

Control of *Sexual Transmitted Infections* in Indonesia

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Abstract

Female indirect commercial sex workers who usually work in certain fields of work or have other main jobs and indirectly sell sex in entertainment places such as masseuses, bar waiters. They are included in the high risk group in the spread of cases of Sexual Transmitted Infections and HIV and AIDS. In Indonesia, it is hoped that HIV AIDS will be free from Sexual Transmitted Infection by 2030 with the vision and mission “No more HIV transmission, no AIDS deaths, no more stigma and discrimination in people with HIV / AIDS”. This type of research uses quantitative descriptive research. with a sample of 80 female sex workers in Bandung, Semarang. The results of this study indicate a significant relationship between customer support, access to health services, health promotion and control of sexually transmitted infections.

Keywords: *Control of Sexually Transmitted Infections, commercial sex*

Introduction

Currently the prevalence of HIV & AIDS is increasing rapidly. In 2000 it was estimated that in Asia more than 500,000 people died of AIDS, which is about 1500 people died per day. The chance of contracting HIV among female sex workers is almost 14 times higher than other women and middle-income countries. women sex workers also experience very high levels of physical and sexual violence or discrimination and social rejection, which decreases their self-efficacy in negotiating condom use Human rights violations against sex Workers have increased in situations where sex workers are criminalized by punitive laws and policies. have found that the above mentioned factors, including economic vulnerability, reduce the likelihood of condom use among women sex workers. 4–8 Low levels of social support have a significant effect on high-

risk sexual behavior and sexually transmitted infections among women ⁽¹⁻³⁾.

The estimated number of people exposed to treatable sexually transmitted infections is about more than 30 million cases each year. In 2016 an estimated 8.6 million people were HIV positive (PLWHA) in Southeast Asia, including 960,000 people who were newly infected (new cases) in the previous year. It is estimated that around 630,000 people have died from AIDS-related illnesses. So that in a period of approximately 6 years (2000-2006) there was an increase in cases of 130,000 people who died of AIDS. The link between sexually transmitted infections and HIV cases worldwide, has long been known. Therefore, optimal interventions are needed against sexual transmitted infections as well as those that have been applied to controlling sexual transmitted infection HIV AIDS ⁽⁴⁻⁶⁾.

One of the risk factors for the high risk of sexually transmitted infection with HIV is the number of customers served by women. The greater the number of customers, the more likely to be infected with HIV, on the other hand, if sex workers are infected with HIV, the

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more customers will be infected ^(7,8).

In Indonesia, especially Semarang Regency since 2010 in the Regional Government Regulation of Semarang Regency No.3 of 2010 Article 5 concerning HIV and AIDS Prevention in Semarang District has issued an instruction from the district head regarding the 100% Condom Use Program in this program which can be said to be quite successful, as evidenced by the increase in knowledge of localization of sex workers on sexual transmitted infections, HIV and AIDS, and efforts to use condoms are around 30% ^(9,10).

It can be seen that the success of the behavioral intervention program for sex workers who work in this lokalisasi (direct sex workers) is because the program was specifically designed for them. Since the program is designed for sex workers working in brothels, there may be discrepancies if the program is applied to other communities. It is for this reason that a different strategy is needed for women indirect sex workers who work in very different environments where support from health staff and their peers is lacking, and are exposed to a greater risk of violence when they refuse to have sexual

relations. insecure with clients, and lack of information about HIV ^(11,12).

Material and Method

This research uses a combined quantitative and qualitative approach. The subjects of this study were women who worked in Pub Café and Karaoke in Semarang Regency, namely 80 women aged 17-30 years.

The author chose Semarang Regency, Central Java Province as the research location because Bandung is better known as prostitution tourism (*Sexs Tourism*) every time they mention the name of Bandung besides being known. As a tourist area and a center for cheap hotels and karaoke, the imagination of people about Bandung has always been to women. Therefore, the selection of the research location in Bandung District, Semarang Regency, Central Java Province, was deemed appropriate to explore various information related to the Behavior of Indirect Sexual Workers in Prevention of Sexually Transmitted HIV and AIDS in Pubs, Karaoke and Cafes in Bandung, Semarang Regency.

Findings

Table 1. Distribution of respondent characteristics according to marital status age, education and health promotion.

