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Original Article

Factor Analysis in Understanding The Spread of Sexually Transmitted Diseases in West Java Province

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ABSTRACT
This study aims to analyze the factors that contribute to the spread of sexually transmitted diseases (STDs) in West Java Province, using a Final Project Based Learning approach. The study uses a mixed-methods research design, combining quantitative and qualitative data collection and analysis methods. The results show that the prevalence of STDs in West Java Province is high, particularly among young people and those with low socioeconomic status. The study also identifies several factors that contribute to the spread of STDs, including lack of knowledge about STDs, lack of access to healthcare services, and risky sexual behavior. The study suggests that education and awareness programs, as well as access to healthcare services, are crucial in reducing the spread of STDs in the province. The study also recommends that policymakers and healthcare providers take into account the social and economic factors that contribute to the spread of STDs when developing policies and interventions to address this issue.

KEYWORDS
Sexually transmitted diseases; West Java province; Health services.

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INTRODUCTION

Sexually transmitted infections (STIs) can be spread through sexual activity, contact with blood, semen, body fluids, or sharing needles. Risk factors include unsafe sex and having multiple partners. STIs include syphilis, gonorrhea, chlamydia, HIV/AIDS, genital herpes, HPV, hepatitis B, trichomoniasis, and genital yeast infections. STIs are serious issues with significant health impacts, including pain, reproductive problems, infertility, cancer, death, immune system suppression, and psychological impacts such as stress and depression. The social stigma of STIs can reduce quality of life, disrupt interpersonal relationships, and isolate. The cost of treating STIs can be a significant economic burden, especially in countries with less developed health

systems. STIs also have a demographic impact, increasing mortality rates, decreasing birth rates, and reducing life expectancy. High rates of STIs also burden health systems, increasing the cost of care, and hindering economic and social progress. Comprehensive sexual education, condom promotion, access to health services, and increasing public awareness are critical preventive measures. Sexually transmitted diseases (STIs) are infections that are generally transmitted through sexual contact (Gutierrez, et al., 2016). More than 30 types of pathogens are known to be spread through sexual contact. Some common STIs include gonorrhea, chlamydia, trichomoniasis, genital herpes, human papillomavirus (HPV) infection, hepatitis B, and syphilis (WHO, 2018). Sexually Transmitted Infections are complex diseases with various causes that can be transmitted in various ways, including sexual intercourse, transmission from mother to fetus, contaminated blood transfusions, and the use of non-sterile medical devices. WHO states that about 1 in 26 people in the world are infected with an STI. This is more common in Asia Southeast and South Asia. Genital infections caused by Chlamydia trachomatis (CT), which mainly occurs among commercial sex workers, and condyloma acuminata caused by Human Papilloma Virus (HPV) are the most common STIs in Indonesia, with a higher prevalence in women over 15 years of age. In addition, genital herpes caused by Herpes Simplex Virus (HSV) and syphilis caused by Treponema pallidum are serious problems. This is mainly because syphilis can affect the entire body and is transmitted in various ways.

The impact of STIs on sexual and reproductive health globally is very significant. Complications of STIs can cause infertility, pregnancy complications, growth disorders, cancer, and increase the risk of infection with human immunodeficiency diseases (HIV) (Hakim, 2011). According to the World Health Organization (WHO) in 2016, more than 1 million cases of STIs were reported every day (WHO, 2018). The Centers for Disease Control (CDC) in 2008 estimated that more than 110 million cases of STIs occurred in the United States, with an estimated 20 million new cases per year, half of which occurred in the 15-24 age group (CDC, 2018). According to data from UNFPA and WHO, 1 in 20 adolescents are infected with STIs each year (BKKBN, 2013). The incidence of STIs among adolescents is still high, thought to be due to their lack of knowledge and attitudes towards STIs. In Indonesia, the prevalence of STIs varies by region, with increased incidence often associated with high-risk behavior. The most vulnerable age groups are men aged 20-34 years, women aged 16-24 years, and individuals aged 20-24 years, including travelers, commercial sex workers, drug addicts, and those involved in homosexual relationships (Hakim, 2013).

During adolescence, the transition period requires attention and support, as individuals become more focused on their own interests and have a strong sense of purpose (UNCF, 2018). Opportunities for adolescents to engage in sexual intercourse are often influenced by a complex and dynamic social environment (Stovel, et al., 2008). Many adolescents do not have knowledge about reproductive health due to the lack of comprehensive sexual education, poor community control, and easy access to sexual information from the media or the internet (BKKBN, 2013). Knowledge is information obtained or obtained by individuals, influenced by factors such as education, work, environment, culture, and economy g (Svensson and Waern, 2018). A high level of knowledge can increase an individual's ability to assess a situation, which then becomes the basis for action (Wawan and Dewi, 2010). Knowledge about STIs can influence community attitudes and behavior, with intensive education programs preventing instability in STIs. Knowledge, skills, attitudes towards sexuality, sexual activity, and sexual community activities can be interrelated with the risk of STIs (Noviyani, 2017). Individual behavior meets needs and can be positive or negative depending on needs (Notoatmodjo, 2009). Socioeconomic factors can affect individual well-being and health. Anticipatory efforts are needed to control negative impacts and increase positive impacts (Notoatmodjo, 2009).

The rising number of cases of sexually transmitted diseases (STDs) in West Java is a pressing public health concern that requires immediate attention. This trend underscores the need for a thorough examination of factors such as inadequate sexual health education, which often leaves individuals uninformed about safe practices and the importance of regular testing. Limited access to healthcare services, particularly in rural areas, prevents timely medical assistance for those affected. Additionally, societal stigma surrounding STDs discourages people from getting tested or discussing their concerns openly. This multifaceted issue not only affects individual health but also has broader implications for public health initiatives. Addressing the rising incidence of STDs in West Java will require effective strategies to raise awareness, improve healthcare access, and reduce stigma within the community.

