

Article

The experiences of women from *Atoin Meto* tribe who performed *Sifon* ritual in the context of HIV/AIDS transmission

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Abstract

Background: *Sifon* is a sexual intercourse ritual after male circumcision from the *Atoin Meto* tribe that contributed to HIV/AIDS transmission. Ritual *Sifon* may put at risk for HIV infection and also the sexual transmission diseases. Doing ritual *Sifon* as a culture, without using protection during intercourse becomes one way to get HIV infection from infected men. Few study explore this phenomenon among women who becomes *Sifon* women. Therefore, the aim of this study is to explore the experience of *Sifon* women in the context of HIV/AIDS transmission.

Design and Methods: The data was collected from March 2020 to July 2020. This study used a phenomenological approach with a purposive sampling technique. Inclusion criteria: the women from *Atoin Meto* tribe aged above eighteen years old who have been *Sifon* women for at least six months. The participants were recruited through traditional healers in Nekbaun village of Kupang District and Timor Tengah Selatan District. The data was analysed by Collaizi method.

Results: Thirteen women were interviewed and we found four themes: lack of knowledge about HIV/AIDS transmission, unaware became *Sifon* women, women experienced of STDs, using traditional medicine to treat STDs (Timor medicine).

Conclusions: The interpretation of *Sifon* women's experiences that performed *Sifon* rituals indicated that *Sifon* is a risk factor for transmitting HIV/AIDS. Preventive and promotional educational programs with cultural approach are needed to reduce the risk of HIV/AIDS transmission.

Introduction

In 2015, UNAIDS reported that 51% of 36.7 million people living with HIV/AIDS were women.¹ The global epidemic of HIV/AIDS in 2018 caused 37.9 million PLWHA and 18.8 million of them were women.² Indonesia was in the 5th position as the country with a high risk of HIV/AIDS infection in Asia. In 2016, it was increased significantly to 10,315 cases.³ HIV cases in East Nusa Tenggara Province was in the 12th position in Indonesia. In 2018, it was leveled up to 10th position for HIV infection.³ In 2017, there were 315 HIV and 291 AIDS cases in East Nusa Tenggara Province.⁴ The number of people

with HIV/AIDS in the East Nusa Tenggara province from 1997 to April 2020, reached 7032 people. This amount is calculated based on data from the KPA of East Nusa Tenggara province. out of 7032 sufferers were divided into two categories, 3417 people with HIV and 3615 people with AIDS.⁵ The total number of people living with HIV/AIDS from 1997 to June 2018 were 3,203 men and 2,750 women. These findings indicated that women are increasingly vulnerable to the transmission of HIV/AIDS infection.

Comparing with men, women are at higher risk of HIV transmission through sexual intercourse. During sexual act, rupturing protective mucosal barriers in vagina may lead to HIV transmission. In addition high rate unsafe sexual behaviour (do not use condom) can increase the prevalence contracted to the HIV from infected sexual partners and the behaviour of constant changing sexual partners. The increase in HIV cases in East Nusa Tenggara Province is not only found in Kupang City but also in a number of districts. According to Directorate of Infection Prevention and Control, in 2017 Timor Tengah Selatan District was one of the districts in East Nusa Tenggara Province with 6 cases of HIV and 29 cases of AIDS. One of the risk factors for HIV/AIDS transmission is the practice of *Sifon* circumcision. Various circles of society still practice this traditional circumcision for religious, health and socio-cultural reasons. In general, medical circumcision for men may reduce the risk of HIV AIDS infection by 50-70%.⁶ However, in this traditional practice, a risky sexual behavior is performed as a part of their belief that incision wound will be healed by having *Sifon* while it can also increase the transmission of HIV infection.⁷ In this regard, there is a traditional practice of circumcision that is still being carried out these days called *Sifon* circumcision, which originated from the *Atoin Meto* tribe in East Nusa Tenggara Province. The practice of *Sifon* tradition, which is still being performed these days, is one of the risk factors for the transmission of HIV/AIDS infection. The unique part of this tradition of *Sifon* circumcision is the ritual of post-circumcision sexual intercourse with other women who are not their regular partners. This sexual intercourse ritual is performed for 2-4 days after circumcision (circumcision wound has not completely healed and is still bleeding). Circumcision wounds that are shaped like tomatoes or *Kaulili* must be broken inside vaginas because they believe that vaginal discharge is a medicine that can accelerate the healing process of circumcision wounds.⁸ Tomatoes or *Kaulili* that are

