



Protecting Your Health: A Comprehensive Review of Sexually Transmitted Illnesses

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ABSTRACT

Sexually transmitted infections are a class of diseases that are spread through sex. They can infect anyone who is sexually active regardless of age, gender, or sexual orientation. Common STIs include gonorrhea, syphilis, herpes, HIV/AIDS, and human papillomavirus (HPV). Many STIs have no visible symptoms, which means that individuals can unknowingly transmit the infection to their sexual partners. STIs can have serious health consequences if left untreated, including infertility, chronic pain, and a higher chance of contracting HIV. Prevention measures include using a condom while having sex, regular testing, and vaccination for HPV. Early diagnosis and treatment can effectively manage STIs and reduce the risk of complications. It is essential to educate individuals about the importance of practicing safe sex and seeking medical care if they suspect they have an STI.

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1. INTRODUCTION

1.1 Background Information on Sexually Transmitted Illnesses

Since ancient times, people have been aware of sexually transmitted illnesses or diseases (STDs). Prior to the development of modern medicine, there were few or no therapies available for STDs, and people's ignorance of the illnesses led to their widespread transmission.

Syphilis and gonorrhea were two of the most common STDs in Europe during the Middle Ages. According to one idea, crew men who contracted syphilis during Christopher Columbus's exploration missions disseminated the illness to others. They are believed to have acquired syphilis while in the Americas and disseminated it when they docked at ports in Europe after returning. During the Cook expeditions, gonorrhea is believed to have been spread from Tahiti to New Zealand by sailors.

Certain STDs can have devastating, life-altering effects; for instance, syphilis may eventually result in the progressive degeneration of the brain and spinal cord, resulting in mental dysfunction and hallucinations, speech difficulties, and general paresis.

"Infections known as sexually transmitted diseases (STDs) are spread through sexual contact between infected and uninfected individuals. Bacteria, viruses, or parasites may be the source of STDs. Examples include syphilis, chlamydia, gonorrhea, genital herpes, human papillomavirus infection, and HIV/AIDS" [1].

"Also, because to their catastrophic effects on pregnant women and infants as well as their connections to HIV/AIDS, STDs are a top global health priority. Due to biological interactions and the fact that both viruses affect the same populations, STDs and HIV are related. The risk of contracting and spreading HIV can be increased by having certain STDs, and it can also affect how the illness develops. Moreover, STDs can have a negative impact on long-term health, especially in women and young children. Pelvic inflammatory disease, infertility, tubal or ectopic pregnancies, cervical cancer, and perinatal or congenital infections in children born

to infected moms are a few of the health issues that result from STDs" [2].

1.2 Overviewing Sexually Transmitted Diseases (STD) and It's Significance

"Sexual contact, including vaginal, anal, and oral sex, is known to transmit more than 30 different bacteria, viruses, and parasites. During pregnancy, childbirth, and breastfeeding, some STIs can also be passed from mother to kid. The highest prevalence of STIs is associated with eight infections. Among them, syphilis, gonorrhea, chlamydia, and trichomoniasis are currently treatable. The remaining 4 viral diseases—HIV, hepatitis B, herpes simplex virus (HSV), and human papillomavirus—are all fatal (HPV)" [3,4].

The resurgence of neglected STIs like lymphogranuloma venereum, as well as new outbreaks of sexually transmitted diseases including monkeypox, *Shigella sonnei*, *Neisseria meningitidis*, Ebola, and Zika. They signal growing difficulties in providing effective services for the prevention and control of STIs.

1.3 Important Information

- Every day, more than 1 million STDs are contracted around the world, the majority of which have no symptoms.
- An estimated 374 million new cases of one of the four treatable STIs—chlamydia, gonorrhea, syphilis, and trichomoniasis—occur year.
- "Herpes simplex virus (HSV or herpes) genital infections are expected to affect more than 500 million people aged 15 to 49". (1).
- "More than 311 000 deaths from cervical cancer are linked to human papillomavirus (HPV) infection each year" (2).
- "In 2016, it was anticipated that around 1 million pregnant women had syphilis, leading to over 350 000 unfavorable delivery outcomes" (3).
- Through stigma, infertility, malignancies, and pregnancy difficulties, STIs have a direct influence on sexual and reproductive health and can raise the risk of HIV.
- Medication resistance poses a serious challenge to efforts to lower the incidence of STIs globally.

