

Knowledge of Sexually Transmitted Infection (HIV/AIDS) Among Female Sex Worker in Sokoto Metropolis

John IO^{1*}, Mariam ON¹, Anthonia IC², Joy IC³, Osazuwa IO⁴, Andrew IE⁵, Jacob O⁶, Mokwe GC⁷ and Mary M⁸

¹Department of Public Health, Imo State University, Owerri, Nigeria

²Federal Medical Centre Kebbi State

³Medicine San Frontiers, Geneva, Switzerland

⁴Department of Periodontology and Community Dentistry, University College Hospital, Ibadan, Nigeria

⁵Department of Anatomy, Anambra State University, Uli, Nigeria

⁶Livon Medical Diagnostic Laboratory Service, No 1 Cold Room Street, Beside Maddala Hotel, Niger State, Nigeria

⁷Altinez Pharmaceutical Ltd 8 Obukun Street, Off Coker Road, Ilupeju, Lagos

⁸Brigade Medical Centre Sokoto, Nigeria.

Received January 09, 2019; Accepted January 30, 2019; Published November 22, 2019

ABSTRACT

Nigeria is currently facing a rapid and widespread increase in human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS). The activities of female sex workers (FSWs) have contributed to the mounting epidemic of HIV/AIDS and other sexually transmitted diseases (STDs). Therefore, this study aimed to assess the knowledge sexually transmitted infection (HIV/AIDS) among female sex worker in Sokoto. A cross-sectional form of descriptive survey research design was used for this study. Data obtained for the study was collected from 100 (one hundred) females sex worker with structured questionnaire in two sections A and B. Section A, was made up of three questions on demographic data (age, level of education and year of prostitute). Section B, contained twelve (12) questions on knowledge of sexually transmitted infection (HIV/AIDS). Chi-square (χ^2) 732.4829 is greater than the critical value 55.758, $df=40$, there is a statistically significant relationship between the age of female sex worker and the knowledge of HIV/AIDS. Chi-square (χ^2) 775.09 is greater than the critical value 55.758, $df=40$ there is a statistically significant relationship between the educational level of female sex worker and the knowledge of HIV/AIDS. Chi-square (χ^2) 1338.669 is greater than the critical value 55.758, $df=40$ there is a statistically significant relationship between the years of been a female sex worker and the knowledge of HIV/AIDS rejection the null hypothesis. This study showed that female sex worker in this study area, possessed very good knowledge of sexually transmitted infection (HIV/AIDS).

Keywords: Sexually transmitted infection/diseases, HIV/AIDS, Age, Knowledge, Female sex workers (FSWs), Educational level

INTRODUCTION

Sex worker is a person who is employed in the sex industry [1]. The term is used in reference to all those in all areas of the sex industry including those who provide direct sexual services as well as the staff and management of such industries [1]. Some sex workers are paid to engage in sex acts or sexually explicit behavior which involve varying degrees of physical contact with clients (prostitutes and some but not all professional dominants); pornography models and actors engage in sexually explicit behavior

Corresponding author: Ikpeama Osita John, Department of Public Health, Imo State University, Owerri, Nigeria, Tel: +234-806-261-9025; E-mail: ikpeama35@gmail.com

Citation: John IO, Mariam ON, Anthonia IC, Joy IC, Osazuwa IO, et al. (2019) Knowledge of Sexually Transmitted Infection (HIV/AIDS) Among Female Sex Worker in Sokoto Metropolis. Adv Vaccines Vaccin Res, 2(2): 57-63.