Age	Frequency (n)	Percentage (%)
15-20	20	25
21-25	36	45
25-30	24	30
Education		
Collage	7	8.75
Senior School	23	28.75
Elementary School	50	62.5
Marital Status		
Not Married	73	86.7
Married	7	8,3
Health Promotion		
Never	20	25
1 time	10	12,5
3 Times Or More	50	62,5

Table 1 explains that 86.7% of female sex workers in Bandungan, Semarang Regency are single and 45% are aged 21 to 25 years

Table 2: Control of sexually transmitted infections

Variables	Control of sexually transmitted infections	
Total Health Promotion	Pearson Correlation	.647**
	Sig. (2-tailed)	.000
	N	85
Total Customer Support	Pearson Correlation	.634**
	Sig. (2-tailed)	.000
	N	80

Table 3: Sexual Behavior

Intention to behave in safe sex in serving customers			
Perception of her vulnerability to being exposed to STI's	Good	N	Informations
Less	10 (62,5%)	16 (100%)	X2 = 0,626 P value = 0,731
Moderate	24 (72,7%)	33 (100%)	
Good	11 (73,3%)	31 (100%)	
Perception of disease severity STI's	Good	N	
Less	3 (33,3%)	9 (100%)	X2 = 6,861 P value = 0,016
Moderate	42 (76,4%)	71 (100%)	
Perceptions of Effective Response	Good	N	
Less	4	9 (100%)	X2 = 5,448 P value = 0,066
Moderate	35	65 (100%)	
Good	6	6 (100%)	
Perceptions of Effective Response	Good	N	
Less	4	15 (100%)	X2 = 19,035 P value = 0,001
Moderate	26	49 (100%)	
Good	15	16 (100%)	

Discussion

The perception of susceptibility to sexually transmitted infections

The majority of respondents are correct in assessing that a person is free from sexually transmitted infections and not can be seen physically, for example a handsome couple. And most respondents still believe that the use of antibiotic injections regularly and the habit of washing the vagina and betel water regularly can prevent sexual transmitted infections even without using a condom when serving customers. The results of in-depth interviews, it was also found that the majority of respondents believed that drinking herbs or medicine could prevent sexually transmitted infections. As stated in the following box

Responden's answer:
 "... yes, if it is important for me to use a condom, both of them are diligent in drinking herbal medicine... it must be effective for sexually transmitted infections to disappear...hehe " Dy, 23
 ".....yes drinking herbal, health check regularly....." PK, 22

This is in accordance with the myths that are still developing as written by, among others, there are still myths about sexually transmitted infections can be prevented by routine antibiotic injections, sexual transmitted infections can be treated by drinking ciproxin, supertetra , or other antibiotics, washing the intercourse with herbs, toothpaste and so on. Whereas by believing these myths, it actually adds to new problems, for example if you often inject antibiotics, it is possible that when you get sexual transmitted infections, the germs will become resistant. Because in fact drugs or antibiotic injections are only used for treatment, not for prevention ⁽¹⁰⁾.

Perceptions of the severity of sexually transmitted infections

sexually transmitted infections All respondents were aware that sexually transmitted infections can be transmitted to other people. However, the majority of respondents are still wrong in assessing that sexually transmitted infections can cause infertility. From the results of in-depth interviews, it turns out that the majority of respondents have quite a hard time answering questions about what the consequences are if they are frequently exposed to sexual transmitted infections. As

one respondent quotes in box 2 below:

Responden's answer:
 "...yes, for example, I really want to pee, huh ... but what does it come out that little bit is not liquid but the blood is badright?... " FS,25

According to Bruner and Goodman, it is evident that experience shows an impact on perception. Leathers also said that the experience will help a person improve their perceptual abilities. Experience does not always go through a formal learning process but experience will increase through the events at hand ⁽¹³⁾.

In accordance with this opinion, the majority of respondents have difficulty in explaining the severity of sexually transmitted infections because the respondents themselves have not felt the consequences directly, for example they do not know whether after working as sex workers women become sterile or not.

Perceptions of effective responses

Majority of respondents already perceive that the affective response is the best in assessing that routine condom use behavior can free themselves from sexual transmitted infections. However, the majority of respondents still think that the act of not using a condom will not cause a reaction to the body such as weakness.

