

## Conference Paper

# The Incidence of Sexually Transmitted Disease at Ciracas Primary Health Care, East Jakarta

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## Abstract

Sexually Transmitted Disease (STD) is a worldwide public health problem and become significant causes of maternal, perinatal mortality and illness. This research analyzed the incidence of STD at STD Clinic, Ciracas Primary Health Care, East Jakarta, in 2010.

The association among socio-demographic (age, sex, occupation, education, civil mobilization, marital status, knowledge), environment (localization area), behavior (multi-partner sexual behavior, first sexual activity, wearing condom behavior, douching/vaginal washing, drug users, dry sex, rape/sexual assault, sexual traditional practices) and health service factors (supply of condoms, late treatment, irrational use of antibiotics, contraception, unsafe medical procedures, health promotion) with incidence of stocktickerSTD were investigated by cross-sectional study design. Eighty-five samples were chosen and interviewed by using a self-constructed questionnaire. Genital and other body fluid, as well as blood samples, were analyzed to find out the incidence of infection.

It found that the total prevalence of STD was 34.2% (consist of gonorrhea 22.4%, syphilis 7.1% and HIV 4.7%). By bivariate analysis, a significant relationship found between STD incident and age (OR 2.8 for age 16-34 years old); sex (OR 0.57 for women); residency (OR 0.25 for Jakarta resident); sexual behavior (OR 5.11 for multi-partner sexual conduct); and drug users (OR 5.19).

**Keywords:** Sexually Transmitted Disease (STD); sociodemographic; environment; behavior; health service

## 1. Introduction

Sexually Transmitted Disease (STD) is a worldwide public health problem and become significant causes of maternal, perinatal mortality and illness. The real incidence and prevalence in many countries are not known. Report of the World Health Organization (WHO) declares 250 million new cases of STD happened every year, including gonorrhea and syphilis, and the number of rate increases. A source from Directorate General of Disease Control and Environmental Health, Ministry of Health until August 30th, 2009, Jakarta was the highest prevalence of STD (i.e., chlamydia 6.0%; gonorrhea

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1.3% and syphilis 0.8%). The second highest prevalence is Surabaya (i.e., chlamydia 5.7%; gonorrhea 1.2%, syphilis 1.6%), and the third is Medan (i.e., 5.3% prevalence of chlamydia and 2.4% of syphilis). East Jakarta is a region of STD's high population at risk. The purpose of the research was to find the incidence, types and influence factor of STD in Caracas Primary Health Care. This research analyzed the incidence in STD Clinic, Caracas Primary Health Care, East Jakarta in 2010.

STD issue is vital because STD increases the risk of HIV-AIDS which 5-9 times greater than those who were never exposed. STD causes some effects and complications, such as ectopic pregnancy, pelvic inflammatory disease, prematurity, miscarriage, fetal death, congenital infections, chronic disability, cancer, infertility, and death. The incidence of STD in Caracas Public Health Center increased from 2008-2009 and there had been no research about the influence factors of the incidence of STD. Therefore, researchers wanted to know the incidence of STD, the types and factors that influence the incidence of STD in Caracas Primary Health Care.

## 2. Methods

The incidence of stocktickerSTD was investigated by cross-sectional study design. Eighty-five samples were chosen and interviewed by using a self-constructed questionnaire. Genital and other body fluid, as well as blood samples, were analyzed to find out the incidence of infection. This research took April – June 2010 in STD Clinic's of Caracas Primary Health Care, East Jakarta. Data analysis used univariate and bivariate chi-square test.

## 3. Results

This research associated between socio-demographic (age, sex, occupation, education, civil mobilization, marital status, knowledge), environment (localization area), behavior (multi-partner sexual behavior, first sexual activity, wearing condom behavior, douching/vaginal washing, drug users, dry sex, rape/sexual assault, sexual traditional practices) and health service factors (supply of condoms, late treatment, irrational use of antibiotics, contraception, unsafe medical procedures, health promotion) with incidence of STD. From 22 variables, five variables had significant correlation such as age, sex, residency, multi-partner behavior, drug users.

TABLE 1: Respondents Frequency Distribution.

