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Characteristics of Sexually Transmitted Infection (STI) Patients at the Tanggul Health Center in Jember Regency in the January-June 2023 Period

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A B S T R A C T

The incidence of sexually transmitted infections (STIs) can expand as the risk factors increase that increase the transmission of STIs, including having unprotected sexual contact with multiple partners, having a history of STIs, having a history of sexual violence, alcohol use, prostitution, having sexual partners who have sexual contact. additional and concomitant or have a history of previous STIs, drug use, and use of intravenous drugs. This study aimed to present the characteristics of sexually transmitted infections in Tanggul Health Center, Jember Regency, Indonesia. This study is a descriptive observational study. A total of 52 research subjects participated in this study. Analysis of variable characteristics was carried out univariately with SPSS version 25. The highest prevalence of STIs was gonorrhea, namely 20 people (38.46%), the age group with the most STIs, namely 25-49 years, as many as 36 people (69.23%), sex of STI sufferers the most were men, 37 people (71.15%) and the risk factors for experiencing STIs that were most common were customers of sex workers, 31 people (59.61%).

1. Introduction

Sexually transmitted infections (STIs) are a health problem that has a major impact, especially on sexual and reproductive health throughout the world. STIs, formerly known as sexually transmitted diseases (STDs). The term STI refers to a variety of pathogens that cause infection through sexual contact, while the term STD refers to a recognizable disease state that has developed from an infection.[1] STIs involve the transmission of an organism between sexual partners through various routes of sexual contact, whether oral, vaginal, or anal. According to the WHO, there are more than 30 types of bacteria, viruses, and parasites that cause STIs. In addition to the sexual contact route, some STIs can also be passed from mother to child during pregnancy, childbirth, and breastfeeding.[2] Infection with one type of STI can increase the risk of infection with another type of STI. Even at the same time, different STIs can be present or transmitted simultaneously.[3]

Globally, more than 1 million STIs are acquired every day. In 2020, WHO estimates that there will be 374 million new infections with 1 in 4 common STIs, namely chlamydia (129 million), gonorrhea (82 million), syphilis (7.1 million) and trichomoniasis (156 million). More than 490 million people are estimated to be living with genital herpes in 2016, and an estimated 300 million women have HPV infection, which is the main cause of cervical cancer in women and anal cancer in men who have sex with other men.

The magnitude of the STI rate is a major risk factor for HIV transmission. This became the basis for WHO launching a global strategy for 2030 with targets including (1) reducing the incidence of syphilis, gonorrhea, new HIV infections, and deaths from AIDS by 90% and (2) reducing cases of congenital syphilis to less than 50 per 100,000 live birth.[3]

In Indonesia, from the 2012 IDHS data, it was found that almost 11% of women reported experiencing bodily discharge and were diagnosed with an STI, while only 0.2% of the male group confirmed that they had experienced an STI in the last 12 months. Data between 2011 and 2016 also reported that the number of women who experienced vaginal discharge was at 79,268 cases. In addition, key populations such as LSL, shemale, WPS, and Penasun also contribute to the high rate of STIs in Indonesia, whose population is very dynamic with cosmopolitan urbanization in the last few decades.[4] At the Tanggul Health Center in Jember Regency, in East Java, 52 cases of STIs have been found in the period January 2023 to June 2023. The average number of cases is found in patients who work abroad as drivers. Existing data shows that most come with complaints of discharge from the body.

