-test model is carried out to assess understanding knowledge about HIV/AIDS. The respondents were given a questionnaire containing questions about HIV/AIDS. Researchers provide brief education, information and pictorial leaflet media with counseling and discussion session. After pre-test and post-test, intra-oral examination of oral mucosal was carried out using a dental instrument.

Results: The results of HIV and STI tests in 18 study subjects showed that 4 people (22.22%) had reactive results for HIV testing and none of the study subjects had an STI. Assessment of knowledge about HIV/AIDS showed that 12 people (60%) had the same score in the pre-test and post-test. Examination of oral mucosal lesions found that only 1 case required therapy (5%) of 20 respondents namely oral hairy leukoplakia (OHL).

Conclusion: Preventing and controlling HIV infection in transvestites communities can be done by increasing knowledge about HIV/AIDS and routine checks through HIV testing and oral screening. This supports efforts to control HIV infection in the transvestite's group who are considered to be at high risk.

Keywords: HIV/AIDS; Transvestites; Sexually transmitted infections; Oral lesion; Knowledge; High risk group

1. Introduction

Transgender is a term used for individuals who have different gender identities at birth with current gender identities (1). Members of the male-to-female transgender community in Indonesia often refer to themselves as "waria", which stands for *wanita* (women) and *pria* (men). In this study we use term transvestites which refers to "waria". Transvestite is defined as a man who acts and looks like a woman and has a male partner (2). Research on transvestites in Indonesia

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states that they do not want to be women, but try to resemble women through their appearance and mask their masculine side (3).

Transvestites are 18 times more at risk of HIV infection than the general population. This relates to risky sexual activity, the use of illegal drugs, and the impact of being a minority in society (4). Based on the Surabaya City Health Profile data report up to December 2018, the number of AIDS cases reported was 319 people and 777 HIV cases. Of the AIDS sufferers 18 (5.64%) of them died of AIDS. This data shows that Surabaya is included in 3 cities with the highest HIV prevalence, along with Jakarta and Bandung (5,6). In addition, the high prevalence of HIV/AIDS and sexually transmitted infections in transvestites is in line with the lack of knowledge, lack of understanding of health services and poor support for transvestites with HIV. Transvestites communities also face challenges in accessing health services due to bad experiences with service providers, fear, and lack of knowledge they have (6,7,8). Therefore, the prevalence of HIV/AIDS in the respective transvestites population is quite high and needs special attention.

Like systemic diseases in general, HIV/AIDS can manifest in other parts of the body. The oral cavity becomes one of the most frequent locations in the manifestation of HIV/AIDS, clinical appearance of certain lesions on the oral mucosa can be used as early detection and progression of HIV infection. Clinicians can contribute effectively in controlling HIV/AIDS through the provision of health education, patient care, and infection control and initial screening through the oral cavity (9,10).

The purpose of this study was to determine the response of providing a short education to understanding HIV/AIDS in transvestites' communities in Surabaya. This is based on the fact that knowledge is a component that is quite influential in the incidence of HIV/AIDS in transvestites. This assessment can be used as a basis for further research on the intervention of knowledge and attitudes of transvestites towards HIV/AIDS. In addition, initial screening through the description of oral mucosal lesions in these at-risk communities can be useful as detection and evaluation of the progression of HIV infection, given the lack of knowledge and poor access to health services faced by transvestites communities in Surabaya.

2. Material and methods

2.1. Research and Demographic Subject

This research is an observational descriptive study with cross sectional design. The research subjects were all members of Persatuan Waria Kota Surabaya (PERWAKOS) in Wonokromo region, Surabaya. This community is an organization consisting of transvestites under the supervision of Ngagel Rejo Public Health Center (Puskesmas) in Surabaya. They routinely hold meetings and counseling together with doctors and dentists from the public health center regarding health issues. This research was conducted at the time of routine activities, namely on July 21, 2019 which was attended by 20 respondents. The research begins with recording identity, gender, and age.

2.2. HIV and STI Test

HIV and STI tests are carried out by medical personnel from the Ngagel Rejo Public Health Center in Surabaya. Research subjects were taken blood samples for HIV and STI tests. The examination results are then tabulated in a table form with reactive or non-reactive assessments for testing HIV and STIs.