Significance for public health

Women are vulnerable to HIV infection and the case is increasing due to economic condition, culture, stigma, low education, limited exposure to information and access to health services. Women who perform *Sifon* ritual have a risk of contracting and transmitting HIV. The role of nurses as educators and counselors is needed in this case to improve women's knowledge about STDs and HIV/AIDS. It is expected that *Sifon* women will be aware that they are a high-risk group for HIV transmission. A prevention measure by recommending condoms cannot not be applied to *Sifon* culture, so nurses need to create promotive and preventive interventions by educating them about the importance of HIV screening. Since *Sifon* exists and it is a source of HIV/AIDS transmission, all parties including health workers and institutions need to collaborate to promote safe *Sifon* in the community.

broken outside the vagina are believed to bring death to the men who did this *Sifon* circumcision. Women who have sexual intercourse after circumcision are called *Sifon* women. *Sifon* women must be those who have given birth or have routine sexual intercourse because they have wide vaginas. This makes it easy for circumcised men to penetrate with their penises. The *Sifon* women is media to “remove heat” that lead to various types of diseases including venereal diseases which make them suffered from prolonged fever, skinny body, yellowish skin and eyes.⁹ The *Sifon* tradition makes women increasingly vulnerable to HIV transmission and sexually transmitted diseases. Women are more vulnerable to the transmission of HIV infection due to socio-economic factor, culture, stigma, low levels of education, lack of exposure to information and limited access to health services. This makes them unaware of the dangers of HIV/AIDS. The significant increase in HIV/AIDS cases globally among women during the last few years indicates several problems, such as feminization. This is marked by an increase in cases of HIV/AIDS infection in women and its transmission. Research shows that HIV/AIDS infection in women is mainly through heterosexual transmission from their husbands or sexual partners.¹⁰ The highest risk factor for HIV/AIDS transmission is through unsafe sexual intercourses. The practice of post-circumcision sexual intercourse as demonstrated in the tradition of *Sifon* circumcision is an entry point for the transmission of HIV infection. The purpose of this study is to explore the experiences of women who performed the traditional *Sifon* ritual in the context of HIV/AIDS transmission.

Design and Methods

Participants and procedure

This was a qualitative research with a phenomenological approach. The sampling technique used was a purposive sampling with inclusion criteria: women who have performed the *Sifon* ritual more than once, come from the *Atoin Meto* tribe, can communicate well using Indonesian or the local language (Dawan language) and are willing to be participants in this study. Prior to data collection, the researcher took ethical test and got research permit. The researcher proposed a research permit to the Faculty of Nursing, Universitas Indonesia (FIK-UI). After obtaining a permit from the faculty, the researcher submitted a research permit application to the Governor of East Nusa Tenggara through the One Stop Integrated Investment and Licensing Service (DPMPTSP) of East Nusa Tenggara Province. The researcher was directly assisted when collecting data in the field by the Executive Manager of the Institute for Educational Research and Development Consultation (LPKP3) Kupang. The data was collected in the field from March 2020 to July 2020. The researcher prepared an interview protocol by focusing on the scope of the study. The researcher also tested the interview protocol and recording device before recording. A cell phone was used to record with duration of not more than one hour. The researcher also used a probing technique and field notes to record non-verbal expressions displayed by participants when telling their experiences on the research phenomena. The number of participants who were successfully interviewed was 13 women, located in Kupang District and Timor Tengah Selatan District.

Data analysis

The data was analysed using the Collaizi method. The researcher also considered code of ethic by fulfilling participants' rights such as anonymity, confidentiality, autonomy, privacy and

dignity, beneficence and non-maleficence and justice. The validity of the data such as credibility, transferability and dependability was also considered. The validity of the data was obtained by doing a thick description of the research location, the interview process and the conditions at the time of the interview. The transcript of the interview was submitted to the participant for re-examination. Readers assessed the accuracy of the researcher in transferring the results of the research from verbatim transcripts. Dependability is obtained by involving other researchers and external reviewers.

Results

The characteristics of the participants are presented in the form of demographic data in Table 1.

A total of thirteen women were interviewed in Kupang. All women were over the age of twenty three and three participants were aged over sixty-four years. At the time of interview, four women had refugee status, six women were married and three widowed.