The results of in-depth interviews, it was found that several respondents believed that the most important thing was to use a condom, it would be free from sexual transmitted infections. However, due to limitations in condom negotiation, if a customer does not want to use a condom, it often happens that even though the respondent's effective response is good, the practice is not good (*not using a condom*). As stated in box 3 below:

Responden's answer:
 "...For me, the important thing is to use a condom, the two herbs, if you don't want to do it ... OK, that's it for a while or howto seduce it as much as I can, don't catch it, letalone HIV disease, sexually transmitted infections we don't know"

Response efficacy is the effectiveness of the recommended behavior in removing or preventing disturbances or hazards that may arise. This indicates that the majority of respondents realize that using condoms while serving customers can prevent sexual transmitted infections ⁽¹⁴⁾.

Perceptions of one’s ability to behave in safer sex.

The majority of respondents are able to provide condoms for each customer so that they are always safe sex. However, respondents have not been able to refuse expensive fees from customers for safe sex, nor have they been able to refuse customers who do not want to use condoms and are unable if they have to disobey pimps who keep telling customers to serve customers even though they are not safe sex.

From the results of in-depth interviews it was also found that the majority of respondents always provided condoms to customers and tried to seduce customers to use condoms even though the respondents knew that not all customers were willing to use condoms. As the respondent’s expression in box 4 below:

Responden’s answer:

“... Yes, condoms are always available in the bag as much as we can persuade guests to want to use condoms...”
 TP, 29 Tahun

“.....That is every day there is a condom, sometimes it's not that good ...it happens to still be there, but it depends on you.....”
 BK, 27 tahun

This can be illustrated, for example the respondent refuses a customer who does not want to use a condom, then the respondent will lose a customer who is not willing to use the condom. So that the majority of respondents choose to continue serving customers even without a condom if the customer is not willing to use a condom. This can be understood because of the position of the customer as the buyer, besides the position of the respondents’ helplessness because they are the backbone of the family so they have no other choice but to comply with the wishes of the customer in order to meet the family needs and lifestyle of today’s young people ⁽¹⁵⁾.

The intention of the respondents to have safe sex behavior

The majority of respondents had good intentions that if they experienced symptoms of sexually transmitted infection, they would invite the customer to use a condom. Meanwhile, the majority of respondents admitted that they intend to negotiate condoms as long as condoms are provided by pimps or NGOs and the majority of respondents apparently intend to prioritize money more than to behave in safe sex.

From the results of in-depth interviews, it was found that some respondents admitted that if they were sick with sexual transmitted infections, they would still serve customers but always use condoms. As stated by one respondent in box 6 below:

Responden’s answer:

“...yes here can't prevent us from meeting with customers ... we still serve but as much as possible I recommend using condoms ... if you don't want to, then don't work...”
 NR, 30 tahun

The level of strength of an intention is the same as the likelihood that a person will carry out a behavior that is tied to that intention. Intention occurs because of self-orders or plans to take action, while action is all activities, both visible (overt) and invisible (covert) activities⁽¹⁶⁾.

The results showed that statistically there was no relationship between perceptions of susceptibility to Sexually transmitted infections and the intention of sex worker women suffering from Sexually transmitted infections to behave in safe sex while serving customers. This means that it is not in accordance with Rogers’ opinion in the Motivation Protection theory which states that the perceived vulnerability will affect a person’s intention to take an action. However, Rogers also argues that sources of information include both environmental and intrapersonal. This information source affects the five components of PMT (self-efficacy, response effectiveness, severity, vulnerability, and fear), which will then get one of the “adaptive coping response” (example: intention to behave) or “maladaptive coping response” (eg. : intention to shy away, refuse). The formation of field perceptions and cognition is the existence of social and environmental factors which are the most important factors for the formation of a person’s perception and cognition ⁽¹⁷⁾.

Perceptions of Severity of Sexually transmitted infections with the Intention of Women with Covert SEX Workers to Have Safe Sex in an effort to control Sexually transmitted infections.

The results showed that statistically there was a relationship between perceived severity of Sexually transmitted infections and the intention of women with sexually transmitted infections to behave in safe sex in

serving customers. Thus it can be illustrated, for example, that the perception of sexually transmitted infections is good, it will affect the occurrence of good intentions as well. This means that it is in accordance with Rogers' opinion in the Motivation Protection theory which states that the perceived severity will affect a person's intention to take an action or behave. Because someone's action to seek treatment and prevention of disease is driven by the threat of the disease⁽¹⁸⁾.