2.3. Assessment of knowledge about HIV/AIDS

To assess understanding that shows knowledge about HIV/AIDS, a pre-test and post-test model is used. The research subjects were given a questionnaire containing questions about HIV/AIDS. Furthermore, researchers provide brief education and information about HIV/AIDS to individual research subjects with pictorial leaflet media. After brief counseling and discussion, subjects were given a questionnaire which was a post-test after receiving information from the researcher. Assessment of understanding and knowledge is done by comparing pre-test and post-test scores.

2.4. Examination of oral mucosa lesions

Visual examination using a dental instrument on the entire mucosa of the oral cavity which includes labial mucosa, buccal mucosa, palatal, dorsal tongue, lateral tongue, ventral tongue, and floor of the mouth.

3. Results

3.1. Demographics of research subjects

All research subjects were male (100%) with the largest age range in the 30-40 years age group (40%). Demographic data of the study subjects are shown in the following Table 1.

Table 1 Demographic data of subjects

Demographic aspect	Number of Subjects	Percentage (%)
Sex		
Male	20	100
Female	0	0
Age		
20-30	7	35
31-40	8	40
≥40	5	25

3.2. HIV and STI Tests

From 20 research subjects, there were 2 people who could not take blood samples for HIV and STI tests. This is because the research subjects arrived late when the health workers from the public health center had left the study site. Researchers did not obtain data from the two research subjects related to a history of HIV and STIs. The results of HIV and STI tests in 18 study subjects showed 4 people (22.22%) had reactive results for HIV testing and none of the study subjects had an STI. Examination results are shown in Table 2.

Table 2 HIV and STD examination results

HIV and STI Tests	Number of Subjects	Percentage (%)
HIV Tests		
Reactive	4	22.22
Non-Reactive	14	77.78
STI Tests		
Reactive	0	0
Non-Reactive	18	100

3.3. Assessment of knowledge about HIV/AIDS

Table 3 Comparison result of pre-test and post-test

Pre-test and post-test	Number of Subjects	Percentage (%)
Improvement	7	35
Equal	12	60
Deterioration	1	5

Assessment is done by comparing pre-test and post-test scores of 20 research subjects who have been given a short education with leaflet media. The assessment results showed 12 people (60%) had the same score in the pre-test and post-test. Data on the results of the understanding assessment are shown in Table 3.

3.4. Examination of oral mucosal lesions

Obtained lesions that require therapy only 1 case (5%) of a total of 20 respondents namely oral hairy leukoplakia (OHL). Apart from these lesions, only normal variance was found in the oral cavity with the most findings being the coated tongue (70%), followed by the linea alba buccalis and fissured tongue with a percentage of 55%. Complete data on normal oral cavity variants can be seen in Table 4.

Table 4 Normal variant of oral mucosa identified

Normal Variant	Number of Subjects	Percentage (%)
Coated tongue	14	70
Linea alba buccalis	11	55
Fissured tongue	11	55
Crenated tongue	8	40
Torus palatinus	5	25
Ductus stensen prominent	5	25
Fordyce's spot	3	15
Lingual varices	2	10
Ankyloglosia	1	5
Geographic tongue	1	5
Hairy Tongue	1	5

4. Discussion

HIV/AIDS is an infectious disease caused by infection with the Human Immunodeficiency Virus (HIV) which attacks the immune system. This viral infection causes the sufferer to experience a decrease in the immune system so that it is easily infected with other diseases (11). HIV/AIDS can be transmitted through a variety of ways, through sexual relations of the opposite sex (heterosexual), similar sexual relations (homosexual), contamination with the patient's body fluids, and transmission from mother to child (perinatal). Transvestites are one of the high-risk groups in the transmission of HIV infection (6).

In the context of psychology, transvestites is a phenomenon of transsexualism which is explained as a condition where someone who is physically clear and perfectly gender, but psychologically tries to present themselves as opposite sex (12). Transvestites are considered at high risk in the spread of HIV/AIDS because they have very risky sexual activity. This group has many male sexual partners and most likely their sexual partners also have other male partners. This shows that the risk of HIV/AIDS transmission is higher in terms of sexual activity (6).

In this study, all subjects were willing to take an HIV test voluntarily. Research subjects who are transvestites are aware that their community is a high-risk group in the transmission of HIV/AIDS. This is in accordance with research conducted by Syahrir (2014) where most people with high risk of HIV / AIDS respond positively to VCT services or HIV testing. Attitude is a significant factor in the risk of spreading HIV/AIDS (11).