Indeed, most STIs have complaints of body discharge, but STIs also often have oligo- or asymptomatic, so this is a considerable burden on public health.[5] STIs that are not detected and treated will cause very serious complications, which, if it affect women and pregnant women, can endanger the lives of the mother and her baby, and this can become a vicious circle in this STI problem.[3] As such, the two most common bacterial STIs are chlamydia and gonorrhea, which not only cause pelvic inflammatory disease and chronic pelvic pain but also result in ectopic pregnancies and miscarriages, premature labor, increased risk of mother-to-child transmission of HIV, conjunctivitis, pneumonia in the newborn. Both chlamydia and gonorrhea can cause irreparable damage to the fallopian tubes, causing infertility in women.[6-10]

The incidence of STIs can expand as the risk factors increase that increase the transmission of STIs, including having unprotected sexual contact with multiple partners, having a history of STIs, having a history of sexual violence, alcohol use, prostitution, having sexual partners who have additional and concurrent sexual contacts or have a history of previous STIs, drug use, and use of intravenous drugs. Low understanding of sex and high population movements may also be other factors influencing the increase in the prevalence of STIs.[2] However, this does not rule out the possibility that this sexually transmitted infection can affect anyone and from any background, including the people of the Tanggul area of Jember Regency. This study aimed to present the characteristics of sexually transmitted infections in Tanggul Health Center, Jember Regency, Indonesia.

2. Methods

This research is a descriptive study that determines the description of sexually transmitted infections at the Tanggul Health Center, Jember Regency, Indonesia, from January 2023 to June 2023. The research design was a cross-sectional study by collecting data from the medical records of STI patients at Tanggul Health Center, Jember Regency. The study was conducted in May 2023. The population for this study was all sexually transmitted infections (STI) patients at the Tanggul Health Center, Jember Regency, using total sampling. The criteria for subjects included in this study were patients with Sexually Transmitted Infections (STIs), which were diagnosed by doctors based on clinical symptoms and basic laboratory tests at Tanggul Health Center, Jember Regency, from January 2023 to June 2023.

The variables observed were the type of STI, age, sex, and risk factors for STI sufferers at Tanggul Health Center, Jember Regency. The types of STIs studied included genital gonorrhea, non-specific genital infections (cervicitis and urethritis), genital syphilis, and other STIs, according to groupings in the medical record. The risk groups to be studied are the most STI risk groups, such as female sex workers (WPS), shemale, men who have sex with men (LSL) or homosexuals, customers of sex workers, and others, according to groupings in the medical record. The data used is secondary data from the medical records of STI patients at Tanggul Health Center, Jember Regency.

The collected data is processed statistically using the software SPSS version 25.

3. Results and Discussion

The Tanggul Health Center in Jember Regency is one of the Health Centers under the Health Office Jember Regency, Indonesian. The working area of Tanggul Health Center is 5 villages, namely Tanggul Kulon, Patemon, Manggisan, Tanggul Wetan, and Kramat Sukoharjo Villages. The Tanggul Health Center provides outpatient and inpatient care. The types of services at this Health Center consist of general examination services, maternal and child health (KIA) services, family planning (KB) services, emergency services, delivery services, inpatient services, STI patient services, and nutrition services. The subjects in this study were 52 sexually transmitted infections (STI) patients at Tanggul Health Center, Jember Regency.

The characteristics of the subjects in this study are presented in Table 1. The most common types of sexually transmitted infections (STIs) were gonorrhea with 20 people (38.46%), cervicitis with 15 people (28.85%), syphilis and urethritis each with 6 people (11.54%), and other STIs 5 people (9.61%). From Table 2, the age group with the most number of subjects was in the 25-49 year age group, with a total of 36 people (69.23%). From Table 3, it was found that the number of male subjects was far more than female subjects, where there were 37 (71.15%) male subjects and 15 (28.85%) female subjects who had STIs. From Table 4, the subject's most frequent risk factors were customers of sex workers, with a total of 31 people (59.61%).

Table 1. Distribution of subjects by STI type.

No.	Type of STI	Total (%)
1	Gonorrhea	20 (38,46%)
2	Urethritis	6 (11,54%)
3	Cervicitis	15 (28,85%)
4	Syphilis	6 (11,54%)
5	Others	5 (9,61%)
Total		52 (100%)

Table 2. Distribution of subjects by age.

