CAUSES AND PREVENTION OF GLOBAL DISEASES SEXUALLY TRANSMITTED INFECTIONS (LITERATURE REVIEW)

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ABSTRACT

Causes and Prevention of Global Diseases Sexually Transmitted Infections: Literature Review. Sexually transmitted infections (STIs) are a group of infections that are currently responsible for many morbidities and mortality in developing countries, because STIs have a role in facilitating the transmission of human immunodeficiency virus (HIV) and have a significant negative impact on reproductive health and children. Complications of STIs can cause infertility in both men and women, ectopic pregnancy, cervical cancer, premature death, congenital syphilis, low birth weight, prematurity and ophthalmia neonatorum. In developing nations, sexually transmitted infections (STIs) remain a significant issue due to their high incidence and prevalence. To prevent these issues, efforts to control and prevent STIs are required. In addition to the lack of diagnostic tools for services, rising antibiotic resistance, shifting patterns of STI pathogens, low treatment seeking behavior, and complex transmission dynamics, the lack of political policies to control STIs is fundamental to the limited success of STI control in developing nations. Invest in effective control measures and to maintain and strengthen the basic health system; however, there is a lack of data on the prevalence of diseases and the effectiveness of programs. Primary prevention and a variety of treatment options are some general strategies that can be used to prevent and control STIs in developing nations. Programs for changing behavior, structural interventions, and the use of a variety of prevention technologies are all examples of primary prevention interventions.

Keywords: Control, Prevention, STIs, Strategies

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INTRODUCTION

We have been aware of venereal diseases for a long time, and some of them, like syphilis, gonorrhea, and herpes, are very common. This disease has been discovered in teenagers. This phenomenon is not a miracle; it is like a ticking time bomb because of the harsh media coverage and lack of information about sexology. The advancement of science and alongside the quantity of examinations on venereal illness, it was found that this sickness doesn’t just objective clinical side effects on the privates, however can likewise cause aggravations in different organs of the body. As a result, the term "veterinary disease" has been changed to "sexually transmitted diseases" (STDs). However,
the term STD has been renamed Sexually Transmitted Infections (STIs) since 1998 in order to reach a significant number of asymptomatic patients, particularly women (2). Because STIs play a role in facilitating the transmission of the human immunodeficiency virus (HIV) and have a significant negative impact on reproductive health and children, sexually transmitted infections (STIs) are a group of infections that are currently responsible for a significant amount of morbidity and mortality in developing nations. Infertility in both genders, ectopic pregnancies, cervical cancer, premature death, congenital syphilis, low birth weight, prematurity, and ophthalmia neonatorum are all complications of STIs (3).

In today's world, it is undeniable that adolescent association often leads to promiscuity, which is characterized by premarital sex behavior and sometimes changing partners. This way of life greatly increases the likelihood of disease spread. Additionally, free sex is practiced without the use of contraception (15). In developing nations, sexually transmitted infections (STIs) rank second among the top ten diseases that affect young adults. Adults and adolescents aged 15 to 24 make up 25% of the population that is sexually active, but they account for nearly 50% of all cases of STIs that are newly acquired. Due to limitations of "screening" and low reporting of STIs, detected STI cases only account for 50% to 80% of all cases that occur (3).

People in developing countries either have a moderate level of well-being or a high quality of life. Economic conditions that are still in the development stage include a low per capita income, income gaps between the rich and the poor, reliance on the primary sector (typically agriculture), insufficient processing of natural resources, and a lack of capital. In the meantime, developing nations are characterized by rapid population growth, high birth rates, high unemployment, and low health and education levels. Developing nations have a significantly higher incidence and prevalence of STIs, though this can vary from country to country (4).

Due to the fact that STIs are frequently not diagnosed or even reported, accurate global estimates of the impact of STIs in developing nations cannot be calculated. As a result of various HIV prevention initiatives and treatment of STI cases, including syndrome-based management, there is evidence that the number of bacterial-caused STIs has decreased in many nations. However, the number of sexually transmitted infections caused by viruses is rising (5).

MATERIALS AND RESEARCH METHODS
Descriptive qualitative research is used in this study. Sugiyono asserts (2016) In contrast to experiments in which the researcher is the primary instrument of trigulation-based data collection techniques, the descriptive qualitative method is a postpositivism-based research method used to examine the condition of natural objects combined. Qualitative research results emphasize meaning rather than generalization, and data analysis is inductive/qualitative. By studying as many individuals, groups, or events as possible, qualitative descriptive research aims to describe, explain, explain, and answer the problems being studied in greater detail. Humans are used as instruments in qualitative research, and the findings are presented in the form of statements or words that accurately reflect the situation.

RESULTS OF RESEARCH AND DISCUSSION
According to estimates provided by the World Health Organization (WHO), there are approximately 340 million new cases annually of four sexually transmitted infections (STIs) that can be treated, including gonorrhea, chlamydia, trichomoniasis, and syphilis (6). In addition, millions of cases of sexually transmitted infections (STIs) caused by viruses have also been reported worldwide, particularly infections caused by the HIV, HSV, HPV, and
hepatitis B viruses. Mortality worldwide, STIs also have a significant economic impact in developing nations, accounting for 17% of the economic loss in the health sector. The majority of epidemiological data are derived from prevalence studies and special surveillance in particular locations because systematic and comprehensive STI surveillance is almost never carried out in developing nations. The following are some of the contributing factors to the high rate of STIs in developing nations: 1) demographic factors (a young population with a high rate of sexual activity), 2) urbanization and subsequent shifts in sociocultural norms, 3) a high rate of prostitution as a result of financial difficulties, 4) multiple and concurrent sexual partners, 5) a lack of affordable and effective STI services, and 6) a high rate of antibiotic resistance in a number of pathogens (7).