HIV test results showed 4 people (22.22%) were reactive or positive infected with HIV. This data shows that efforts to prevent transmission of HIV/AIDS both within the community and in activities outside the community have been done well. Interventions from the public health center are also a suppression factor in the spread of HIV/AIDS. The formation of a community directly under the guidance of health services has a positive impact on the control and prevention of STIs and HIV/AIDS. The existence of a social structure in this transgender community makes members more recognized and open to the community, so that efforts to control and prevent HIV/AIDS transmission are easier to do (6,13,14).

Positive responses to VCT services and good efforts to control and prevent HIV/AIDS indicate that in this community the level of knowledge about HIV/AIDS is quite good. This is demonstrated through the results of the knowledge assessment conducted by researchers. As many as 35% of research subjects showed improved scores that can be

interpreted that there is an increase in knowledge from the educational efforts provided by researchers. Comparison of the level of knowledge between one study with research is difficult. This is not only due to the different methods used, but also because this aspect of the study has quite high variability (4,15).

In addition to trying to find out the knowledge profile of the transvestite's community, health checks, especially oral screening, can be an effort to control HIV infection. Oral cavity disorders associated with HIV are reported in 30-80% of cases. Lesions in the oral cavity play an important role in early diagnosis and management of HIV/AIDS patients, because these lesions are associated with an increased risk of disease progression and a decrease in the immune system (16). There are many regional variations in oral manifestations of HIV infection, depending on the population under study and on clinical heterogeneity (10).

In this study found 1 person (5%) of research subjects had oral hairy leukoplakia (OHL) which is an oral manifestation of HIV/AIDS. OHL is a benign epithelial hyperplasia with white, wavy lesions on the tongue, which cannot be scraped, can be unilateral or bilateral. OHL can be used as an indicator of CD4 cell decline in HIV/AIDS patients (9). The prevalence of OHL in people with HIV/AIDS varies from 0.2% to 45%, this variation depends on the study population and clinical heterogeneity (10).

In addition to oral lesions as a manifestation of HIV/AIDS, other oral mucosal lesions were also found in the oral cavity of the study subjects. These lesions are normal variants in the oral cavity that do not require special therapy. Three most common normal variant lesions found were coated tongue (70%), linea alba buccalis (55%), and fissured tongue (55%).

Coated tongue is a normal variant that is very commonly found. Appears as a yellowish-white pseudomembranous picture on the dorsal tongue, can be scraped, painless and does not leave erythematous marks. One differential diagnosis of coated tongue is oral thrush (17,18). Oral thrush or oral candidiasis can occur as a manifestation of HIV/AIDS which shows a decrease in CD4 levels and occurs in almost 90% of HIV/AIDS patients who have not taken ARV drugs. The appearance of coated tongue and oral candidiasis can look very similar, evaluation in patients with complaints of pain and redness if the pseudo-membrane is scraped can be clinical evidence in the diagnosis of oral candidiasis (9,10). Clinicians need to carry out routine follow-up on HIV/AIDS patients with coated tongue images, considering that oral candidiasis may occur as a clinical manifestation of the patient's immune system.

This research has limitations especially in the research methods used. Need further research using more systematic and complex research methods, especially in assessing aspects of attitude and knowledge. Both of these aspects have high variability between researchers so it is necessary to use clear and structured methods. The small number of research subjects is also a limitation in this study, it is related to the difficulty of assessing communities that are a minority in society. Collaboration with health services related to the transvestite community can be very helpful in conducting research in later days. However, this research can be used as an initial description in assessing HIV/AIDS prevention and control in society, especially in transvestites' communities. Regular guidance and regular visits and ongoing health checks can reduce the likelihood of increasing cases of HIV/AIDS in transvestites' communities in Surabaya.

5. Conclusion

Efforts to prevent and control HIV infection in transvestites communities in the city of Surabaya can be done by increasing knowledge about HIV / AIDS and routine checks through HIV testing and oral screening. In this study the level of knowledge about HIV/AIDS in Persatuan Waria Kota Surabaya (PERWAKOS) was considered good. This supports efforts to control HIV infection in the transvestite's group who are considered to be at high risk. With a good level of subject knowledge, coupled with collaboration with health centers and health-education institutions in regular health checks, efforts to prevent and control HIV infection in the city of Surabaya can be done well.

Compliance with ethical standards

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Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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