No.	Age group (years)	Total (%)
1	<15	0 (0,0%)
2	15-19	4 (7,70%)
3	20-24	10 (19,23%)
4	25-49	36 (69,23%)
5	>49	2 (3,84%)
Total		52 (100%)

Table 3. Distribution of subjects by gender.

No.	Gender	Total (%)
1	Man	37 (71,15%)
2	Woman	15 (28,85%)
Total		52 (100%)

Table 4. Distribution of subjects according to risk factors.

No.	Risk factors	Total (%)
1	WPS	7 (13,46%)
2	Shemale	2 (3,85%)
3	LSL	4 (7,70%)
4	Customers of sex workers	31 (59,61%)
5	Others	8 (15,38%)
Total		52 (100%)

Based on this research, it was found that out of 52 STI cases at the Tanggul Health Center in January - June 2023, the most common type of STI found was Gonorrhea, namely 20 people (38.46%), cervicitis as many as 15 people (28.85%), and those with urethritis and syphilis were 6 people each (11.54%). There are also sufferers who suffer from other types of STIs, such as condyloma akuminata, and another 5 people (9.61%). The results in Table 1 cannot be used to determine the characteristics of STI patients at Tanggul Health Center, Jember Regency. This result is not in accordance with the results of the study Centers for Disease Control and Prevention (CDC) in 2018, where there were as many as 4 million cases of chlamydia infection in the United States. Chlamydia is a type of sexually transmitted infection (STI) caused by bacteria that is most often reported in the United States.[7] Differences in research results can be caused by people's behavior in self-medication without seeing a doctor. There are types of STIs whose treatment can be known with the help of the internet or advice from other people. While the type of gonorrhea STI is likely to cause clinical symptoms that cannot be treated alone and is considered to be very disturbing to daily life by the subjects, they tend to check themselves at the Health Center. This is also inseparable from the risk factors that are the most common, namely customers of sex workers.[11-14]

The subjects with STIs were mostly in the age group of 25-49 years, namely 36 people (69.23%), followed by the 20-24 year age group with 10 people (19.23%), 15-19 years with 4 people (7, 70%), and the age group >49 years was 2 people (3.84%). There were no subjects (0%) from the age group <15 years. This is different from the results of the CDC study, and there were 26 million new sexually transmitted infections in 2018 in the United States. About half of these infections occur in people between the ages of 15-24.[8] The difference in the results of this study with the CDC research in America in 2018 could be caused by differences in culture and lifestyle, where premarital sex is more commonly practiced by adolescents in America than in Indonesia. This causes the American public to be exposed to risk factors for STI transmission at a younger age than in Indonesia. However, the results of this study are quite consistent with Nasyifa's research et al., who reported the highest incidence of gonorrhea in the age range of 25–49 years (67%).[9]

There were more male subjects than female subjects, namely 37 people (71.15%) male and 15 people (28.85%) female. These results are in accordance with the results of research by Ni Putu et al., where STIs are more common in males.[10] However, contrary to the results of research in the United States in 2018, several STIs are more common in women than men, including gonorrhea, chlamydia, and Trichomoniasis.[11-16] The difference in the results of the study may be caused by several things, including men having a higher level of mobility than women who work more at home, changing sexual partners, clinical symptoms in men are more visible than women who are usually asymptomatic and due to risk factors in this study there were more customers of sex workers. Subjects exposed to STIs were more sex worker customers, namely 31 people (59.61%). The second, namely other causal factors, as many as 8 people (15.38%), followed by WPS with 7 people (13.46%), LSL with as many as 4 people (7.70%), and shemale as many as 2 people (3.85%). The large number of customers at risk for sex workers is probably due to the fact that many men from the Tanggul area work as drivers out of town.[17-20]

4. Conclusion

The highest prevalence of STIs was gonorrhea, namely 20 people (38.46%). The age group with the most STI sufferers, namely 25-49 years, 36 people (69.23%), the sex of the most STI sufferers was men, 37 people (71 .15%), and the most common risk factor for experiencing STIs is the number of customers of sex workers 31 people (59,61%).

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