1.4 Scope

The global state of sexual and reproductive health is significantly impacted by STDs. Every

day, more than 1 million STDs are contracted. WHO predicted that 374 million new cases of one of the four STDs—chlamydia (129 million), gonorrhoea (82 million), syphilis (7.1 million), and trichomoniasis—would be diagnosed in 2020. (156 million). In 2016, it was estimated that more than 490 million people had genital herpes, and that 300 million women had HPV infections, which are the main causes of cervical cancer and anal cancer in males who have sex with men. Globally, 296 million people are thought to have chronic hepatitis B.

STIs can have negative effects that go beyond the symptoms of the infection.

The risk of contracting HIV can be increased by STIs such herpes, gonorrhea, and syphilis.

Stillbirth, neonatal mortality, low birth weight, preterm, sepsis, neonatal conjunctivitis, and congenital abnormalities can all be caused by mother-to-child transmission of STIs.

Cervical and other cancers are brought on by HPV infection.

An estimated 820 000 people died from hepatitis B in 2019, primarily from cirrhosis and hepatocellular cancer. STIs including gonorrhoea and chlamydia are significant contributors to female infertility and pelvic inflammatory illness.

1.5 Definition and Classification of Sexually Transmitted Illnesses

“Sexual contact is the primary method of transmission for sexually transmitted diseases (STDs) or sexually transmitted infections (STIs). Usually, there is vaginal, oral, or anal sex involved. Yet, occasionally they can be transmitted through other close physical contact. Many STDs, including herpes and HPV, are transferred through skin-to-skin contact” [5].

There are more than 20 different kinds of STDs, such as:

- Chlamydia
- Herpes genital
- Gonorrhoea
- HIV/AIDS
- HPV
- Public lice
- Syphilis
- Trichomoniasis

- What are the factors that lead to STDs in sexual contact?
- Bacteria, viruses, and parasites can all cause STDs.

Sexually Transmitted Diseases (STDs) Infect Who?:

The majority of STDs affect both sexes, although for many, women may experience more severe health issues as a result. An STD during pregnancy might seriously harm the unborn child's health.

1.6 Symptoms of Sexually Transmitted Diseases (STDs)

It's possible that minor symptoms are all an STD would ever produce. Infections can therefore exist and go undetected. You can still impart it to others, though.

If symptoms exist, they may include:

1. unusual vaginal or penile discharge
2. warts or sores on the vaginal region
3. frequent or painful urination
4. Redness and itching in the vaginal region
5. Blisters or blisters in the mouth or lips
6. undesirable vaginal odor
7. Itching, bruising, or bleeding in the lips
8. Continent pain
9. Fever

1.7 Explanation of Different Types of STDs and their Characteristics

1.7.1 Chlamydial Infection

Chlamydia is caused by Chlamydia trachomatis infection. This widespread infection can spread by anal, vaginal, and oral intercourse. Moreover, during labor, a newborn may contract it.

Chlamydia typically doesn't have any symptoms, but if it isn't treated, it can lead to infertility and other problems. With early therapy, it is simple to cure.

If symptoms do show up, they could be something as simple as a change in vaginal discharge or burning discomfort when urinating.

Whether chlamydia develops as a result of anal sex or spreads from another part of the body, it can also infect the rectum. Rectal discomfort is a potential outcome.

1. Abdominal bleeding
2. Rectal bleeding

If you do experience symptoms, they'll often start to show up about 7–21 days Trusted Source after exposure.

1.7.2 Crab (public lice)

Crab or public lice typically adhere to pubic hair. But, occasionally they can also affect the eyebrows, beard, eyelashes, mustache, and hair in the armpits. Although they are microscopic and difficult to see, a person may probably experience itching in the affected locations.

The appearance of the eggs will mark the beginning of the life cycle. This phase lasts around 610 days. Reliable Source. The lice's first appearance will be that of small crabs. They will last for roughly 23 weeks and require blood to survive. The females will lay additional eggs in the final several days, and the cycle will resume.

Close physical contact, particularly sexual contact, can transmit pubic lice. Moreover, they can spread through sharing bedding or towels. They cannot, however, spread via public toilet.