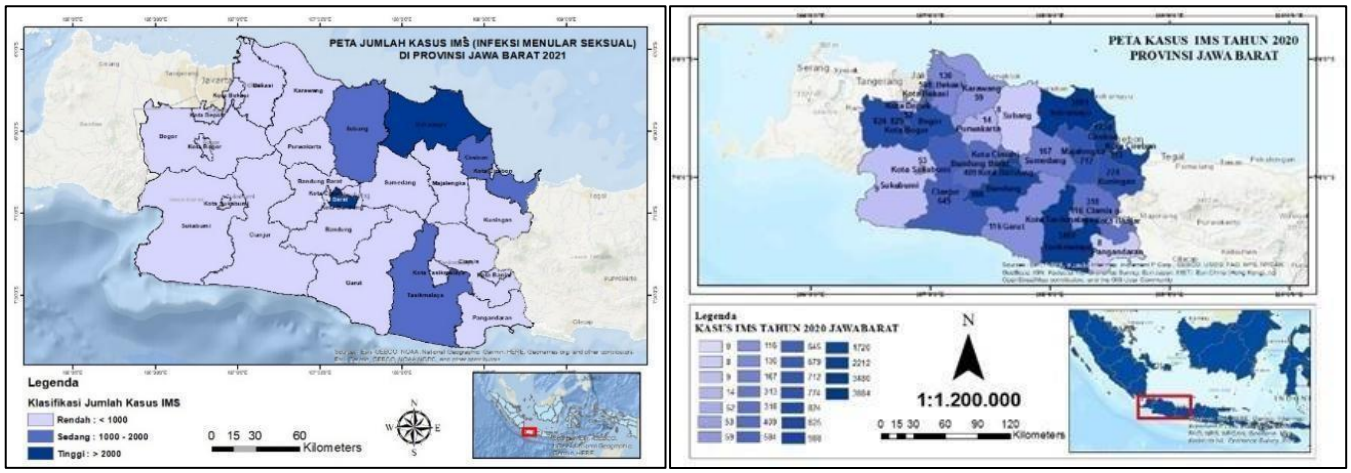

Figure 1. The number of cases of sexually transmitted diseases in West Java

Based on the map above, the number of cases of sexually transmitted diseases in West Java is divided into three classifications, namely low (less than 1000), moderate (1000-2000) and high (more than 2000). This map provides a visual depiction of the geographical distribution of STI cases in the West Java region, which is important for understanding the pattern of spread and mapping the necessary prevention and treatment efforts. Based on data from the West Java Health Office in 2021, there were 14,772 cases of sexually transmitted infections (STIs) in West Java. The district with the most STI cases is Cirebon Regency with 1,366 cases, followed by Bandung Regency with 491 cases, and Indramayu Regency with 2,168 cases. Meanwhile, the city with the most STI cases is Bandung City with 2,081 cases, followed by Cirebon City with 126 cases, and Bekasi City with 700 cases. With an active nightlife and a growing sex industry, big cities like Bandung often have a freer and more liberal urban lifestyle regarding sexuality. This can increase the risk of STI transmission.

Other factors that exacerbate the problem of STIs include high levels of poverty and socio-economic inequality, which often hinder access to accurate sexual and reproductive health information. It is possible that urgent financial needs can encourage risky sexual behavior. The increase in STI cases is also influenced by population growth, high community mobility, and advances in IT-based technology. The increase in STI cases is also caused by the lack of sexual education in schools and communities, which leads to a lack of discussion about sexuality in formal or cultural curricula, which also contributes to a lack of awareness of the importance of STI prevention.

Sexually Transmitted Disease Theory

Disease theories are concepts that explain the various factors that cause disease in individuals or populations. These factors can include biological, environmental, social, and psychological aspects that affect a person's health. One common theory is the balance of health theory, which states that disease occurs when the body's balance is disturbed by internal and external factors. In addition, there are other theories that focus on genetics, individual behavior, or the physical environment. Understanding these theories helps us recognize and address the causes of disease, supporting overall human health and well-being, Sexually Transmitted Infections (STIs) are complex diseases with multiple causes and modes of transmission. These include sexual intercourse, mother-to-fetus transmission, contaminated blood transfusions, and the use of non-sterile medical devices. Theories related to STIs:

1. Contagion Theory

Emile Durkheim's theory states that contact between individuals is necessary for disease to occur, based on the situation at the time the disease spreads, diseases caused by contact, This theory was originally developed based on observations that occurred in Egypt. (Bustan, 2002). This theory suggests that sexually transmitted infections (STIs) are caused by prolonged sexual contact between infected and non-infected individuals. Recent observations of HIV, syphilis, and gonorrhea outbreaks in Egypt have prompted the development of this theory. Understanding the role of STIs in sexual contact can guide sexual education and contraceptive practices.

2. Germ Theory

This theory suggests that certain diseases are caused by microorganisms invading the uterus. The 19th century marked a significant change in human behavior, with various diseases dominating the population and influenced by the microbiota. This theory has been instrumental in the development of infection epidemiology, with 15% of all cancers being caused by infections (Lucas, 2003). This theory identifies microorganisms such as bacteria, viruses, or parasites as potential causes of various infections, particularly HIV, HPV, and Neisseria gonorrhoeae, and developments, especially in COVID-19, may help identify these causes.

3. The Web of Causation Theory

This web of causation theory was discovered by Mac Mohan and Pugh (1970). The multi-factor theory suggests that a phenomenon arises from various factors, such as biological, climatic, and social interactions, which influence the outcome. Changes in one factor can weaken others, causing a decrease or increase in the phenomenon. This phenomenon does not depend on one factor, but on the interaction between the two, allowing the manifestation of the phenomenon through various factors (Azwar, 1998). The Web of Causal Theory states that problems, such as HIV / AIDS, are not only caused by one factor, but also by interactions with various physical, biological, and social factors, indicating that changes in one factor can affect differences in health and STI rates in society.

4. The Wheel of Causation Theory

This model requires identifying various factors that affect quality of life without implying the importance of agents, emphasizing the relationship between humans and their environment, especially the impact of various environments (Notoatmodjo, 2003). This theory also explores the interaction of humans and the environment in the context of STIs, focusing on biological, social, and physical factors that can influence STI outcomes. The social environment is more significant in the stigma surrounding condom use and social interventions, while the biological environment can influence STI outcomes through exposure or recurrence.