Seven participants had graduated from elementary school and one woman had no schooling. Participant from Kupang regency were victims of manipulation by *Sifon* men. One of them receive death threat by a *Sifon* man if she did not want to have a sexual intercourse with him. The youngest participant is twenty three years old the oldest one is seventy-one years old.

The majority of participants have jobs, such as farmers/planters (53,85%). Even though they have jobs, their total income is still below the Regional Minimum. According to them, their income as farmers is uncertain and very low. A participant also said that her husband's income is low and they have many children, so they need to support their family needs. FL (33 years old), one of the participants who has six children said that she still wants to perform *Sifon* these days to help her husband in supporting the family financially, such as fulfilling children needs for school and buying milk. She said that she often gets paid around 100-200 thousand rupiahs from a *Sifon* man, but her husband does not know that she is a *Sifon* woman.

We found four main themes: lack of knowledge about HIV/AIDS transmission, unaware became *Sifon* women, women experienced of STDs, using traditional maedicine (Timor medicine) to treat STDs.

Theme 1. Lack of knowledge about HIV/AIDS transmission

The majority of participants did not have adequate knowledge about HIV/AIDS. The participants perceived that AIDS only occur among women who were not have adequate personal hygiene.

“I think that AIDS happens when women and men have multiple sex partners. Not just one woman, but some women and they are not hygiene. That is how you got infected.” (P1)

One women also stated that she had ever heard about HIV/AIDS. In her opinion, HIV/AIDS can be transmitted through breathing.

“I am not really sure. I just heard that she has to live alone, she has her own things, and she has to be alone. If we interact with her, we may get infected through breathing.” (P3)

Limited in knowledge on HIV transmission were also express by participants, women will not get HIV transmission from men.

“If I have sex with a man, I will transmit it to him. It will not

get back to me and I will heal because I already transmit it to him.” (P8)

“Men can do it, but women cannot. We can get another man if we seek treatment. But women cannot get another man, but men can get another woman. He has to transmit it to another woman.” (P2)

“Yes. It is so. Change partners. Some men got infected from a sexual intercourse during a period. So, if a man has sex with a woman during a period, he will get sick too.” (P1)

Interestingly, mostly participants believe that ritual *Sifon* did not cause of HIV transmission

“She did not carry any diseases. Indeed, she has no disease in her body.” (P10)

“No, I do not think that there are risks of having *Sifon*. Not at all.” (P6)

“We are uneducated people so we do not know much about diseases. So, people will get infected if they have *Sifon*.” (P5)

Another misperception about HIV transmission was that having contact with others will lead to HIV:

“If a member of the family gets infected, it means that other members will get infected too. So, if we got infected, we must live alone. We cannot live with our parents anymore. So, we need to build our own house, eat by ourselves, have our own plates if we get infected”. (P3)

Theme 2. Unaware became *Sifon* women

Unaware is the main the reason these women had *Sifon* routine with men. For example, some women did not know that she would have sex with *Sifon* men, who had circumscised during ritual of *Sifon*. This is supported by one of the traditional circumcision shaman (LT) in Nekbaun village, West Amarasi Sub-District, Kupang District. He said that most of the women who know that the men want to have *Sifon* would refuse it even though they are given a lot of money. Then, YS, a circumcision shaman from Kauniki village, Takari Sub-District, Kupang District also said the same thing. He said that if the men sincerely said that he wants to have *Sifon*, he will be rejected.

“He did not tell me that he got circumscised, but he seduced me so I wanted to sleep with him.” (P5)

“When we had *Sifon*, I did not know that he was circumscised. I did not know. So, when we had *Sifon* I smelled something but I did not know that he wanted to have *Sifon*. I did not think that he wanted to have *Sifon* but maybe in his heart he just wanted to remove heat when we had sex.” (P1)

“I did not know. I did not know that he wanted to have *Sifon*. He came and seduced me to go on a date. He was desperate so he looked for a way to get me and to have sex.” (P2)

Therefore, all these women did not realize that they became *Sifon* women.

Another reason to become *Sifon* women because they were seduced by *Sifon* men. Some women were promised to be married after having sex with *Sifon* men.