A type of bacteria known as Neisseria gonorrhoeae is responsible for sexually transmitted infections (STIs). These infections are brought on by diplococci, which are gram-negative bacteria. This germ is very careful, so it needs a complete and good medium for growth (3). It cannot, however, survive for long outside of its host because it is also susceptible to heat and drought. Males experience symptoms and signs two days after exposure, beginning with urethritis, followed by purulent discharge, dysuria, and frequent and painful urination. Transmission typically occurs through sexual contact and the incubation period is approximately two to five days.

Sexual activity with multiple partners, non-medical blood transfusions and needle use, and a lack of knowledge about reproductive health are all risk factors for sexually transmitted infections (STIs). In addition to a shift in sexual values and behavior toward free sex, particularly among the younger generation, adolescents lack knowledge about healthy reproduction and sexually transmitted diseases (8). Herpes is one class of viruses that can cause STIs. Herpes zoster and herpes simplex are the two types of herpes currently in existence. The viruses that cause these two herpes are distinct. Varicella is the virus that causes herpes zoster, while the herpes simplex virus (HSV) is the virus that causes herpes simplex. The herpes simplex virus (HSV), particularly HSV type 2, which is frequently recurrent, causes genital herpes. The shooting time can be anywhere from three to seven days. Several hours before the lesion appears, complaints such as a burning sensation and itching may be accompanied by general symptoms such as weakness, fever, and muscle aches. Arjani (14) says that bubbles form groups that are easy to break.

STI prevention and control programs aim to: (1) reduce STI-related morbidity and mortality, (2) prevent HIV infection, (3) prevent serious complications in women, and (4) prevent adverse pregnancy effects. The program’s objectives will be achieved through primary prevention efforts that will directly reduce the incidence of STIs and through secondary prevention which will reduce the prevalence of STIs by shortening the duration of the disease, thereby reducing the likelihood of complications and sequelae of these STIs (9).

Through safe sexual behavior or the use of condoms for penetrative sexual activity, primary prevention aims to prevent infection or disease transmission. Incurable STIs, which are mostly caused by viruses, can only be significantly reduced through primary prevention (10). In the face of shifting patterns from curable bacterial STIs to incurable viral STIs and resource-poor areas with limited medicines and diagnostic tools, primary prevention is an essential component of the STI control program (Amiruddin, 2019). When compared to vaccines, suppressive therapy, or screening tests, primary prevention strategies also have a significant impact on reducing the transmission of all STIs because they can reduce an individual’s exposure to an infectious person by reducing their number of sexual partners or by using condoms or other barrier methods to prevent transmission which is only applicable to a specific pathogen.

Changing sexual behavior is one of the primary prevention strategies, and it can be done in a number of ways, including: delaying the first time you have sex, abstinence from sexual activity, being loyal to a partner, and encouraging safe sexual behavior, such as having fewer
partners and using safe sexual practices, are all examples of safe sexual behavior. Without genital piercing and by encouraging proper condom use. This can be accomplished through group education programs or through communication, information, and education. Adolescents need behavior modification programs the most because they are easier to change and have a higher prevalence of STIs (11).

At the health, social, or political level, behavior change programs can be supported by structural and environmental interventions that alter the environment. According to Aryani (12), this strategy may concentrate on ensuring that the goods, tools, and supplies needed to engage in healthy behavior are readily available. This includes making sure that condoms, lubricants, services for sexually transmitted infections, HIV counseling and testing are available, or making policies to make sure condoms are available in places where there is sexual activity. One example is Thailand's "100% condom use policy," which mandates that condoms be used during commercial sex in brothels and holds business owners accountable for condom use by their customers. Making laws to legalize sex workers and imposing legal fines on hotel or brothel owners if preventative regulations are not implemented are other structural interventions at the policymaking level (5).

Utilizing vaginal microbicides is yet another preventative technology. Microbicides for the female genital area have been developed since the early 1990s (16). At first, a detergent-based chemical with virulidal and bactericidal properties offered glimmering hope; however, its effectiveness in HIV prevention was disappointing. Additionally, the use of some ingredients has an effect on the integrity of the vaginal epithelium, especially when used repeatedly, which may make it easier for pathogens to enter the body. These ingredients are not always effective against STI pathogens. However, a number of brand-new, safer components are being developed at the moment and will require additional testing (13).

The burden of STI prevention and control programs could be reduced with the use of safe and effective vaccines. Despite the fact that numerous studies have reported the effectiveness of using the HPV vaccine, the only vaccine that is currently available that is effective against the pathogen is the hepatitis B vaccine. Due to the lack of efficacy in previous studies, vaccines against HSV are still being developed. The widespread use of vaccines in developed nations has been hampered by their high costs in developing nations.

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**CONCLUSIONS AND RECOMMENDATIONS**

The conclusion that can be in developing nations, sexually transmitted infections (STIs) remain a significant issue due to their high incidence and prevalence. To prevent these issues, efforts to control and prevent STIs are required. In addition to the lack of diagnostic tools for services, rising antibiotic resistance, shifting patterns of STI pathogens, low treatment seeking behavior, and complex transmission dynamics, the lack of political policies to control STIs is fundamental to the limited success of STI control in developing nations. Invest in effective control measures and to maintain and strengthen the basic health system; however, there is a lack of data on the prevalence of diseases and the effectiveness of programs. Primary prevention and a variety of treatment options are some general strategies that can be used to prevent and control STIs in developing nations. Programs for changing behavior, structural interventions, and the use of a variety of prevention technologies are all examples of primary prevention interventions.
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