

## The Sexually Transmitted Infection (STI) In Women Sexual Workers (WSW) in Southeast Sulawesi Province

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### Abstract:

**Background:** This study aimed to analyze the incidence of sexually transmitted infections in women sexual workers in three cities i.e. Kendari, Bau-Bau and Raha (Muna).

**Method:** The study method was descriptive. The population consisted of 253 people from Kendari city, 82 people from Bau-Bau, and 215 from Raha (Muna). The number of samples had taken proportionally each location. Each 102 people in Kendari city, 34 people in Bau-Bau city and 86 people in Raha (Muna). Collecting data used questionnaires and interviews. Variables studied was the use of condoms, knowledge about STI and AIDS, how to have sexual intercourse, frequency of sexual intercourse every week, length work as WSW and age.

**Result:** The results showed that of the entire WSW that there were 52 people (23.4%) suffered STI disease and 76.58% did not suffer STI, sexual intercourse did not use condoms as many as 148 people (66.7%), and 74 (33.3%) used condoms, knowledge about STI and HIV / AIDS as many as 76 people (34.2%) did not know and as many as 146 people did not know, how to have sexual intercourse as many as 50 people (22.5%) was not normal and as many as 172 people (77.5%) was normal sexual intercourse, frequency of sexual intercourse as many as 136 people (61.3%) serve as many customers as 1-2 times/week and 86 people (38.7%)  $\geq 3$  times / week, length work as WSW as many as 95 people (42, 8%)  $< 3$  months and 127 people (57.2%)  $\geq 3$  months, age WSW many as 96 people (43.2%)  $< 29$  years old and 128 (57.7%)  $\geq 29$  years old. Special attention is needed for local governments on sexually transmitted infections (STI) in women sexual workers (WSW), in order to decreasing the risk of sexually transmitted infections (STI) in the Community.

**Keywords:** Infection, Women Sexual Workers

### I. Introduction

Infectious diseases are still a major problem of public health in Indonesia and are the commonest cause of death of its sufferer. Sexually Transmitted Infections (STI) is also called venereal disease, is a disease that is easily transmitted through sexual intercourse, with the hallmark of their causes and disorders that occur primarily in the genital area, usually in the form of inflammation and discharge, transmitted through sexual intercourse [1]. At this time estimated that there are approximately 340 million or more people with STI include syphilis, herpes genitalia, gonorrhoea, HIV / AIDS, and the last few years have seen a trend of increase in the prevalence of STI in various countries including Indonesia [2]. In epidemiology the disease of STI are spread throughout the world, the highest incidence was recorded in South Asia and Southeast Asia, followed by Saharan Africa, Latin America and the Caribbean [3], there are nearly 50 million STI annually, include HIV, herpes virus, human papilloma virus, and hepatitis B virus [4].

The percentage of people living with HIV / AIDS in the productive age is very high, as many as 53% of 20-29 years age group and 25% in the age group of 30-39 years. Besides, there has been a shift in the way that was originally transmitted by injecting drug misuse / Injecting Drug Users (IDU) as the main risk factors for HIV and AIDS, is now cases of HIV and AIDS transmission through heterosexual contact as many as 46.5% through homosexual as many as 3,89% [5]. Sexually transmitted infections (STI) is the first of the top ten leading causes at male-young adults and the second leading cause in young adult women in developing countries, [3].

Disease Prevention Division in Health Office of Southeast Sulawesi Province obtained information that in Southeast Sulawesi has been found people with HIV in 2009 were 10 people and AIDS 14 people. In 2010 people with HIV were 4 people and AIDS were 10 people, in 2011 people with HIV were 17 people and AIDS were 36 people, whereas in 2012 people with HIV were 38 people and AIDS were 51 people. The Distribution by occupation : self-employed (39%), housewives (30%), employees (11%), others (8%), civil servants (6%), Soldier/Police (5%) and students (1%) (AIDS Commission of Southeast Sulawesi Province, 2012). The prevalence of AIDS cases based on the ranking of 12 (twelve) district / city until October of 2012, Muna Regency was the first 51 (26.6%), Kendari 39 (20.3%) and Bau-Bau 27 (14.06%), the rest was dispersed in 9 districts in Southeast Sulawesi [6]. To understand the problem of sexually transmitted infections (STI) in

Women Sexual Workers (WSW), and the risk factors and to find out a solution to prevent it, especially in Southeast Sulawesi is necessary to do some research on the risk factors for Disease Sexually Transmitted Infections (STI) on Women Sexual Workers (WSW) in Southeast Sulawesi.

## II. Method

The research was conducted on three localizations in three cities: Kendari city, Bau-Bau and Raha with consideration that these three regions occupy the top three incidences of STI and HIV/AIDS in Southeast Sulawesi province in 2012. The study was descriptive. The populations in this study were 550 people of Women Sexual Workers (WSW) that 253 people in Kendari city, 82 people in Bau-Bau, and 215 in Raha (Muna). The number of samples each location was proportionately, respectively 102 people, 34 people, 86 people. Sampling each location conducted with accidental sampling. Variables in the study is the use of condoms, knowledge about STI and HIV / AIDS, how to have sex, frequency of sex, length works as WSW, and age of WSW. Data analysis conducted by describing each variable to see the frequency distribution of each variable.