5. Triangle Theory

According to John Gordon and La Richt (1950), this model consists of three components: humans (host), agents (agent), and environment. (environment). It explains that the host and agent are separated by their characteristics and the environment. This model emphasizes the need to analyze and understand these components in order to prevent sexually transmitted infections. It is similar to the triangular epidemiological model and is used to understand the relationship between these components. The interaction between the host and agent is represented by the distance between them, with the environment as the source. This model can be used effectively to understand sexually transmitted infections.

Risk Factors and The Triangle Theory

Risk factors, also known as risk factors, are variables or conditions that are associated with the risk of a particular disease. Risk factors contribute to an increased or decreased risk of a disease. Risk factors include characteristics, biases, or differences that affect an individual or population before the disease occurs. However, risk factors have a specific definition, such as characteristics, biases, or differences in the risk of a new disease occurring in a population. Statistical analysis is used to determine the relationship between risk and risk factors and to identify causal factors. Epidemiology is the field that studies the relationship between risk factors and disease outcomes. It consists of three main components: agent, host (infected), and environment. (environment). The selection of risk factors can be described as key factors.

The host is a vital organ in a healthy life, not a diseased one. Infections can affect the host's health and risk of sexually transmitted infections (STIs). Some STIs, such as sexually transmitted infections (STIs), are less common in young people because of their desire to learn more about sexuality but are not educated. Infections that are infected such as gonorrhea and syphilis are more common in young people, while infections such as gonorrhea and vaginal candidiasis are more common in older adults. In addition, certain STIs, such as pregnancy and childbirth, only occur during pregnancy. Lifestyle factors such as intravenous drug use can also affect the host's health, as can alcohol consumption.

An agent is a living organism or infected cell that causes symptoms. Some agents are single-celled organisms, while others are microorganisms that produce certain symptoms. Agents can be bacteria, viruses, bacteria, or parasites. Sexually transmitted infections (STIs) are often caused by a single virus. HIV, which causes AIDS, interacts with certain blood vessels, such as the uterus, sperm, vagina, and anus. Herpes

simplex virus (HSV) is a common STI, causing genital herpes, which can cause rashes and increase the risk of other STI infections. Environmental Risk Factors The social environment plays a significant role in sexually transmitted infections (STIs) by influencing an individual's interactions with culture, social norms, and social behaviors. Social norms that support promiscuity can be a major factor in STIs. Individuals may not practice good sexual health practices, such as condom use, and may not understand the importance of sexual reproduction and the risk of STIs. Negative social environments can increase STIs, as individuals may not understand how to protect themselves. Positive social environments can help prevent ARVs, such as lack of community support, negative stigma, and discrimination.

Environments that affect human health include the physical and social environment. Research by the P2M, HIV/AIDS team in Pariah District, and the police found that lack of support from the LGBT community and PEKAT (Penyakit Masyarakat) led to the creation of the Comprehensive Community Service (LKB) in response to areas such as service delivery, service provision, and PLWHA. A study by Mardhiyati (2011) found that service delivery, service provision, and PLWHA, including support facilities, doctor-patient relationships, referral services, and STI services, are critical to effective service delivery. The stigma surrounding contraceptive use is also a significant issue, as it can prevent individuals from effectively engaging in STI services. Gender also plays a role in STI services, as it often leads to discrimination against sexual health information and services. Understanding these social environments is critical to holistic service delivery and promoting sexual health in the community.

Research novelty

This study highlights the risk factors for the spread of Sexually Transmitted Infections (STIs) in West Java using geographic and socio-economic data that have not been widely discussed in previous studies. This study not only looks at the prevalence of STIs but also explores the relationship between urban lifestyle, poverty, and social inequality with high rates of STIs. This provides a new perspective on how population mobility and technological advances contribute to the increased risk of STIs, which have previously received little attention in similar studies.

Previous studies, both domestic and international, generally focus on the clinical and epidemiological aspects of STIs. For example, studies conducted by Gutierrez et al. (2016) in the United States and by BKKBN (2013) in Indonesia, both highlight the prevalence of STIs among adolescents without memberikan perhatian khusus pada local factors that may influence the spread of the disease. This study also offers a new approach by combining statistical data from the West Java Health Office with socio-economic and demographic analysis to provide a more holistic picture of the spread of STIs in this region. This approach has not been widely adopted in previous studies that tend to focus on clinical aspects without considering social factors.

In addition, previous studies such as that conducted by Lucas (2003) which discussed the role of microorganisms in sexually transmitted infections, emphasized more on microbiological aspects without highlighting social and economic variables that can influence the spread of the disease in a region. In Indonesia, studies by Hakim (2011) and Noviyani (2017) focused on individual behavior and community knowledge related to STIs, but did not provide an in-depth analysis of how socio-economic conditions in certain areas affect the spread of the disease. This study broadens the scope by considering specific local factors in West Java, such as poverty levels, urbanization, and access to health services.

This study also differs from previous studies by integrating social and epidemiological theories in understanding the spread of STIs. For example, the theory of causal networks proposed by Mac Mohan and Pugh (1970) is used in this analysis to link various factors that contribute to the spread of STIs in West Java. Previous studies, such as those conducted by Bustan (2002) and Azwar (1998), tend to focus on individual or biological factors without considering the complex interactions between social, economic, and environmental factors. Therefore, this study offers a new contribution to the literature with a comprehensive approach that combines various dimensions in analyzing the spread of STIs in West Java Province.

Research Objectives

The objectives of this study were to identify and analyze risk factors that influence the spread of Sexually Transmitted Infections (STIs) in West Java Province, including urban lifestyle, poverty, socio-economic

inequality, and population mobility. This study also aimed to investigate the relationship between technological development and the increasing risk of STIs and its impact on the prevalence of these diseases in this region. In addition, this study attempted to integrate geographic data, socio-economic data, and social and epidemiological theories to provide a comprehensive understanding of the spread of STIs and propose more effective prevention strategies in West Java.

METHOD

Location of Research

The research is conducted in West Java, an island in Indonesia. Astronomically, West Java Province is situated between 5°50' - 7°50' South Latitude and 104°48' - 108°48' East Longitude. Geographically, it is bordered by the Java Sea and DKI Jakarta Province to the north, Central Java Province to the east, the Indonesian Ocean to the south, and Banten Province to the west.