Copyright: ©2019 John IO, Mariam ON, Anthonia IC, Joy IC, Osazuwa IO, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

and actors engage in sexually explicit behavior which are filmed or photographed. Phone sex operators have sexually-oriented conversations with clients and play auditive role. HIV infection among women in the United States decreased from 9.5 per 100,000 persons in 2008 [2], to 6.1 per 100,000 in 2014 [3]. However, there may be subgroups among the female population where HIV transmission remains high, such as female sex workers. Globally, sex workers are among the populations most affected by HIV [4]. Female sex workers often have large numbers of sex partners, concurrency of partners, report infrequent or inconsistent condom use, and are likely to engage in high-risk sexual acts such as anal sex without condom [4]. Data from the continental United States and Puerto Rico show that sex workers are more likely than other women to have a history of sexually transmitted infections (STI) [1,5,6] and STI contribute to increased likelihood of acquiring and transmitting HIV [7]. Studies from the United States have also documented a high prevalence of injection and non-injection drug use among women who engage in exchange sex [8,9]. Not surprisingly, female sex workers who inject drugs are at higher risk of HIV infection when compared to female sex workers who do not inject drugs since they can acquire HIV through sex without condoms and through sharing needles or other injection equipment. Women who abuse drugs or alcohol may feel more pressure to have sex without condom if offered more money or drugs by their clients. They may also trade sex while under the influence and receive less money when selling sex [10].

Statement of problem

HIV infection among women in the United States decreased from 9.5 per 100,000 persons in 2008 [2], to 6.1 per 100,000 in 2014 [3]. However, there may be subgroups among the female population where HIV transmission remains high, such as female sex workers. Globally, sex workers are among the populations most affected by HIV. A systematic review of HIV infection among female sex workers in developing countries found an overall prevalence of 11.8% (95% confidence interval (CI) 11.6-12.0), a level that is significantly greater than in the general female population (Odds Ratio: 13.5 (95% CI 10.0-18.1)) [11]. A recent update to this systematic review included additional data from 2011 to 2013 and showed that the estimated prevalence varied widely by region from 0.3% (95% CI 0.1-0.8) in the Middle East and North Africa to 29.3% (95% CI 25.0-33.8) in Sub-Saharan Africa.

AIMS AND OBJECTIVES

The main purpose of the study was to determine the behavioral practices promoting malaria drug resistance among adults in Sokoto metropolis. In specific terms, the objectives of the study include:

1. To determine the influence of age on the Knowledge of sexually transmitted infection (HIV/AIDS) among female sex worker in Sokoto metropolis.
2. To ascertain the influence of level of education on Knowledge of sexually transmitted infection (HIV/AIDS) among female sex worker in Sokoto metropolis.

SIGNIFICANCE OF THE STUDY

Results of the study would reveal Knowledge of sexually transmitted infection (HIV/AIDS) among female sex worker in Sokoto metropolis. Specifically, result of the study would be significant to adults (male/female), Public health officers, health counselors, health educators, curriculum planners, medical allied personnel and researchers in assessing Knowledge of sexually transmitted infection (HIV/AIDS) among female sex worker in Sokoto metropolis. Although good knowledge, assessment would motivate effectiveness of program in this locality. Results of the study would motivate public health workers toward identifying behavioral practices (risk factors) that are common in this locality. Health counselors would through the results of this study develops and adapts effective method on the best malaria preventive practices. Health educators, curriculum planners and researchers would be able to identify gaps in Knowledge of sexually transmitted infection (HIV/AIDS) among female sex worker in Sokoto that can aid in the development of health education and health promotion concepts that can be utilized in the community to address the deficiencies.

RESEARCH QUESTIONS

The following research questions gave direction to the study:

1. What is the level of influence of age on the Knowledge of sexually transmitted infection (HIV/AIDS) among female sex worker in Sokoto metropolis?
2. What is the influence of level of education and year of female sex work on Knowledge of sexually transmitted infection (HIV/AIDS) among female sex worker in Sokoto?

HYPOTHESES

The following null hypotheses were postulated for the study

1. There is no significant difference in the age on the Knowledge of sexually transmitted infection (HIV/AIDS) among female sex worker in Sokoto metropolis.
2. There is no significant difference on level education and year of female sex work on Knowledge of sexually transmitted infection (HIV/AIDS) among female sex worker in Sokoto metropolis.