## III. Result and Discussion

### a. The incidence of STI According to Condom Use

**Table 1.** Distribution of STI according to the using of condoms

No	Use of condoms	Sufferer		Non Sufferer		Total	
		n	%	n	%	n	%
1	Use	42	18,91	106	47,75	148	66,7
2	Did not use	10	4,51	64	28,83	74	33,3
	Total	52	23,4	170	76,58	222	100

Table 1 showed that WSW customers during sexual intercourse did not use condoms as many as 66.7% and 33.3% used condoms. A total of 23.4% of WSW had STI and 76.58% of WSW in a healthy state. Customers who did not use condoms have the potential for transmitting or contracting sexually transmitted infections (STI), especially if customers and WSW frequently changing partners. Data showed that the customer respondents who did not use condoms and WSW suffer the STI as many as 18.91%, compared to the use of condoms (4.51%), or 2.10: 1. This means that customers who did not use condoms during sex intercourse have an increased risk of 2.10 times risk of STI than customers who use condoms. Customers have the risk of STI as many as 18.91% of all customers. While the group did not suffer STI, which did not use a condom is (47.75%) remained at risk of STI that can be sourced from the customer, and the use of condoms (28.83%). The results showed that the use of condoms is very low (33.3%) so there is a possibility of transmission of infections from WSW to customers or vice versa. The Increasing number of people with the STI, including HIV / AIDS one of them is caused by sexual intercourse without using a condom. From interviews with WSW on the use condoms during sexual intercourse caused by customers and WSW knowledge about the benefits of condoms to prevent the transmission of STI and prevent premature ejaculation, and for WSW believe that condoms can prevent pregnancy. Customers did not use condoms caused by their perception that the use of condoms can reduce the enjoyment. WSW usually keep serving customers despite not using kondom. From the above explanation shows that customers did not understand the benefits and WSW condom.

### b. The incidence of STI According to Knowledge about STI and AIDS

**Table 2.** Distribution of STI disease incidence according to knowledge

No	Knowledge about STI and AIDS	Sufferer		Non Sufferer		Total	
		n	%	n	%	n	%
1	Know	35	15,76	41	18,47	76	34,2
2	Did not know	17	7,66	129	58,11	146	65,8
	Total	52	23,4	170	76,5	222	100

Table 2 showed that the respondents did not know about STI and AIDS have a greater proportion suffer from STI that (15.76%) than those who know that only (7.66%), or 2: 1. It means that the respondents were not know about STI and AIDS have two times greater risk of suffering from STI compared with respondents who knew about STI and AIDS, whereas in the group not exposed to STI, respondents who did not know of 18.47%, and knows of 58.11%.

Respondents (WSW) known about the disease STI and HIV/ AIDS has reached 65.8%. The respondents who had knowledge of STI and HIV / AIDS have a lower risk than respondents who did not know. Therefore, to inhibit or reduce the risk of sexually transmitted infections in WSW, the increased knowledge about STI and HIV / AIDS is a necessity. Increased knowledge can be through counseling, advocacy, promotion through the mass media, and reinforce the eradication program of STI and HIV / AIDS through education and advocacy. WSW education levels still very low at the elementary level as many as 48.2%, 42.3% junior high school and senior high school as many as 9.5%. The level of education affect the learning process, the higher the

person's level of education the easier person to receive information [7]. However, it should be emphasized that a low education does not mean absolute knowledge also lower. Increased knowledge is not absolute acquired in formal education. Notoatmodjo (2007) states that there are several factors that influence a person's knowledge, among others, intelligence, experience, information, health education given health personnel at the WSW or through the media information.

**c. The incidence of STI According to How to have sexual intercourse**

**Table 3.** Distribution of STI disease according to How to have sexual intercourse

No	How to have sexual intercourse	Sufferer		Non Sufferer		Total	
		n	%	n	%	n	%
1	Normal	25	11,2	25	11,2	50	22,5
2	Abnormal	27	12,1	145	65,3	172	77,5
	Total	52	23,4	170	76,5	222	100

Table 3 reveals that the not normal sex way that (oral sex or anal sex) in the group of patients with STI, have a greater proportion suffer from STI that (11.26%) compared to normal way (12.16%), or 1 : 1. it means having sex with not normal way has the same risk compared with normal sex in the WSW that have STI disease. While the group did not suffer the STI for not normal sexual intercourse was (11.26%) and the normal amount of (65.32%), thus normal sexual relations risk was lower than the normal sexual intercourse. Depth interviews known that the WSW serves consumers have sex by integrating the genitals to the vagina (vaginal), but some of that in addition to the vagina, usually consumers were also asking for sexual intercourse orally (insert the genitals to the mouth) and anal. Sexual activity such as vaginal, oral and anal contact is the type that could be at risk of transmitting STI, especially if not done safely i.e. not using a condom