Population and Sample

The study focuses on secondary data analysis sourced from reports issued by the West Java Health Office and the West Java Central Statistics Agency (BPS) for the years 2020 and 2021. This data includes statistics related to sexually transmitted diseases (STDs) in various districts and cities within West Java.

Data Collection Techniques

Data collection involves using secondary data derived from health reports, statistical data, and relevant articles pertinent to the research topic. The data obtained from the West Java Health Office will be visualized through maps, which will undergo descriptive spatial analysis. The quantitative data will typically include case numbers and statistics from surveys, while qualitative data will be gathered through interviews, observations, and document analyses.

Data Analysis

The collected data will be analyzed using both quantitative and qualitative methods. Quantitative data will be subjected to statistical analysis, while qualitative data will undergo thematic or narrative analysis. The study will integrate findings from both types of data to provide a comprehensive understanding of the factors contributing to the spread of STIs in West Java. GIS software, such as ArcGIS, will be utilized for spatial analysis, incorporating administrative maps and the locations of reported STD cases.

RESULTS AND DISCUSSION

Population Density in West Java

This study revealed that the impact of the P2M and HIV/AIDS programs significantly affected the prevalence of HIV/AIDS in the work area of the Regional Health Department in Paramaribo, with 77.0% of respondents reporting low levels of sexual orientation and lack of condom use. Based on the CIA survey in 2015, it was estimated that the number of LGBT in Indonesia was around 3% of the 250 million population or around 7.5 million people were LGBT (Santoso, 2015). LGBT people are increasingly not ashamed to use social media platforms such as Instagram, Twitter, Facebook, and WhatsApp to declare themselves and continue to seek their followers about sexual harassment, which is considered a violation of human rights, such as the UN resolution on LGBT rights oriented towards sexual and gender identity. LGBT issues are important because they can increase sexual harassment, violate morals, and have a negative impact on society, society, and the country.

According to Figure 2. The population map of West Java shows uneven population density, with densely populated areas in large cities and less populated rural areas. This has an impact on the pattern of spread of Sexually Transmitted Infections (STIs) in the province. The risk of sexually transmitted infections (STIs) is higher in urban areas due to the proximity between individuals. However, access to sexual health services and reproductive health information can be disrupted by population control and social stigma. To combat STIs in West Java, the focus should be on increasing access to sexual health services, addressing social stigma, improving STI education, and promoting reproductive health and sexual education. By addressing these issues, we can protect public health from STIs. Urbanization, healthy social life, and strong population mobility can also increase the risk of STIs. However, increased population control and social stigma can also contribute to increased STI risk.

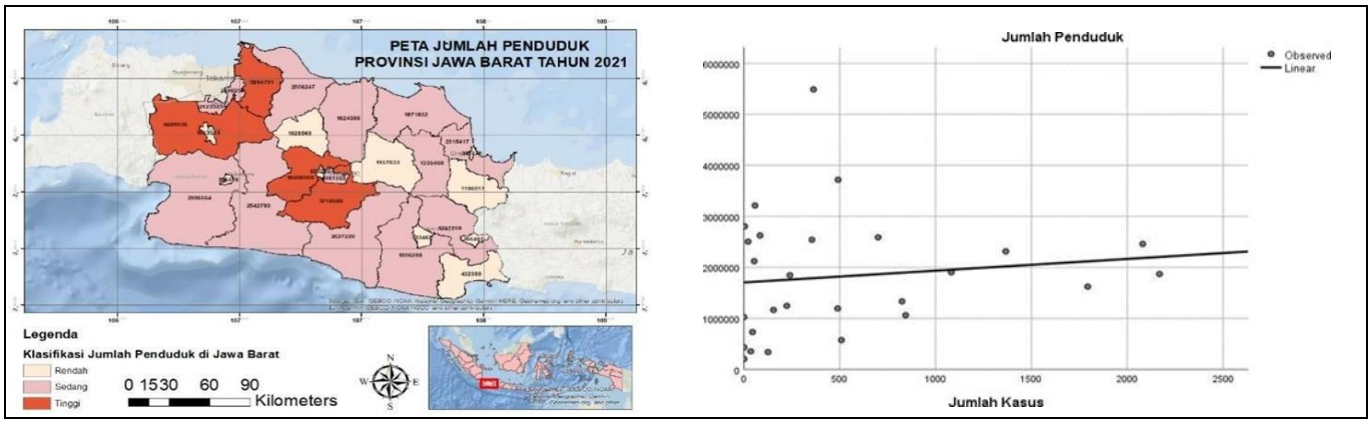

Figure 2. Population map of West Java province in 2021 and correlation of stis with population

Correlation analysis between population and number of STI cases using SPSS revealed a significant positive correlation. High population density tends to correlate with an increase in STI cases. This is because high population density creates an environment where social interactions occur more frequently, which in turn enlarges the network of sexual contacts. In such conditions, STI transmission can occur more quickly because there are more opportunities for sexual interaction with potentially infected individuals. In addition, high population density can also have an impact on limited access to health services, complicating STI prevention and treatment efforts.

Number of Poor People in West Java Province

The study revealed significant problems in economic and health outcomes in certain areas, such as poor health services and quality education, and inadequate nutrition for basic needs such as food, shelter, and sanitation. Economic and social instability can increase sexually transmitted infections (STIs) due to limited access to information, reproductive health services, and environmental conditions. Poor health services in these areas can lead to more effective measures to reduce poverty and economic growth in local areas. Better access to health and education services and stable living conditions can help reduce sexually transmitted infections.