“At that time, a man came and we both were in a relationship. He said he wanted to be responsible. After two months, I invited him to my house and introduced him to my family. He said that he wanted to marry me. Finally, he asked me to have sex with him. So, I said yes.” (P3)

Only one women knew that she would have sex with *Sifon*

men. However, this women did not know the intention that *Sifon* men wanted to remove heat as one of the culture in *Atoin Meto* tribe.

“He told me that he was circumscised. But I did not know that he wanted to remove heat. So, I just accepted it”. (P12)

Theme 3. Women experienced of STDs

After undergoing *Sifon*, all women suffered with STDs, such as vaginal discharge painful urination, blood in urine:

“The vaginal discharge ... ouch ... we look for this medicine and take it regularly... the vaginal discharge keeps running... I also urinate more frequent... that's it...” (P8)

“I don't feel really well, I cannot get up, headache, body aches, I just lay in bed for a week. After having sex, I feel body aches for a week. I also got back pain, stomachache, headache, mixed white blood or red blood, that is so bad. It hurts because red and white blood are mixed. It feels like being cut by the tip of a sharp knife, so painful. It comes to clean our body.” (P11)

Feeling excruciating pain after having *Sifon*:

“After having sex, I lied in bed for two or three days. They came out like menstruating ... it hurts ... the pain is excruciating.” (P5)

Table 1. Characteristics of participants.

Characteristics of participants	Frequency	Percentage
Place of residence		
• Kupang District	9	69.23
• Timor Tengah Selatan District	4	30.77
Age		
• < 25	1	7.7
• 25-45	5	38.46
• 46-65	4	30.77
• > 65	3	23.07
Marital status		
• Widowed	3	23.08
• Married	6	46.15
• Single	4	30.77
Income/month (IDR)		
• < 100.000	1	7.7
• 100.000	5	38.46
• 200.000	4	30.77
• 300.000	1	7.69
• 500.000	1	7.69
• > 500.000	1	7.69
Level of education		
• No school	1	7.69
• Elementary School	7	53.85
• Junor High School	2	15.38
• Senior High School	3	23.08
Frequency of HIV test		
• Have Taken HIV Test	0	0
• Never Taken HIV Test	13	100
Occupation		
• Housewives	6	46.15
• Farmers	7	53.85
Number of children		
• Childless	3	23.08
• 2-3	5	38.46
• >3	5	38.46

“At that time, I felt pain around my genital. I felt pain when urinating. Even just one drop, it causes excruciating pain. It felt like pain during labour.” (P1)

“It is hot and painful, and it is even worse when urinating. It is so painful. Initially, I found red spots around my genital. When I washed it, it became more painful. Even gently wipe causes pain and feels hot.” (P2)

Suffered from milky urination, itchy and found blood in urine two weeks after having *Sifon*:

“I suffered from severe pain while urinating and less than one hour, I want to pee again. The urine is milky and it takes time. I go to the bathroom frequently. It is hard to sit. I even cannot wear my underwear because it comes out uncontrollably. I did not know that the man removed heat at that time.” (P3).

“After having sex, it was so painful and I almost died. When one drop of urine came out, it feels like pulling out all of my hair... it hurts so bad...” (P5).

Theme 4. Using traditional medicine (Timor medicine) to treat STDs

The majority of participants used traditional ways such as using hot water compress or using betel leaves and drinking coconut water to relief sign of STDs.

“Warm compress makes it even worse. So, I asked for coconut water and I drank it. I asked people to find me a coconut and I drank the water. I said that I need to take some medicine.” (P1)

“I looked for betel leaves, boiled them and take a shower with it. I wash my genital area with the water and I drink it as well. I did not take herbal medicine and I looked for the medicine by myself based on the information from my sister. I did not tell my treatment. My mom also knows the medicine.” (P1)

One women explained how she used betel leaves to relief her pain:

“Herbal medicine, such as betel leaves, this is forest betel. It was so hot but I took it. Finally, I healed. If it comes, my stomach gets swollen. I thought it is too deep but it was healed. I did not just take betel leaves but also various kinds of medicine. Someone massaged me and it was so painful. It hurts so much around this area.” (P1)

“Finally, I just drank boiling water of betel leaves, only betel leaves. So, I used charcoal. When I was sick, I was admitted to the hospital. If I felt sick, I drank charcoal. I once drank charcoal. Kusambi charcoal, shell charcoal. Then, I drank like coffee. But it did not feel anything wrong.” (P1)