A person can use a 1% permethrin Trusted Source solution or a comparable product to get rid of pubic lice in the vaginal area. They are sold over-the-counter in the majority of pharmacies and drug stores. It's crucial to adhere to the directions exactly.

The client may require a prescription medicine if pubic lice are harming the hair around their eyes.

1.7.3 Genital herpes

The herpes simplex virus (HSV) is a widespread virus that can infect several body areas, including the skin, cervix, and genitalia.

Typically, HSV-1 affects the mouth. It can spread by saliva or if another person has a mouth sore associated with herpes. During oral intercourse, it may transfer to the vaginal region.

HSV-2 can cause problems in the mouth, anal region, and genital region. It spreads by anal, oral, and vaginal intercourse.

Utensils, toilet seats, swimming pools, soaps, and mattresses cannot spread herpes. Herpes can, however, travel to another area of the body

if a person touches a body part where it is present and then touches another portion of their body.

Herpes remains in the body once it is there. Yet, it typically remains dormant, and many people never have symptoms.

Blisters around the mouth, anus, or vaginal region are the major symptoms. These blisters have the potential to rupture, leaving a painful sore that may take a week or more to cure.

- Among the signs of a first illness are fever and body aches.
- an enlarged lymph node

Some people never experience symptoms, some only experience the first epidemic, and some experience multiple outbreaks.

The first episode is typically the most severe, although those with weakened immune systems, such as those who have HIV, are more likely to experience severe symptoms all at once. Herpes can make it more likely for someone to get HIV or spread it to others.

Even if a person has the herpes virus but is unaware of it, it can still infect others.

Although there is no known cure, medicines can help with any symptoms. Herpes can be stopped from spreading with the help of daily antiviral drugs. Herpes cannot be totally prevented from spreading by using condoms.

1.7.4 Hepatitis B

Hepatitis B can result in liver damage and a long-lasting infection. Once infected, the virus can persist in a person's blood, semen, and other physiological fluids.

Sexual contact, the use of sterile injection equipment, and piercing the skin with a sharp item are all ways that the virus might spread.

During pregnancy or delivery, this infection might be transferred to the unborn child. A doctor can offer advice on how to avoid this, though.

The risk of the virus spreading through breast milk is minimal if the nipples are not damaged, according to the Centers for Disease Control and Prevention (CDC) Trusted Source.

A vaccine that may provide some protection should be discussed with a doctor by those who are at high risk of getting hepatitis B. The vaccine may not provide long-term immunity, however, and the person may need booster doses for continued protection.

1.7.5 Trichomoniasis

Everyone can get trich, or trich, however females are more prone to show symptoms. This infection is brought on by *Trichomonas vaginalis*.

The vagina is most likely to be affected in females. The infection might start in the male urethra.

Penetrative intercourse and vulva-to-vulva touch are two ways that transmission can happen.

Many folks have no symptoms at all. If symptoms do manifest, they may include: odd discharge painful ejaculations painful or uncomfortable sex.

Trichomoniasis can also cause problems during pregnancy and raise the risk of catching and spreading HIV.

Trichomoniasis can be treated with medicine, but both partners will likely need to be treated in order to prevent the illness from returning. Trichomoniasis can continue for months or years without therapy.

1.7.6 HIV

The immune system is attacked by the HIV virus. In addition to other methods, it can spread through sexual contact.

A person with HIV is more vulnerable to some other infections. Moreover, those who have HIV are more likely to get other STIs. Without treatment, this propensity for infection worsens and could result in potentially fatal complications.

Any of a person's bodily fluids, including semen, blood, breast milk, vaginal, and rectal fluids, will include HIV once they have the disease. These secretions can spread HIV to other people if they go inside their bodies. This can occur during sexual activity, needle sharing, skin-to-skin contact, childbirth, and lactation.

Treatment can lower the virus's concentration in the body to an undetectable level. This indicates that there is no way for blood testing to find the

virus because its concentration in the blood is so low. Also, it prevents it from spreading to other people.

To maintain low viral levels, an individual with undetectable HIV must continue to adhere to their medication regimen exactly as directed by their doctor.

Using a condom or another barrier method of contraception during vaginal or anal sex and taking preexposure prophylaxis are some other strategies to prevent transmission.

When those who have been exposed to the virus refrain from sharing needles, wear gloves, and dispose of sharps properly, as is the case when working in the healthcare industry, they can use the medicine Trusted Source to help prevent HIV.