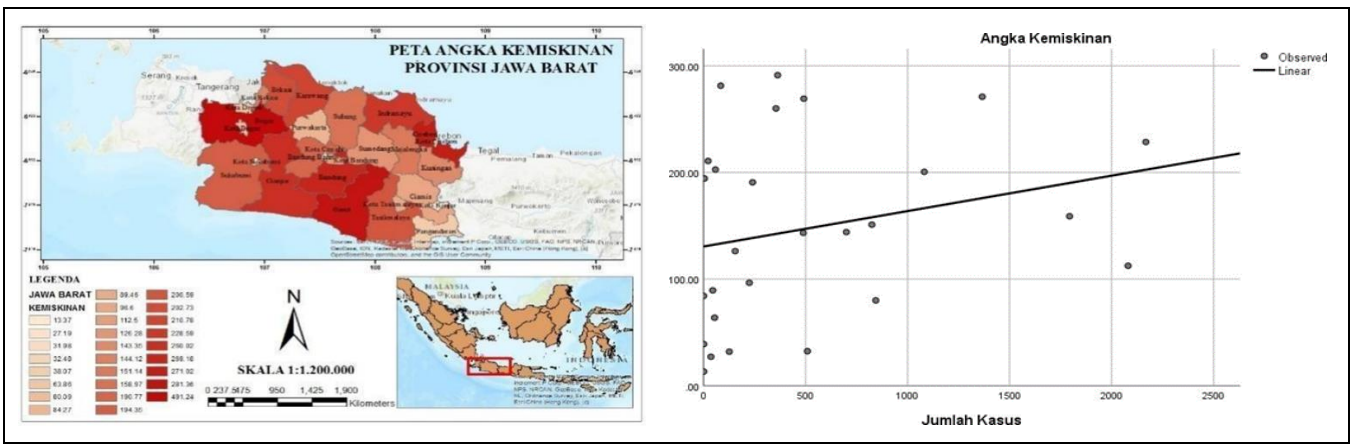

Figure 3. Map of the number of poor people in West Java province in 2021 and *correlation of ims with poverty rate*

Correlation analysis between poverty rates and the number of STI cases using SPSS showed a significant relationship. Poverty tends to be positively correlated with increased STI cases. Economic factors such as lack of access to expensive condoms, risky sexual behavior due to economic pressures, and living in poor sanitation can strengthen this relationship. Poverty often limits access to adequate health information and health services, increasing the risk of exposure to STIs. This suggests the need for a holistic approach to combating STIs that includes efforts to address economic inequalities and provide necessary resources to vulnerable communities.

Number of health services in West Java province

Health facilities in several districts, such as Bekasi, Karawang, and Garut, have significant health facilities, reaching 60. These areas provide good health services for individuals with sexually transmitted infections (STIs). However, the lack of health facilities in low-income areas can affect the quality of health services provided. In areas such as Sukabumi, only six health facilities are needed, which requires urgent attention to health services. The lack of health facilities and high costs can lead to inadequate health services for the diagnosis, treatment, and care of STIs, thereby increasing the risk of STIs among disadvantaged populations in low-income areas.

Correlation analysis between health facilities and the number of positive cases of Sexually Transmitted Infections (STIs) aims to understand the relationship between the availability of health services and the level of STIs in a region or population. In this analysis, the focus is on health facility variables, such as the number of hospitals, clinics, and health centers. The use of statistical software such as SPSS helps measure the correlation coefficient between these two variables. The results of the analysis provide insight into whether the increase in health facilities is associated with a decrease in STI cases. The implications of these findings can be used to design more effective health policies in the prevention and control of STIs in the community.

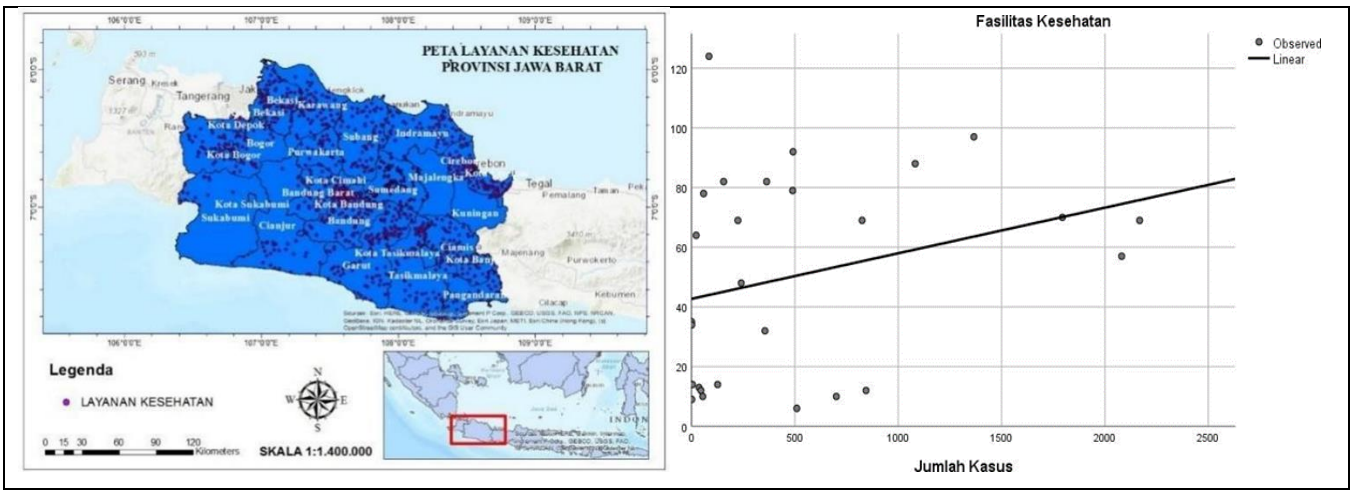

Figure 4. Number of health facilities in West Java province and correlation of stis with health facilities

School children's participation in West Java

According to Figure 5, the map depicts the level of school participation in three main classifications: high, medium, and low. Bekasi City, Depok City, Sukabumi City, and Bandung City have high school participation, with each participation rate above 79%. These cities may have access to education, resources, and opportunities to learn, which can help in sexual knowledge and understanding and reduce risky behaviors related to STIs. Medium levels may require further efforts to improve access and quality of education, and to integrate comprehensive sexual health programs into the Education curriculum. Low levels, where Purwakarta, Bogor, and Sukabumi Districts are located, are areas that require special attention.

Correlation analysis between school participation and the number of STI cases using SPSS revealed a significant positive relationship. Low school participation was correlated with increased STI cases. This is related to the lack of access to information on safe sexual practices and the impact of STIs among adolescents who are less schooled. Comprehensive sexuality education in schools can provide a better understanding of STI risks and encourage safer sexual behavior, which in turn can reduce the prevalence of STIs among more educated populations. This emphasizes the importance of efforts to increase school participation and integrate effective sexuality education into the school curriculum.