RESEARCH DESIGN

A cross-sectional form of descriptive survey research design was used for this study. This is because descriptive studies are used when the characteristics of a population are either unknown or partially known; this justified the use of similar design in a study of similar nature.

Study area

Sokoto is one of the seven states that form the North West geopolitical zone of Nigeria. It is bordered to the north by the Republic of Niger, Zamfara State to the east, Kebbi state to the south and west. It is situated in the savannah on the temperature of 44 degree Celsius annually. The city of Sokoto is its capital. Sokoto state traces its origin to the Sokoto Caliphate founded in 1809 by Shehu Usman Fodio, the leader of the jihadists who overthrew the Hausa state of Gobir, Kano, Katsina and Kanem-Bornu. The empire fell after the British conquest of 1903 and the death of Attahiru, the Sultan of Sokoto and became part of the Northern Region in the three-region structure of 1954. In 1967, Nigeria, the military administration of General Yakubu Gowon merged Sokoto and Niger provinces to form the North Western state. In 1976, North Western State was split into Sokoto and Niger states by the military administration of General Murtala Muhammed. Sokoto State covers an area of 28,232.37 km². The state is located between latitudes 40 to 60 north and longitudes 110 to 130 east has a population of 3,702,676 (2006 census figures). It accounts for 2.3 percent of Nigeria's total population. Prior to the establishment of Sokoto as a ribat (military camp or frontier) in 1809, the area that is modern-day Sokoto state was home to Hausa state with large populations. These states eventually fell under the control of Usman Fodio and the Fulani jihadists and became part of the Sokoto Caliphate. In 1817 when Usman died, his son Muhammed Bello succeeded him as the Sultan of Sokoto. Usman's brother Abdullahi was given the western divisions of the caliphate to run; however, supreme authority rested with Bello. At the height of its power, the Sokoto Caliphate extended as far as Ilorin (in modern-day Kwara State). The Hausa are the largest ethnic group in Sokoto State while the Fulani are its second largest. Minority include the Zabarmawa, Tuareg and the Dakarkari. The majority of the population is Sunni Muslim. There is a small Shia minority. There are twenty-three local government areas (LGAs) in Sokoto. Each has a chairman as its administrative head. The Islamic community in Nigeria considers the person of the Sultan as 'First among Equals'. He is both the political head of the Fulani as well as the supreme spiritual head of the rough 70 million Muslims in Nigeria. Currently occupying the site is Sultan Muhammadu Sa'ad Abubakar III, the 20th sultan of Sokoto. Agriculture is the mainstay of Sokoto's economy. The riverine floodplains produce cash crops, including peanuts (groundnuts), cotton and rice. Sorghum, millet, cowpeas and cassava are grown in the upland areas. Much of the land in

the state is used for grazing cattle. Cattle hides, goatskin, sheepskins and finished leather products are significant exports, as are cattle, goats and fowl. The state possesses limestone and kaolin deposits and Sokoto City, the state capital, is home to a cement factory, tanneries and a modern abattoir. Festivals include Kalankuwa, Halbi, Sharo, AikinGawa, Shan Gumba-Pap drinking and Remo Fishing Festival.

Method of data collection

A letter of introduction (**Appendix D**) signed by the Head of Department of Public Health Imo State University, Owerri was presented to the district head of Kwannawa area to allow entry for data collection. Two (2) trained research assistants were involved in explaining to the respondents on face to face basis detail of what the research is meant for.

Population of the study

The accessible population of the study consisted of an estimated one thousand (1,000) adults (female) (18-70 years) in Kwanawa area.

Sample/sampling technique

The sample for the study consisted of 100 (one hundred) adults' females randomly drawn areas in Kwannawa area. Ten percentage (10%) of the accessible population was used as sample size, Nwana (2011) opined that if the population is in few thousand 10% will be appropriate as the sample size.