Discussion

The finding shows that almost all women in this study did not realize that they became *Sifon* women for the first time they had sex with men who had *Sifon* circumcision. A previous research by Primus Lake stated that normally women refuse to have sex with *Sifon* men because the purpose of *Sifon* is to “remove heat.”⁸ For this reason, *Sifon* men find it difficult to get a *Sifon* women so that they seduced and manipulated the women by promising to marry them. Even, some women were threatened by the *Sifon* man if they did not want to serve the man. Generally, women refuse to have sex with men in the context of *Sifon*. According to the prevailing tradition, it is said that the *ahélet* (circumcision shaman) is in

charge of providing a *Sifon* woman who will become a partner for a *Sifon* man. This reason makes it difficult for the men to get *Sifon* women, so they manipulated the women by seducing, promising to establish serious relationships and get married, and there were even women who were threatened by the *Sifon* men so that they wanted to have sex. In general, women refuse to have sex with men in the context of *Sifon*.

The finding shows that overall, these women had inadequate knowledge about HIV, including HIV transmission. Having inadequate knowledge about HIV may lead someone to get HIV infection. For adult population, the increase in HIV cases occurs because of their sexual behavior, but some people do not realize that unsafe sexual behaviors make them a person at high risk of contracting HIV/AIDS.¹¹ The results of the literature review conducted by Martin indicated that people who have higher education will have better knowledge about HIV.¹¹ Based on demographic data, it was found that most of the *Sifon* women who participated in this study had low knowledge about HIV/AIDS particularly about the HIV transmission. *Sifon* women have high risk of getting HIV infection through *Sifon* ritual, because they do not use any protection during intercourse. It is necessary to have knowledge of HIV for preventing the disease and to reduce the risks. Someone who have adequate knowledge about HIV/AIDS including HIV transmission may influence their sexual behavior into safe sexual practise.¹² This is a novelty of this study that *Sifon* women had lack of knowledge about HIV transmission and therefore they did not realize that they may put themselves in getting HIV infection through *Sifon* ritual.

One of the findings of this study is a way to improve screening behavior through health education about HIV/AIDS. The lack of knowledge that *Sifon* women have about HIV/AIDS transmission is one of the factors that affects their awareness of undergoing HIV/AIDS screening. Education and knowledge about HIV/AIDS also affect a person to engage in risky sexual behavior.¹³ Education about HIV/AIDS and STD is expected to be able to help *Sifon* women to understand prevention intervention so that they can maintain their health. Increasing knowledge is an important part in establishing behavior. Increasing knowledge about HIV/AIDS is very important so that it can reduce risky sexual behavior.¹⁴ This finding is supported by research conducted by Irmayanti, which found out that knowledge of HIV and HIV risk behavior affected women to take HIV examination. *Sifon* women have lack of knowledge about HIV/AIDS transmission and this is one of the factors that can affect their awareness of taking HIV/AIDS screening. Increasing knowledge about HIV transmission is the essential component in reducing transmission of HIV and STD among *Sifon* women.¹⁵

In this study, all women were suffered from Sexually Transmitted Diseases (STDs). This issues need more attention because STD can become precursor to get HIV. Women have a higher risk of transmission through sexual partners if they do not get treatment earlier. The increasing number of HIV cases is followed by the increasing number of other STD cases.¹⁶ HIV infection, which underlies an increased susceptibility to STDs, can create other health problems. An increased risk of STDs is associated with unsafe sexual behaviors and multiple sexual partners.¹⁷ HIV is still a major global health problem and the increase in HIV cases is due to STDs. Sexually transmitted diseases are closely related to the HIV epidemic because STDs can increase the risk of HIV transmission.¹⁸ In this study, all of the women were not asked whether they had HIV test. Therefore, we do not know whether they are getting HIV infection or not. Lack of knowledge about their HIV status may also influence their sexual behaviour.

The complaints felt by *Sifon* women are actually the symptoms

of STDs. They complained uncomfortable condition around feminine area because *Sifon* is done when the circumcision wound is still bleeding. The woman who serves the *Sifon* man does not know whether the *Sifon* man is infected or has been suffered from other contagious diseases. The indicator of promiscuity in this *Sifon* ritual is the existence of the “count the stones” ritual. This “count the stones” ritual is carried out with the aim of finding out the number of women who already slept with *Sifon* men before having traditional circumcision. This is a requirement for a *Sifon* man because in order to perform a traditional circumcision, the man must have previous sexual experiences. The *Sifon* ritual may indicate STD transmission because sexual intercourse happened when the incision wound has not completely healed. This makes *Sifon* women at a high risk of contracting the STDs. According to them, the complaints they feel around the feminine area are due to *Sifon*. A strong commitment is needed for the prevention, diagnosis and treatment of STDs because more than 1 (one) million new STD cases occur globally every day.