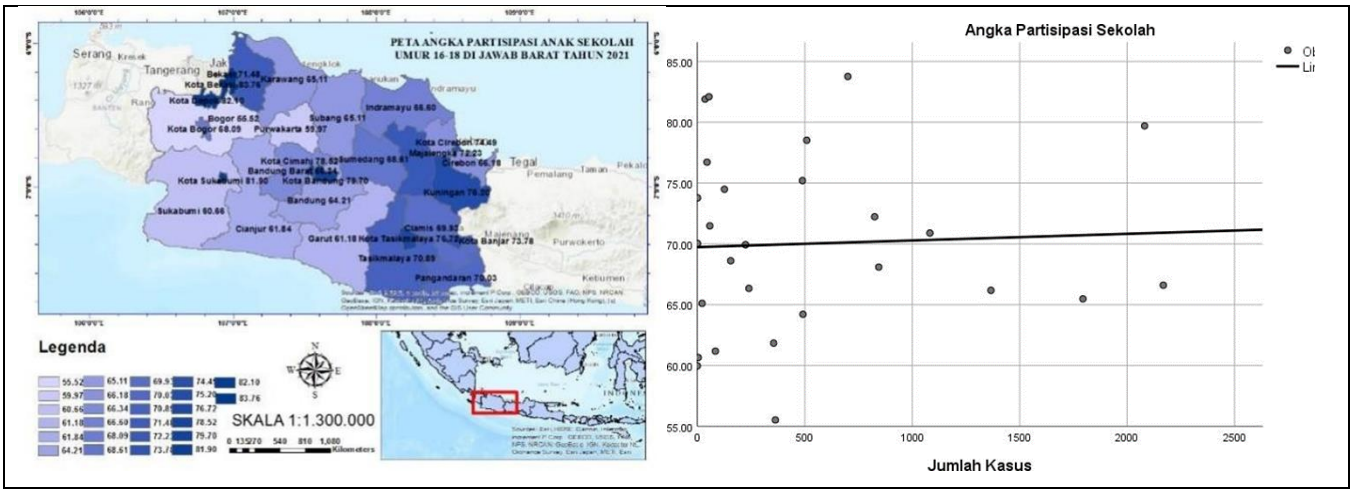

Figure 5. Map of the number of school children's participation in West Java and correlation of ims with children's pasticipation

Number of non-star hotels in Java province

Hotels in certain areas, such as Pangandaran and Bogor, can increase individuals who are sexually infected because of their proximity to unsafe sexual activities. Sexual activities without hotel access, such as in unsafe conditions, can increase the risk of STIs. However, there is still potential for hotels in these areas to be safe for individuals to engage in risky sexual activities. In addition, the cost of hotels in areas such as Sukabumi, Cianjur, Bandung, Garut, and Subang can affect the risk of STIs. Apart from the potential risks, the lack of safe facilities in these areas can also affect proper medical care for those infected with STIs.

Correlation analysis between hotels and the number of positive STI cases using SPSS showed a significant relationship between the two variables. The results showed that an increase in the number of hotels was positively correlated with an increase in positive STI cases. This indicates the potential for STI transmission related to hotel activities. This finding emphasizes the importance of implementing STI prevention and control strategies in the hotel environment to reduce the risk of spreading infection.

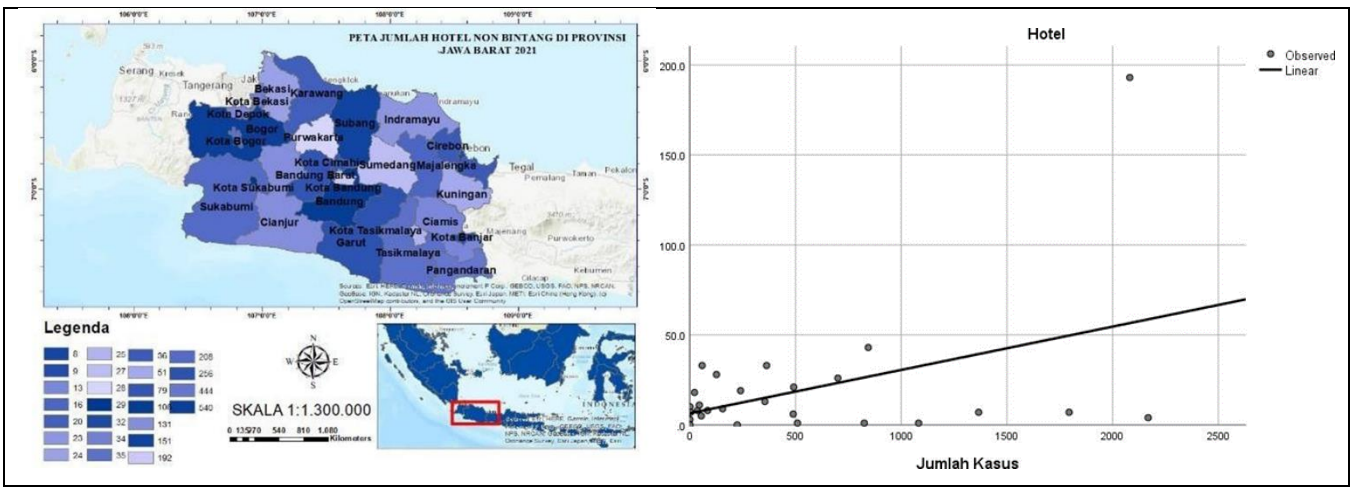

Figure 6. Map of the number of non-star hotels in West Java and correlation of ims with hotel facilities

Discussion

Based on the results of the analysis of research on the IGAMA Foundation's strategy in fighting for the health service rights of gay entities in Malang City, it can be concluded that the IGAMA Foundation has succeeded in using various strategies, especially through cooperation with the government. This organization uses campaign, cooperation, education, and character development strategies, but the cooperation strategy is the core of its

programs. Through cooperation with the Health Office and Dinoyo Health Center, the IGAMA Foundation has succeeded in producing positive impacts, such as reducing HIV/AIDS cases and increasing access to health services for MSM groups. Despite doubts about the validity of certain data, this collaboration has strengthened relations with the government and the community, and has succeeded in achieving the main objective of providing inclusive health services for the entire community, including gay entities who are the focus of their struggle (Riberu, 2016).