**d. The incidence of STI According to frequency of sexual intercourse.**

**Table 4.** Distribution of STI disease incidence according to sex frequency

No.	frequency of sexual intercourse	Sufferer		Non Sufferer		Total	
		N	%	N	%	n	%
1	1- 2 times/week	19	8,56	117	52,70	136	61,3
2	≥ 3 times / week	33	14,87	53	23,87	86	38,7
	Total	52	23,43	170	76,57	222	100

Table 4 showed that the group STI, frequency of sexual intercourse ≥ 3 / week, have a larger proportion of people suffering from STI (14.87%) compared to those just getting their customers (8.56%), or 2.74: 1. It means that respondents who had sex ≥ 3 / week had a 2.74 times greater risk compared with respondents who only had sex between 1 to 2 times every week. While the group did not suffer STI, frequency of sexual intercourse ≥ 3 / week, amounting to (23.87%), and frequency of sexual intercourse 1 to 2 times / week (52.70%). Based on studies conducted of relationship between the frequency of unprotected sexual intercourse with WSW and the risk of STI, this suggests sexual intercourse conducted with WSW without using condoms can result in various diseases STI although the frequency of sexual intercourse different. If the condoms are used consistently during intercourse, 80% less for HIV infection than people who did not use condoms [8]. Condoms also reduce the risk of STI, such as Chlamydia, gonorrhea, trichomoniasis, and a woman's risk of pelvic inflammatory, reduce the risk of transmission of herpes simplex virus-2, and diseases caused by HPV, for example, genital wart and cervical cancer. Condoms are an important component in the prevention of HIV and STI [9].

**e. The incidence of STI according to Length of work as WSW**

**Table 5.** Distribution of duration of STI disease occurrence according to Length of work as WSW

No	Length of work as WSW	Sufferer		Non Sufferer		Total	
		N	%	n	%	N	%
1	< 3 Month	12	5,41	83	37,39	95	42,8
2	≥ 3 Month	40	18,01	87	39,19	127	57,2
	Total	52	23,42	170	76,58	222	100

Table 5 showed that the group STI, respondents who had worked as WSW ≥ 3 months, have a greater proportion of STI (18.01%), compared with <3 months, as many as (5.41%), or 2.5: 1. It means that respondents who had worked ≥ 3 months, had a 2.5 times greater risk compared to those relatively new profession or less than 3 months. While the group did not suffer STI, to whose profession was ≥ 3 months (39.19%), and < 3 months was (37.39%). Most respondents have become WSW more than 3 months to 1 year. Most of the Respondents chose to become a classic due to the reasons WSW, i.e. economic reasons and oppressed needs. The respondents had to support their children, parents and sister in the village, and also found to be living with needs met. By Working as WSW they find easier to get adequate amounts of money.

**f. The incidence of STI according to Age of WSW.**

**Table 6.** Distribution of STI disease incidence by Age of WSW

No	Age	Sufferer		Non Sufferer		Total	
		N	%	n	%	n	%
1	< 29 Years Old	39	17,57	57	25,67	96	43,2
2	≥ 29 Years Old	13	5,85	113	50,91	128	57,7
	Total	52	23,42	170	76,68	222	100

Table 6 showed that in the group of STI, the respondent's age < 29 years old, have a greater proportion suffer from STI that (17.57%), compared to respondents aged ≥ 29 years old by (5.85%), or 3.94 : 1. It means that the respondents were relatively young age had a risk of 3.94 times more likely to have STI when compared to those age < 29 years old, while those who did not suffer STI, age < 29 years old as many as (25.67%) and ≥ 29 years old as many as (50.91%).

Based on the explanation, it has been known that there are many women sex workers who suffer from sexually transmitted infections. This needs serious attention from the government such as supervision, empowerment, including routine health examination for the WPS as an attempt to curb the spread of STI case.

The efforts the government has done enough to combat sexually transmitted diseases. Among them are Reducing morbidity and mortality associated with IMS, Preventing HIV infection, prevent serious complications in women, prevent adverse pregnancy effects. There are also efforts IMS Cases, The Election Of Medicine, Patient Examination of sexually transmitted infections, Diagnosis & Treatment of sexually transmitted infections[10].

The Constraints faced today is the absence of specific handling by the local government for women sex workers and also have not done adequate amount of data collection with WPS, and generally they are embarrassed to check their health status to health personnel with status as WSW. WSW provides job status as negative pastures for their families. So that there were still number of WSW suffer the Sexually Transmitted Infection disease.

**IV. Conclusion**

The education level of female sexual workers (WSW) is still very low at 90.5%, has a high risk of sexually transmitted infections. WSW who suffer the STI still continue to serve customers as many as 23.4%, so it is very high risk of transmitting STI to customers primarily sexual intercourse without using a condom. The level of condom use is still low so WSW can transmit STI to customers or otherwise. WSW knowledge of the disease STI has been good, but condom use is still low. Generally WSW get normal sexual intercourse (77.5%). WSW serves customers depending on the customer's order, so that the frequency of the week 1-2 times sexual intercourse. WSW generally, has worked more than three months. Age WSW mostly over 29 years old.

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