Most of the *Sifon* women believe that traditional medicine can heal the diseases transmitted from *Sifon* ritual. The belief on medicinal properties of various plants has been passed from generation to generation, both from family and their own belief. The medicines are made of leaves, trees and fruits. Most of the *Sifon* women use betel leaves, *faloak* (*Sterculia quadrifida*) fruit, *Turis* (Pigeon pea) plant and *Timor* medicine to heal the complaints after having *Sifon*. They are healed completely after taking this traditional medicine and it is based on their personal experiences. For example, one participant revealed that she took traditional medicine made of some tree barks which are boiled and drunk. Apart from tree barks, plants called *faloak* (*Sterculia quadrifida*) fruit, *Turis* (Pigeon pea) are also used. The bark of *Faloak* and the leaves of *Turis* are taken to make the medicine. Both of these ingredients are boiled and drunk. She admitted that she has never gone to a hospital or health facility because it is so far. Using complementary and alternative medicine has been used for managing various health problems. The major reasons that patients used are satisfied results, low cost, and adverse effect medicine. For example, according to a study conducted by Kloos *et al.*, 2013, the majority of respondent used traditional medicine to treat their illness related with HIV/AIDS.¹⁹

The exploration of *Sifon* women’s experience in having *Sifon* ritual in the context of HIV/AIDS transmission has generated four themes: lack of knowledge about HIV/AIDS transmission, unaware became *Sifon* women, women experienced of STDs, using traditional medicine (Timor medicine) to treat STDs. The role of nurses as educators and counselors is needed in this case with the aim of increasing women’s knowledge about STDs and HIV/AIDS. *Sifon* women are expected to understand that they are a high-risk group for HIV transmission. An awareness of how important the HIV screening can help *Sifon* women to improve their quality of life. Based on the findings in this research, most of these women are heads of the families and widows who must support their families financially. Based on the benefits of the research, nurses are expected to implement nursing care with a culturally sensitive approach without ignoring *Sifon* women’s beliefs and culture. Collaboration with NGOs and educational methods can help nurses to provide better health education interventions to women while still considering an ethical aspect. The results of this study can be used as information and studies for nursing services (nursing assessment), which include culture of *Sifon* as a risk factor for STDs and HIV/AIDS transmission in East Nusa Tenggara Province. Nurses in a clinical setting are expected to be able to provide culturally sensitive nursing care. As a qualitative design, this study only represents the population of *Sifon* women in *Atoin Meto*

tribe who still perform ritual as *Sifon* women. Therefore, the finding may not represent general population.

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Institutions where the research was carried out: The research was carried out at two district in East Nusa Tenggara Province: Kupang District (Kauniki village, Nekbaun village) and Timor Tengah Selatan District (Tobu village, Tune village, Kualeu village).

Ethics approval and consent to participate: The studies conducted here were carried out with ethical approval the Faculty of Nursing, Universitas Indonesia No. SK-40/UN2.F12.D1.2.1/ETIK.FIK.2020. This study has received permission from the Governor of East Nusa Tenggara province through the One Stop Integrated Investment and Licensing Service (DPMPSTP) of East Nusa Tenggara province No. 070/445/DPMPSTP/2020. The consent form was signed by the participants after receiving an explanation from the researcher. The name of participants were not include to ensure confidentiality. All participants were allowed to withdraw at any time.