Based on the research conducted by Putra et al., (2021), the role of non-governmental organizations in the health sector is very important in steps to overcome the risk of transmission of sexually transmitted infections. The Gaya Dewata Foundation is an NGO engaged in the health sector specifically for gay, transgender, and MSM groups in the STI, HIV & AIDS prevention program in Denpasar City. Therefore, to provide information to the public, a campaign is needed so that LGBT groups can be aware of sexually transmitted infections. Considerations in terms of geography (region), psychographics (lifestyle), demographics (population), and behavior (habits) greatly influence the creation of visual communication design works later. The visual elements used in designing this campaign include using digital illustration techniques with a pop art design style. The delivery of messages verbally and non-verbally will be displayed in an attractive, informative, communicative, and persuasive manner. In designing various media, using Adobe Photoshop, Adobe Illustrator, and Medibang Paint software. It is expected that the media campaign can be a solution in the prevention of the risk of STI transmission in the LGBT group by the Gaya Dewata Foundation in Denpasar City to be carried out more intensively. This refers to the increasing population of LGBT groups, especially gays, waria/transgenders who are at risk of transmitting STI diseases. Visual communication design designers should be able to provide solutions, education, and information to the target audience through visual communication media.

The description of sexual behavior in drug addicts is not using condoms, changing partners and using drugs during sexual intercourse. Then the age of first abusing drugs and sexual intercourse occurred before the age of 17 years. Furthermore, the place of sexual intercourse occurs in commercial places such as hotels and boarding houses with sexual partners, namely PSK. The informants who are drug addicts generally have jobs. The perception of addicts regarding the effects of drugs during sexual intercourse is that it can prolong the duration of sexual intercourse, increase sexual arousal, feel strong and others. The types of drugs used by addicts during sexual intercourse are shabu-shabu and mixing other types of drugs such as marijuana, ecstasy, putaw, cocaine and others. Drug addicts' knowledge of safe and healthy sexual relations is quite good, such as with their own partner, using condoms and having to get married. The design to reduce cases of sexually transmitted infections (STIs) in West Java is to implement the establishment of the Peduli IMS foundation which collaborates between the government and health institutions, encourages collaboration between local governments, health institutions, and civil society organizations to design and implement effective STI prevention programs and strengthen the monitoring and reporting system for STI cases by establishing a foundation or non-profit organization that focuses on STI prevention and treatment. This foundation will provide youth-friendly health services, counseling, and support for infected individuals. Comprehensive and structured sexual education programs will be implemented both in the foundation and in the wider community. This includes counseling on the use of contraceptives, the importance of safe sex, and comprehensive STI prevention efforts.

By implementing these two steps seriously and in a coordinated manner, it is hoped that there will be a significant decrease in cases of sexually transmitted infections in West Java and increase awareness and access to health services related to STIs. By considering important factors such as accessibility, infrastructure, local needs, local government support, and STI prevalence, the foundation established can provide maximum benefits to the community and contribute to STI control efforts in West Java.

The design of the Foundation in West Java that will be established and engaged in the health sector, especially infectious diseases, has the potential to be a solution in reducing and saving people affected by the disease. The Foundation can provide health services that are more easily accessible to the community, especially in remote areas that may not have access to government health services. The Foundation can provide education and awareness to the community about infectious diseases, including how to prevent and transmit them. In addition, it can provide support and assistance to people affected by infectious diseases, both physically and mentally. The Foundation can conduct research and development to find more effective ways to prevent and treat infectious diseases. The distribution of foundations

in West Java, it can be concluded that a foundation is needed for infectious disease consultation. This is because the number of people affected by infectious diseases in West Java is still quite high. This shows that there is a high need for infectious disease consultation services. The infectious disease consultation services provided by the government may not be sufficient to meet everyone's needs. Foundations have several advantages compared to government services, such as flexibility, namely foundations can be more flexible in providing their services, so they can more easily reach people in remote areas. Foundations can be closer to the community, so they can more easily build trust and establish good relationships with the community. Foundations can be more innovative in developing their services, so they can be more effective in meeting the needs of the community.