Instrument for data collection

The main instrument for data collection consisted of structured questionnaire. The structured questionnaire was in two sections A and B. Section A, was made up of three questions on demographic data (age, level of education and year of prostitute). Section B, contained nine (9) questions on Knowledge of sexually transmitted infection (HIV/AIDS) among female sex worker.

Scope of the study

The study was delimited to the Knowledge of sexually transmitted infection (HIV/AIDS) among female sex worker (18-70 years) in Sokoto metropolis. It was delimited to independent variables of age, female sex worker and levels of education. It was further delimited to adult's female sex worker (18-70 years) in Kwanawa area Sokoto metropolis. It involved young adult age (18-40), middle adult (41-65) and older adult above 65 years. It was delimited to the use of structured questionnaire as the main instrument for data collection. Finally it was delimited to the use of descriptive statistic of frequency and percentage as well as inferential statistic of chi square at 0.05 level of significant for data analysis.

Method of data analysis

Data collected were analyzed using descriptive statistic of frequency count, normative percentage and grand mean; as

well as inferential statistics of chi-square (χ^2). The level of significant was fixed at 0.05. Appropriate degrees of freedom were worked out.

Data presentation and analysis

The chapter deals with data presentation, analysis and discussion of the results obtained based on the objectives, and the research questions of the study as well as the hypotheses. Research questions were answered using percentages (%); null hypotheses were tested using inferential statistics of chi-square. The level of significance was set at 0.05.

RESULTS AND DISCUSSION

The influence of age of female sex worker on the of knowledge of sexually transmitted infection (HIV/AIDS) showed that among subjects of different age group 18-28 years, 29-38 years and ≥ 39 years, 26 (100%), 50 (100%) and 21 (87%) answered yes correctly respectively that HIV infections has no symptoms. 23 (88%), 48 (96%) and 24 (100%) answered No correctly that mosquito bite does not spread HIV across different age group 18-28 years, 29-38 years and ≥ 39 years, respectively. There were

overwhelming (100%) yes correctly that the use of condoms can reduce the risk of HIV infection across different age group 18-28 years, 29-38 years and ≥ 39 years, respectively. HIV infected blood is a risk factor for HIV transmission 21 (81%) answered yes correctly in 18-28 years and 100% yes each for 29-38 years and ≥ 39 years, respectively. There is a general 100% yes correctly that Unprotected oral sex may transmit HIV, Unprotected sexual act is a risk factor for HIV infection and HIV can be spread through sharing of sharp object (needle, syringe, razor, etc.) respectively different age group 18-28 years, 29-38 years and ≥ 39 years. 23 (88%), 48 (96%) and 22 (92%) answered yes correctly across different age group 18-28 years, 29-38 years and ≥ 39 years, respectively, that HIV can be transmitted to new born by pregnant mother (via breastfeeding or during birth). 26 (100%), 49 (98%) and 24 (100%) answered yes correctly across different age group 18-28 years, 29-38 years and ≥ 39 years, respectively that present of sore or wound on the private part increases the risk of HIV. Chi-square (χ^2) 732.4829 is greater than the critical value 55.758, $df=40$, there is a statistically significant relationship between the age of female sex worker and the knowledge of HIV/AIDS (Table 1).

Table 1. Distribution of knowledge of HIV/AIDS among female sex worker based on age group.