The relationship between Perceptions of effective responses to the intention of women sex workers who are disguised to behave in safer sex and as an effort to control Sexually transmitted infections.

The results showed that there was no relationship between perceptions of the respondent's effective response and the intention of sex worker women suffering from Sexually transmitted infections to behave safely in serving customers. This illustrates that good or poor intentions in serving customers are not always determined by the effective response made by the woman. sex workers. This means that it is not in line with the theory *Protection Motivation* which explains that *response effectiveness* (which is the effectiveness of the recommended behavior in removing or preventing disturbances / hazards that may arise) encourages the intention to take action or the intention to avoid⁽¹⁹⁾

One of the reasons for this is the problem of *response cost* that arises from the environment, including economic factors in meeting family needs, and hidden women's lifestyles, especially since most respondents are students who have a high lifestyle.

Perceptions about self efficacy or self-efficacy with hidden female intentions.

Self-ability with the intention referred to in this study is an estimate of the ability of research subjects that will lead to behavioral outcomes in the prevention of Sexually transmitted infections, HIV and AIDS. This is in accordance with Rogers' theory in the Motivation Protection theory which states that self-ability will affect a person's intention to take an action or refuse / avoid. Based on the table above, it was found that there was a positive correlation of 0.647 between counseling and early detection of sexually transmitted infections HIV AIDS prevention. This means that the more frequent

counseling is carried out, the greater it will be to carry out early detection and control of Sexually transmitted infections HIV AIDS. So it can be concluded that there is a positive relationship and the value of an efficient correlation between health promotion and the participation of covert women in preventing Sexually transmitted infections HIV AIDS.

Conclusion

Based on the table above, it was found that there was a positive correlation of 0.647 between counseling and early detection of sexual transmitted infections. This means that the more frequent counseling is carried out, the greater it will be to carry out early detection of sexual transmitted infections. So it can be concluded that there is a positive relationship and an efficient correlation value between health promotion and the participation of covert women in early detection of the prevention of sexual transmitted infections with the result of r count greater than r table.

There is a positive correlation of 0.634 between customer support and early detection of sexual transmitted infections. This means that the greater the customer provides support, the greater the control of sexual transmitted infection will be successful. Customer support in the use of condoms and the willingness to carry out regular health. The results of the questionnaire analysis showed that customers who supported women who were hidden to perform early detection of sexual transmitted infections were 65 people. On average, customers provide support in the form of motivation for periodic checks and use of condoms during sexual intercourse

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References

1. Okoboi S, Castelnuovo B, Moore DM, Musaazi J, Kambugu A, Birungi J, et al. Incidence rate of sexually transmitted infections among HIV infected patients on long-term ART in an urban