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References

1. UNAIDS data 2017. Geneva: Joint United Nations Programme on HIV/AIDS; 2017. Accessed: 2020 Dec 13. Available from: https://www.unaids.org/en/resources/documents/2017/2017_data_book
2. UNAIDS data 2019. Geneva: Joint United Nations Programme on HIV/AIDS; 2019. Accessed: 2020 Dec 13. Available from: <https://www.unaids.org/en/resources/documents/2019/2019-UNAIDS-data>
3. Ministry of Health of the Republic of Indonesia. [Infodatin: situasi umum HIV/AIDS dan tes HIV (Infodatin: common HIV / AIDS situation and HIV testing)]. Jakarta: Ministry of Health of the Republic of Indonesia; 2018. Accessed: 2020 Dec 13. Available from: <http://www.depkes.go.id/resources/download/pusdatin/infodatin/infidatinAIDS.pdf>
4. East Nusa Tenggara Provincial Health Office. [Profil kesehatan Provinsi Nusa Tenggara Timur tahun 2018 (Health profile of East Nusa Tenggara Province in 2018)]. Kupang: East Nusa Tenggara Provincial Health Office; 2019. Accessed: 2020 Dec 13. Available from: dinkes.nttprov.go.id
5. Jengamal Y. [Jumlah ODHA di NTT capai 7.032 orang (The number of people living with HIV in NTT reached 7,032 people)]. Victory News 2020 Sep 15. Accessed: 2020 Dec 13. Breaking News: [about 2 screens]. Available from: <https://www.victorynews.id/jumlah-odha-di-ntt-capai-7-032-orang/#>
6. Rodriguez VJ, Chahine A, de la Rosa A, et al. Identifying factors associated with successful implementation and uptake of an evidence-based voluntary medical male circumcision program in Zambia: the Spear and Shield 2 Program. *Transl Behav Med* 2020;10:970-7.
7. Kibira SPS, Atuyambe LM, Sandøy IF, et al. "Now that you are circumcised, you cannot have first sex with your wife": post circumcision sexual behaviours and beliefs among men in Wakiso district, Uganda. *J Int AIDS Soc* 2017;20:21498.
8. Lake P. [Sifon: antara tradisi dan risiko penularan PMS (Sifon: Between tradition and the risk of transmitting STDs)]. Yogyakarta: Collaboration between the Ford Foundation and the Population Research Center, Universitas Gadjah Mada; 1999.
9. Saba KR. Wanita sifon (studi ethno-phenomenology). [Thesis in Indonesian]. Yogyakarta: Universitas Gajah Mada; 2016.
10. Halimatusa'diyah I. Moral injury and the struggle for recognition of women living with HIV/AIDS in Indonesia. *Int Sociol* 2019;34:696-715.
11. Martins-Fonteyn E, Loquiha O, Baltazar C, et al. Factors influencing risky sexual behaviour among Mozambican miners: a socio-epidemiological contribution for HIV prevention framework in Mozambique. *Int J Equity Health* 2017;16:17.
12. Ortblad KF, Musoke DK, Ngabirano T, et al. Is knowledge of HIV status associated with sexual behaviours? A fixed effects analysis of a female sex worker cohort in urban Uganda. *J Int AIDS Soc* 2019;22:e25336.
13. Salem BE, Bustos Y, Shalita C, et al. Chronic disease self-management challenges among rural women living with HIV/AIDS in Prakasam, Andhra Pradesh, India: a qualitative study. *J Int Assoc Provid AIDS Care* 2018;17:2325958 218773768.
14. Rokhmah D, Khoiron. The role of sexual behavior in the transmission of HIV and AIDS in adolescent in coastal area. *Procedia Environ Sci* 2015;23:99-104.
15. Irmayati N, Yona S, Waluyo A. HIV-related stigma, knowledge about HIV, HIV risk behavior and HIV testing motivation among women in Lampung, Indonesia. *Enferm Clin* 2019;29: 546-50.
16. Jaspal R, Lopes B, Jamal Z, et al. HIV knowledge, sexual health and sexual behaviour among Black and minority ethnic men who have sex with men in the UK: a cross-sectional study. *Sex Health* 2019;16:25-31.
17. Saberi P, Neilands TB, Lally MA, et al. The association between use of online social networks to find sex partners and sexually transmitted infection diagnosis among young men who have sex with men and transgender women living with HIV. *J Int Assoc Provid AIDS Care* 2019;18:23259582 19867324.
18. Schönfeld A, Feldt T, Tufa TB, et al. Prevalence and impact of sexually transmitted infections in pregnant women in central Ethiopia. *Int J STD AIDS* 2018;29:251-8.
19. Kloos H, Mariam DH, Kaba M, Tadele G. Traditional medicine and HIV/AIDS in Ethiopia: herbal medicine and faith healing: a review. *Ethiop J Health Dev* 2013;27:141-55.