	18-28 years n (26) Yes (%) No (%)	29-38 years n (50) Yes (%) No (%)	≥ 39 years n (24) Yes (%) No (%)
Infection with HIV can have no symptoms	26 (100%) 0 (0%)	50 (100%) 0 (0%)	21 (87%) 3 (13%)
Mosquito bites can spread HIV	3 (12%) 23 (88%)	2 (4%) 48 (96%)	0 (0%) 24 (100%)
The use of condoms can reduce the risk of HIV infection	26 (100%) 0 (0%)	50 (100%) 0 (0%)	24 (100%) 0 (0%)
HIV infected blood is a risk factor for HIV transmission	21 (81%) 5 (19%)	50 (100%) 0 (0%)	24 (100%) 0 (0%)
Unprotected oral sex may transmit HIV	26 (100%) 0 (0%)	50 (100%) 0 (0%)	24 (100%) 0 (0%)
Unprotected sexual act is a risk factor for HIV infection	26 (100%) 0 (0%)	50 (100%) 0 (0%)	24 (100%) 0 (0%)
HIV can be spread through sharing of sharp object (needle, syringe, razor, etc.)	26 (100%) 0 (0%)	50 (100%) 0 (0%)	24 (100%) 0 (0%)
HIV can be transmitted to new born by pregnant mother (via breastfeeding or during birth)	23 (88%) 3 (12%)	48 (96%) 2 (4%)	22 (92%) 2 (8%)
Sore or wound of the private part increases the risk of HIV	26 (100%) 0 (0%)	49 (98%) 1 (2%)	24 (100%) 0 (0%)

Chi-square (χ^2) 732.4829 is greater than the critical value 55.758, $df=40$, there is a statistically significant relationship between the age of female sex worker and the knowledge of HIV/AIDS

The influence of educational level of female sexual worker on the knowledge of sexually transmitted infection (HIV/AIDS), showed that 25 (89%), 54 (100%) and 18 (100%) answered yes that HIV infection those not have symptoms across Non formal education level, primary and secondary educational level and tertiary educational level subjects respectively. On mosquito bite spreading HIV, 25 (89%), 52 (96%) and 18 (100%) answered No correctly that mosquito bite does not spread HIV across non-formal education level, primary and secondary educational level and tertiary educational level subjects, respectively. Among subjects there were 100% yes across non-formal education level, primary and secondary educational level and tertiary educational level subjects respectively that the use of condoms can reduce the risk of HIV infection. On HIV infected blood been a risk for HIV infection 23 (82%), 54 (100%) and 18 (100%) answered yes correctly across Non formal education level, primary and secondary educational level and tertiary educational level subjects, respectively.

Across non-formal education level, primary and secondary educational level and tertiary educational level subjects there were 100% yes correctly that unprotected oral sex may transmit HIV; unprotected sexual act is a risk factor for HIV infection same for HIV can be spread through sharing of sharp object (needle, syringe, razor). 26 (96%), 51 (95%) and 15 (87%) answered yes correctly across Non formal education level, primary and secondary educational level and tertiary educational level subjects respectively that HIV can be transmitted to new born by pregnant mother (via breastfeeding or during birth). 27 (96%), 54 (100%) and 18 (100%) answered yes correctly across Non formal education level, primary and secondary educational level and tertiary educational level subjects respectively that present of Sore or wound on the private part increases the risk of HIV. Chi-square (χ^2) 775.09 is greater than the critical value 55.758, $df=40$ there is a statistically significant relationship between the educational level of female sex worker and the knowledge of HIV/AIDS (Table 2).

Table 2. Distribution of knowledge of HIV/AIDS among female sex worker based on educational level.

	Non-formal Education n (28) Yes (%) No (%)	Primary and Secondary Education n (54) Yes (%) No (%)	Tertiary Education n (18) Yes (%) No (%)
Infection with HIV can have no symptoms	25 (89%) 3 (11%)	54 (100%) 0 (0%)	18 (100%) 0 (0%)
Mosquito bites can spread HIV	3 (11%) 25 (89%)	2 (4%) 52 (96%)	0 (0%) 18 (100%)
The use of condoms can reduce the risk of HIV infection	28 (100%) 0 (0%)	54 (100%) 0 (0%)	18 (100%) 0 (0%)
HIV infected blood is a risk factor for HIV transmission	23 (82%) 5 (18%)	54 (100%) 0 (0%)	18 (100%) 0 (0%)
Unprotected oral sex may transmit HIV	28 (100%) 0 (0%)	54 (100%) 0 (0%)	18 (100%) 0 (0%)
Unprotected sexual act is a risk factor for HIV infection	28 (100%) 0 (0%)	54 (100%) 0 (0%)	18 (100%) 0 (0%)
HIV can be spread through sharing of sharp object (needle, syringe, razor, etc.)	28 (100%) 0 (0%)	54 (100%) 0 (0%)	18 (100%) 0 (0%)
HIV can be transmitted to new born by pregnant mother (via breastfeeding or during birth)	27 (96%) 1 (4%)	51 (95%) 3 (5%)	15 (87%) 3 (17%)
Sore or wound of the private part increases the risk of HIV	27 (96%) 1 (4%)	54 (100%) 0 (0%)	18 (100%) 0 (0%)