Description	Amount	Percentage (%)	Description	Amount	Percentage (%)
Age			Job		
16-34	55	64.71	Sexual Worker	38	44.7
<16 and >34	30	65.29	Non Sexual worker	47	55.3
Sex			Education		
Women	49	57.6	<Senior High School	31	36.5
Men	36	42.4	>senior High School	54	63.5
Residency			Marital Status		
Outside Jakarta	38	44.7	High Risk	11	12.9
Jakarta	47	55.3	Low Risk	74	87.1
Job			Job of pair		
Does not work	12	14.1	Doesn't work	9	10.6
Student	3	3.5	Student	1	1.2
Housewife	28	32.9	Housewife	8	9.4
TNI/Polri	1	1.2	TNI/Polri	2	2.4
Government employees	2	2.4	Government employees	10	11.8
BUMN employees	2	2.4	BUMN employees	2	2.4
Private employees	16	18.8	Private employees	23	27.1
Private enterprise	2	2.4	Private enterprise	4	4.7
Services	2	2.4	Maid	4	4.7
Maid	4	4.7			
Sexual worker	13	15.3			
Knowledge Level			Neighborhood		
Less	37	43.5	Prostitute area	15	17.6
Good	48	56.5	Nonprostitute area	70	82.4
Multipartner behaviour			First Sex		
Multipartner	40	47.1	<20	51	60
Single partner	45	52.9	>20	34	40
Wearing condom behavior			The reason not wearing a condom		
No	73	85.9	Unpleasure	39	45.8
Yes	12	14.1	embarrassed to buy	9	10.6
			cost	3	3.5
			others	22	25.9
Douching			Drug user		
Yes	29	59.2	Yes	29	34.1
No	20	40.8	No	56	65.9
Dry sex			Easy get condom		
Yes	9	10.6	Yes	65	76.5

Description	Amount	Percentage (%)	Description	Amount	Percentage (%)
No	76	89.4	No	20	23.5
Get examination soon			Use Antibiotic		
Yes	34	40	Yes	26	30.6
No	51	60	No	59	69.4
Contraception			Unsafe medical procedures		
Yes	24	49	Yes	15	30.6
No	25	51	No	34	69.4
STD Health Promotion			Rape/sexual assault, sexual traditional practices		
Yes	41	48.2			
No	44	51.8			

TABLE 2: Respondents Distribution by STD Laboratory Result (Gonorrhoea, Sifilis, an HIV/AIDS).

Laboratory Result for STD (Gonorrhoea, Sifilis, and HIV)	Amount	Percentage
Gonorrhea	19	22.4
Sifilis	6	7.1
HIV	4	4.7
Total	29	34.2

TABLE 3: Respondents Distribution by Age and STD.

Age (years)	STD				Total		p-value	OR (95%CI)
	Yes		No		f	%		
	f	%	f	%				
16-34	23	41.8	32	58.2	55	100	0.056	2.875 (1.013-8.157)
<16 and >34	6	20.0	24	80.0	30	100		
Total	29	34.1	56	65.9	85	100		

TABLE 4: Respondents Distribution by Sex and STD.

Sex	STD				Total		p-value	OR (95%CI)
	Yes		No		F	%		
	f	%	f	%				
Women	5	10.2	44	89.8	49	100	0.000	0.57 (0.018-0.180)
Men	24	66.7	12	33.3	36	100		
Total	29	34.1	56	65.9	85	100		

TABLE 5: Respondents Distribution by Residency and STD.

Residency	STD				Total		p-value	OR (95%CI)
	Yes		No		f	%		
	F	%	f	%				
Jakarta	7	18.4	31	81.6	38	100	0.012	0.257 (0.094-0.698)
Non-Jakarta	22	46.8	25	53.2	47	100		
Total	29	34.1	56	65.9	85	100		

TABLE 6: Respondents Distribution by Multi-partner Behaviour and STD.

Multi-partner Behavior	STD				Total		p-value	OR (95%CI)
	Yes		No		F	%		
	f	%	f	%				
Yes	21	52.5	19	26.4	40	100	0.002	5.112 (1.910-13.681)
No	8	17.8	37	82.2	45	100		
Total	29	34.1	56	65.9	85	100		

TABLE 7: Respondents Distribution by NAPZA and STD.

NAPZA	STD				Total		p-value	OR (95%CI)
	Yes		No		F	%		
	f	%	f	%				
Yes	17	58.6	12	19.1	29	100	0.001	5.194 (0.527 – 2.736)
No	12	21.4	44	78.6	56	100		
Total	29	34.1	56	65.9	85	100		

#### 4. Discussions

People in the range 16-34 years old had possibility 2.8 times got STD than <16 and >34. They were high risk got STD because they were active in sexual activity, these things also related to significant result in multi-partner behavior.