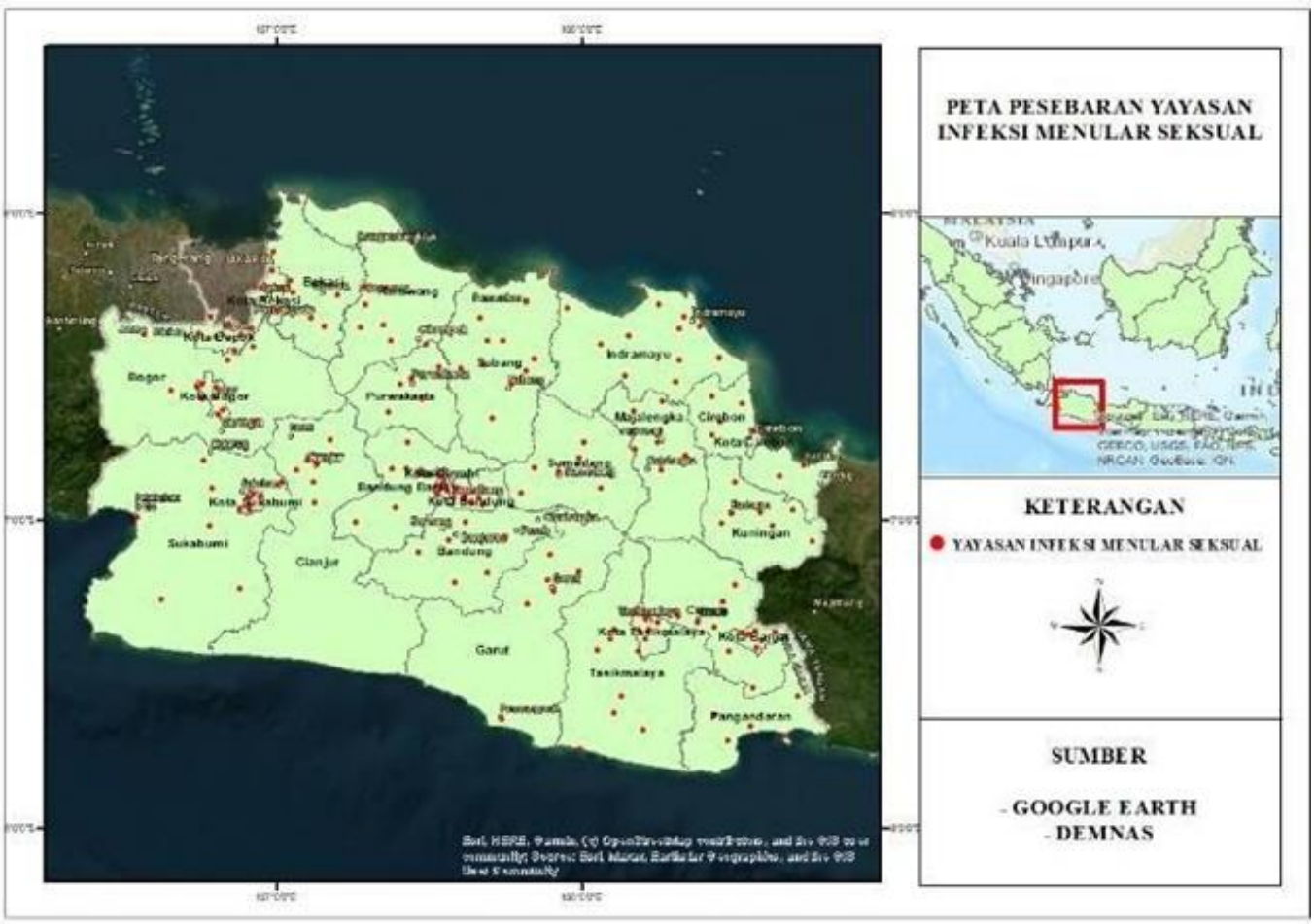

Figure 7. Map of Distribution of Sexually Transmitted Infection Foundations

Research on sexually transmitted infections (STIs) shows the importance of understanding the geographic distribution and risk factors in different regions. In an article published in The Lancet Infectious Diseases (Diseases, 2013), special attention is paid to high-quality clinical interventions and epidemiological studies, such as randomized controlled trials, to provide definitive answers to unsolved clinical questions. This study emphasizes the importance of effective prevention strategies and community-based interventions to improve public health and change clinical practice and understanding of these infectious diseases. The focus on high-quality studies is expected to continue to increase research publications in this field.

Meanwhile, research published in the Bulletin of the World Health Organization (Holmes, Levine, & Weaver, 2004) shows that consistent condom use has a significant impact on protecting individuals from various sexually transmitted infections (STIs). Although condoms do not provide 100% protection, their consistent use can substantially reduce the risk of transmission of diseases such as HIV, gonorrhea, chlamydia, and syphilis. These findings are of great importance for public health campaigns aimed at controlling the spread of STIs,

especially among high-risk populations. In an in-depth review by Wagenlehner et al. (2016), emphasis was placed on the increasing incidence of STIs in Germany and the importance of timely diagnosis and treatment. The authors stressed the need for health professionals to adopt a comprehensive diagnostic strategy in light of increasing challenges, such as antibiotic resistance. This study underlines the crucial role of early detection and intervention, both for individual patients and for overall public health. Van Der Pol (2014) explained that STIs in women often go undetected due to the absence of clear symptoms, which is crucial to know given the risk of long-term complications that can have serious impacts on women's reproductive health, including the risk of mother-to-child transmission of infection during pregnancy.

Furthermore, research by Ahmad et al. (2016) in the book Male Infertility: A Clinical Approach discusses the impact of sexually transmitted infections on male fertility, especially in regions with high STI prevalence such as Africa and Southeast Asia. This article highlights that infections such as gonorrhea and chlamydia can cause fertility problems, and the importance of early treatment and prevention to prevent long-term impacts on reproductive health. Scott-Sheldon and Chan (2020) in their editorial in the Archives of Sexual Behavior expressed deep concern about the increase in sexually transmitted infections in the United States, especially among young women and the LGBTQ+ community. They highlighted the increasing prevalence of chlamydia, gonorrhea, and syphilis, and the need for increased routine testing, early diagnosis, and comprehensive care to reduce the burden of STIs in the community. Research by Whitlock et al. (2018) in the International Journal of STD and AIDS highlighted the importance of rapid testing and treatment services in improving the quality of patient care and providing significant benefits to public health. These services not only speed up the delivery of results and treatment, but also prevent further transmission and reduce the burden of clinic visits, contributing to significant cost savings. An article by Review (2014) in the Journal of Coastal Life Medicine discusses the utility of a syndromic approach to STI management, particularly in resource-limited countries. This approach allows healthcare professionals to provide immediate effective treatment based on the main symptoms, without having to rely on expensive or inaccessible laboratory tests. Although this approach is quick and cost-effective, it does have limitations such as low specificity in diagnosis and the potential for overtreatment. Therefore, it is imperative that health policy continues to innovate and find better solutions in STI management to improve overall public health. Research by Hughes and Field (2015) in Future Microbiology shows significant changes in the epidemiology of STIs in the UK due to shifting demographics and sexual behaviours, and highlights inequalities in sexual health across groups, such as men who have sex with men, young adults and minority ethnic groups. The study also highlights the importance of technological advances in testing and changes in sexual health care delivery, which offer both opportunities and challenges for future STI control. Finally, an article by Murali and Jayaraman (2018) in BJPsych Advances discusses the link between substance use disorders and STIs. This study suggests that individuals with substance abuse disorders are at increased risk for acquiring and transmitting STIs through high-risk sexual activity and blood exposure. This underscores the need to integrate STI screening and treatment programs into substance abuse care, with a focus on primary, secondary, and tertiary prevention.

CONCLUSION

By considering important factors such as accessibility, infrastructure, local needs, local government support, and STI prevalence, the foundation established can provide maximum benefits to the community and contribute to STI control efforts in West Java. The study conducted in West Java aims to address the problem of bacterial infections and provide solutions to protect people from these infections. This study aims to provide easier health services for the community, especially in areas that may not have access to government health services. It also provides education and awareness about bacterial infections, their prevention and treatment, and the environment and support for those affected. The study concluded that providing bacterial infection consultation services is essential for public health. This study has several advantages over government services, such as flexibility in providing services, proximity to the community, better communication, and more innovative ways to develop and respond to community needs.

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