Chi-square (χ^2) 775.09 is greater than the critical value 55.758, $df=40$ there is a statistically significant relationship between the educational level of female sex worker and the knowledge of HIV/AIDS

The influence of year involved by female sexual worker on the knowledge of sexually transmitted infection (HIV/AIDS), showed that 100%, 36 (92%) and 51 (100%) answered yes that HIV infection those not have symptoms across ≤ 1 year, 2-5 years and ≥ 6 years of prostitution, respectively. On mosquito bite spreading HIV infection, 8 (80%), 37 (95%) and 50 (98%) answered No correctly that mosquito bite does not spread HIV across ≤ 1 year, 2-5 years and ≥ 6 years of prostitution, respectively. Among subjects there were 100% yes across ≤ 1 year, 2-5 years and ≥ 6 years of prostitution respectively that the uses of condoms reduce the risk of HIV infection. On HIV infected blood been a risk for HIV infection 7 (70%), 37 (95%) and 51 (100%) answered yes correctly across ≤ 1 year, 2-5 years and ≥ 6 years of prostitution respectively. Across ≤ 1 year, 2-5 years and ≥ 6 years of prostitution there was 100% yes correctly that unprotected oral sex may transmit HIV, unprotected sexual act is a risk factor for HIV infection same for HIV can be spread through sharing of sharp object (needle, syringe, razor), respectively. 10 (100%), 36 (92%) and 46 (90%) answered yes correctly across ≤ 1 year, 2-5 years and ≥ 6 years of prostitution, respectively, that HIV can be transmitted to new born by pregnant mother (via breastfeeding or during birth). 9 (90%), 36 (92%) and 46 (90%) answered yes correctly across ≤ 1 year, 2-5 years and ≥ 6 years of prostitution respectively that present of Sore or wound on the private part increases the risk of HIV. Chi-square (χ^2) 1338.669 is greater than the critical value 55.758,

df=40 there is a statistically significant relationship between the years of been a female sex worker and the knowledge of HIV/AIDS. de Araújo Patricio et al. [12] reported a low knowledge among female sex worker in Brazil where women had an average age 23.7 years; 84.4% (76) and 62.2% (56) amount to the level of education above the high school. Knowledge in the physiological and behavioral attributes of aids (D3), that HIV causes symptoms in humans (D4) and treatment of aids (D5) dimensions feature significantly different hit percentage ($p < 0.001$). D3 showed lower percentage (53.8%) hit and D5 (70.8%) [12]. The T-score revealed a discrepancy between the percentage of women's knowledge about the observed and expected. de Araújo Patricio et al. [12] reported that there was no influence of schooling in relation to knowledge about HIV ($p = 0.476$) and the professional exercise, age, marital status, income and participation in educational activities ($p > 0.05$). The knowledge presented significant difference in the average percentage of hit by D3, D4 and D5 dimensions ($p < 0.001$) [12]. Results from this study showed that the knowledge of sexually transmitted infection (HIV/AIDS) among female sex worker was very sound or excellent; this could be due to constant workshop and training organized for them on HIV/AIDS by government and Non-governmental organization. There is significant influence of educational level, years of female sexual worker and age of the subject on the knowledge of sexually transmitted infection (HIV/AIDS) (Table 3) [13].

Table 3. Distribution of knowledge of HIV/AIDS among female sex worker based on year of been a female sex worker.