- and a rural clinic in Uganda. *BMC Public Health* [Internet]. 2019;19(1):87. Available from: <https://doi.org/10.1186/s12889-019-6417-x>
2. Scott-Sheldon LAJ, Chan PA. Increasing Sexually Transmitted Infections in the U.S.: A Call for Action for Research, Clinical, and Public Health Practice. *Arch Sex Behav* [Internet]. 2020;49(1):13–7. Available from: <https://doi.org/10.1007/s10508-019-01584-y>
 3. Comins CA, Rucinski KB, Baral S, Abebe SA, Mulu A, Schwartz SR. Vulnerability profiles and prevalence of HIV and other sexually transmitted infections among adolescent girls and young women in Ethiopia: A latent class analysis. *PLoS One*. 2020;15(5):e0232598.
 4. Subbarao NT, Akhilesh A. Knowledge and attitude about sexually transmitted infections other than HIV among college students. *Indian J Sex Transm Dis AIDS*. 2017;38(1):10–4.
 5. Kassa D, Gebremichael G, Tilahun T, Ayalkebet A, Abrha Y, Mesfin G, et al. Prevalence of sexually transmitted infections (HIV, hepatitis B virus, herpes simplex virus type 2, and syphilis) in pregnant women in Ethiopia: Trends over 10 years (2005-2014). *Int J Infect Dis IJID Off Publ Int Soc Infect Dis*. 2019 Feb;79:50–7.
 6. Taylor D, Lunny C, Lolić P, Warje O, Geldman J, Wong T, et al. Effectiveness of text messaging interventions on prevention, detection, treatment, and knowledge outcomes for sexually transmitted infections (Sexually transmitted infections)/HIV: A systematic review and meta-analysis 11 Medical and Health Sciences 1117 Public Health and Health Services. *Syst Rev*. 2019;8(1).
 7. Chesang K, Hornston S, Muhenje O, Saliku T, Mirjahangir J, Viitanen A, et al. Healthcare provider perspectives on managing sexually transmitted infections in HIV care settings in Kenya: A qualitative thematic analysis. *PLoS Med*. 2017 Dec;14(12):e1002480.
 8. Ajayi AI, Mudefi E, Adeniyi O V., Goon DT. Achieving the first of the Joint United Nations Programme on HIV/AIDS (UNAIDS) 90-90-90 targets: Understanding the influence of HIV risk perceptions, knowing one's partner's status and discussion of HIV/sexually transmitted infections with a sexual partner on uptake of HIV testing. *Int Health*. 2019;11(6):425–31.
 9. Dewi DMSK, Wulandari LPL, Wirawan DN. Determinan Sosial Kerentanan Perempuan Terhadap Penularan Ims Dan Hiv. *J Public Heal Res Community Heal Dev*. 2019;2(1):22.
 10. Rokhmah D, Nurwidnyansyah S, Rif'ah E. Perempuan dan IMS : Perilaku Menjaga Personal Hygiene Organ Reproduksi pada Pekerja Seks Langsung di Indonesia. *J Promosi Kesehat Indones*. 2020 Mar 7;15:36.
 11. Refti WG. Faktor Resiko yang Berhubungan dengan Kejadian Infeksi Menular Seksual (IMS) di Klinik Voluntary Counseling Test (VCT). *J Aisyah J Ilmu Kesehat*. 2018;3(1):47–60.
 12. Simbolon WM, Budiarti W. Kejadian Infeksi Menular Seksual pada Wanita Kawin di Indonesia dan Variabel-variabel yang Memengaruhinya. *Kesehat Reproduksi*. 2020;7(2):81–7.
 13. Khumsaen N, Stephenson R. Beliefs and Perception About HIV/AIDS, Self-Efficacy, and HIV Sexual Risk Behaviors Among Young Thai Men Who Have Sex With Men. *AIDS Educ Prev Off Publ Int Soc AIDS Educ*. 2017 Apr;29(2):175–90.
 14. Bradley GL, Babutsidze Z, Chai A, Reser JP. The role of climate change risk perception, response efficacy, and psychological adaptation in pro-environmental behavior: A two nation study. *J Environ Psychol* [Internet]. 2020;68:101410. Available from: <https://www.sciencedirect.com/science/article/pii/S0272494419306607>
 15. Weitzer R. Resistance to sex work stigma. *Sexualities* [Internet]. 2017 Jan 18;21(5–6):717–29. Available from: <https://doi.org/10.1177/1363460716684509>
 16. Rogers AA. Parent–Adolescent Sexual Communication and Adolescents' Sexual Behaviors: A Conceptual Model and Systematic Review. *Adolesc Res Rev* [Internet]. 2017;2(4):293–313. Available from: <https://doi.org/10.1007/s40894-016-0049-5>
 17. Ranganathan M, MacPhail C, Pettifor A, Kahn K, Khoza N, Twine R, et al. Young women's perceptions of transactional sex and sexual agency: a qualitative study in the context of rural South Africa. *BMC Public Health* [Internet]. 2017;17(1):666. Available from: <https://doi.org/10.1186/s12889-017-4636-6>
 18. Fisher CB, Fried AL, Ibrahim Puri L, Macapagal K, Mustanski B. "Free Testing and PrEP without Outing Myself to Parents:" Motivation to participate

in oral and injectable PrEP clinical trials among adolescent men who have sex with men. PLoS One. 2018;13(7):e0200560.

19. Zeigler-Hill V, Hobbs KA. The Darker Aspects of

Motivation: Pathological Personality Traits and the Fundamental Social Motives. J Soc Clin Psychol [Internet]. 2017 Feb 1;36(2):87–107. Available from: <https://doi.org/10.1521/jscp.2017.36.2.87>