People range 16-18 years old could get information from their formal institution through “Mitra Sebaya” program and informal institution through activity that involves teenage and community in reproductive ages. The Ministry of Health also spread “Aku Bangga Aku Tahu” to heal the potential effect, this promotion is to show that HIV and STD are the things must know, hope for they will think twice to do the risk activity related the cause of HIV and STD.

These data were also significant that man had possibility 1.75 times got STD than women. Actually, as literature, women are more potential to get STD than a man because women have a larger vaginal surface to be infected by germ and virus than man (MOH,

2005). It also related that STD diagnosis for women is more difficult to hold that man and STD on women is without symptoms. The result that women realize the importance to go to a health facility to get examination when they got sick than man (Azwar, 1999) indicated that they could get treatment early so that illness could be cured first. The consequence of this result, man must ask the partner to get examination too, so the procedure will be useful to avoid recurrent infection.

Society mobile influences the spread of STD (Daily 2007), the range of STD is influenced by travelers that got STD (Redfern, 1981). Qomariah (2001) stated that many STD case was commonly found in nomadic society but this research found that respondents living in Jakarta residency were 3.89 times to get STD than outside Jakarta residency, showing that Jakarta had high STD prevalence. It can be related that in Ciracas Public Health Service area, there is prostitute localization area, a kind of prostitute accelerating STD deployment. This prostitute localization has disbanded as formal, but the prostitute practice got spread like a small localization in some place in Ciracas Public Health Service area and outside the area. This condition can aggravate health networking; they are difficult to find. They just came to the health facility when the disease is severe, so the STD spread, and the treatment becomes longer. NGO collaboration is needed to ask sexual worker examined regularly. Health promotion about the STD risk factor is necessary to society and sex worker to decrease STD transmission.

This research showed wearing condom behavior in 13 sexual workers, most of them did not or just sometimes use a condom. Others research showed sexual workers in Gang Dolly survey where only 20% of them use condom Sedyaningsih-Mamahit (1999). This research also showed that 30.6% just sometimes used a condom. Even they use the condom, STD can happen because of inconsistency in use, and genital ulcus can spread in uncovered part. STD can spread because they do oral sex before using a condom. The reason why they did not use a condom was all about stigma and less pleasure and enjoyment. Social institution action is needed to empower people, especially sexual worker as another job to choose.

This research showed that sexual multi-partner probability was 5.1 times to get STD than a single partner, every people in sexual active potentially got STD and the risk increased for more than one partner (MOH 2008). STD can be prevented through ABC program, "A" for Abstinence; "B" for Be Faithful; "C" for use Condom. Sometimes, the participant is abstinence, but their couple does sexual multi-partner so they are also at risk of suffering from STD.

Djuanda (1999) stated there was 28% patient of syphilis and 73% patient of gonorrhoea did promiscuity because of drug addiction. Drug user probability was 5.2 times to get STD, drug user potentially did free sex related with STD.

## 5. Conclusions

It found that the total prevalence of STD was 34.2% (consisted of gonorrhoea 22.4%, syphilis 7.1%, and HIV 4.7%). By bivariate analysis, a significant relationship found between STD incident and age (OR 2.8 for age 16-34 years old); sex (OR 0.57 for women); residency (OR 0.25 for Jakarta resident); sexual behavior (OR 5.11 for multi-partner sexual conduct); and drug users (OR 5.19).

Increased knowledge of the community is needed to prevent the spread of Sexually Transmitted Diseases through health promotion. Public health needs to create a strategy on how to find the active health promotion such as smooth step approach that is necessary through the closer community and early detection that is essential to prevent the severity of STD.

This problem is a worldwide problem; it is not just a health institution problem. The big task is how to minimize public stigma. So, all people will open their mind and think rationally about the risk factor. They will be hand in hand with full awareness to prevent STD so the incidence of STD can decrease.

For the next research, it can be discussed later about STD by using the more significant sample, or specific example using in-depth interview, or compare particular sex worker in one prostitute with another prostitute so that it can be known prostitute characteristic deeper and the effective way to solve STD problem will be found.

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