	≤ 1 year n (10)	2-5 years n (39)	≥ 6 years n (51)
	Yes (%) No (%)	Yes (%) No (%)	Yes (%) No (%)
Infection with HIV can have no symptoms	10 (100%) 0 (0%)	36 (92%) 3 (14%)	51 (100%) 0 (0%)
Mosquito bites can spread HIV	2 (20%) 8 (80%)	2 (5%) 37 (95%)	1 (2%) 50 (98%)
The use of condoms can reduce the risk of HIV infection	10 (100%) 0 (0%)	39 (100%) 0 (0%)	51 (100%) 0 (0%)
HIV infected blood is a risk factor for HIV transmission	7 (70%) 3 (30%)	37 (95%) 2 (5%)	51 (100%) 0 (0%)
Unprotected oral sex may transmit HIV	10 (100%) 0 (0%)	39 (100%) 0 (0%)	51 (100%) 0 (0%)
Unprotected sexual act is a risk factor for HIV infection	10 (100%) 0 (0%)	39 (100%) 0 (0%)	51 (100%) 0 (0%)
HIV can be spread through sharing of sharp object (needle, syringe, razor, etc.)	10 (100%) 0 (0%)	39 (100%) 0 (0%)	51 (100%) 0 (0%)
HIV can be transmitted to new born by pregnant mother (via breastfeeding or during birth)	10 (100%) 0 (0%)	36 (92%) 3 (8%)	46 (90%) 5 (10%)
Sore or wound of the private part increases the risk of HIV	9 (90%) 1 (10%)	39 (100%) 0 (0%)	51 (100%) 0 (0%)

Chi-square (χ^2) 1338.669 is greater than the critical value 55.758, df=40 there is a statistically significant relationship between the years of been a female sex worker and the knowledge of HIV/AIDS

CONCLUSION

This study showed that female sex worker in this study area, possessed very good knowledge of sexually transmitted infection (HIV/AIDS).

REFERENCES

1. Baptie T (2009) Sex worker? Never met one! Sisyphe.org. Retrieved 2009-09-12.
2. CDC (2013) Diagnosis of HIV infection in the United States and dependent areas, 2011. HIV Surveillance Report 23: 84.
3. CDC (2015) Diagnoses of HIV Infection in the United States and Dependent Areas, 2014. Atlanta, GA.
4. Burnes TR (2017) Sex work. Thousand Oaks: Sage Publications, Inc.
5. Farley M (2006) Prostitution, trafficking, and cultural amnesia: What we must not know in order to keep the business of sexual exploitation running smoothly. *Yale Journal of Law and Feminism* 18: 109-144.
6. Harcourt C, Donovan B (2005) The many faces of sex work. *Sex Transm Infect* 81: 201-206.
7. Givetash L (2017) Some sex workers choose industry due to benefits of occupation: Study. *The Globe and Mail*. Toronto: Phillip Crawley.
8. Breslin S (2011) Why do women become sex workers and why do men go to them? *The Guardian*. UK.
9. Weitzer R (2000) Sex for sale: Prostitution, pornography and the sex industry. New York: Routledge Press.
10. Rusakova M, Rakhmetova A, Strathdee SA (2015) Why are sex workers who use substances at risk for HIV. *Lancet* 385: 211-212.
11. Baral S, Beyrer C, Muessig K, Poteat T, Wirtz AL, et al. (2012) Burden of HIV among female sex workers in low-income and middle-income countries: A systematic review and meta-analysis. *Lancet Infect Dis* 12: 538-549.
12. de Araújo Patrício ACF, Bezerra VP, Camargo BV, de Almeida Nogueira J, Moreira MASP, et al. (2016). Knowledge of women sex workers about HIV/AIDS. *Int Arch Med* 9: 22-36.
13. Ryan C, Kinder R (1996) Sex, tourism and sex tourism: Fulfilling similar needs? *Tourism Management* 17: 507-518.