1.7.7 Human papillomavirus

A type of virus known as human papillomavirus (HPV) attack the skin and mucous membranes, including the mouth, throat, cervix, and anus. There are many different kinds, and some carry a greater risk than others.

HPV is widespread. Almost 79 million Americans are impacted by it Trusted Source. Except for those who have gotten an HPV vaccine to prevent it, almost everyone who engages in sexual activity will at some point in their lives have HPV.

Many people have no symptoms, however even in these circumstances the virus may still spread. Several HPV strains can cause genital warts. They frequently carry low risk.

Moreover, throat and cervical cancer risk are increased by HPV.

HPV can spread by way of:

- vaginal and anal sex
- oral sex
- genital-to-genital contact
- from a pregnant person to a baby, though this is rare

Vaccination can help prevent the transmission of HPV.

1.7.8 Molluscum contagiosum

A infectious viral skin illness that is typically benign is called molluscum contagiosum.

Both adults and children are susceptible. When it affects adults, doctors classify it as a STI; but, when it affects young children, they do not. It is a specific sort of pox, according to experts.

Adults are more likely to contract the disease by skin-to-skin contact or lesions, frequently during sexual activities. Little, rounded bumps and indents on the skin are signs of the condition. One of these might exist. Although it may take some time, the lump or bumps typically go away on their own, and while they're still there, they're still contagious.

“Using specific prescription drugs, applying chemicals or an electrical current, or freezing them are a few options to get rid of the bumps. Using a barrier method of contraception can help prevent the transmission of the virus. Anyone who has the virus should wash their hands carefully after touching an affected area of skin to prevent the spread of the virus to another part of the body or another person” [5].

1.7.9 Scabies

Sarcoptes scabiei, a mite, is the cause of the contagious skin disorder known as scabies. A rash resembling pimples may develop anywhere on the body as a result of this illness.

After being exposed for up to 26 weeks, a person may experience the symptoms for the first time. If they contract scabies once more, symptoms could start to show 14 days following exposure. Before a person is even aware that they have scabies, the condition can spread.

Skin-to-skin contact and sharing of objects like towels and bedding are the two main ways that transmission happens.

Topical treatments that destroy the mites can be recommended by a physician. When suffering with scabies, a person should refrain from skin-to-skin contact with others. They should disinfect any personal belongings, such as all bedding and clothing, when it has cleared up.

1.7.10 Syphilis

The bacterium *Treponema pallidum* is the cause of syphilis. Early treatment is essential to avoid long-term consequences and lasting harm from this potentially deadly infection.

Typically, there are four stages. A person may experience a circular, firm sore at the infection site in the early stages, which is typically around the genitalia, anus, rectum, or mouth. This typically lasts 36 weeks. Reliable Source.

As the sore is frequently painless and can be concealed, for example in the vagina, it might not be noticeable.

At any moment throughout the infection, the pathogen can spread. An unborn child can contract syphilis during pregnancy.

There could be: at the secondary stage. non-itchy lesions in the mucous membranes, such as the mouth, vagina, or anus, that appear as rough, brownish or red spots on the palms of the hands or soles of the feet.

- an enlarged lymph node
- pain from hair loss
- weight loss fatigue fever aches in the muscles

While the symptoms vanish during the latent stage, the germs are still present in the body and can still harm the body.

Life-threatening problems can affect the brain, neurological system, eyes, heart, and a number of other organs in the tertiary stage. Which body area the syphilis affects will determine the symptoms at this stage. The only way to confirm whether or not syphilis is present is by conducting a test. If the result is positive, the person should inform their sexual partner or partners, and they, too, should seek medical advice.

Symptoms will appear around 21 days after the transmission of the bacteria, on average, but they can take between 10 and 90 days to appear

1.7.11 Gonorrhea

The bacteria *Neisseria gonorrhoeae* causes the widespread infection known as gonorrhea. Without treatment, HPV can cause consequences that are life-threatening and is very contagious.

The spread of gonorrhea can occur during anal, vaginal, or oral intercourse. Gonorrhea can also cause pink eye if a person contacts a part of their body that is infected and then touches their eye.

Also, when giving delivery, a baby could contract this illness.

In warm, moist body regions like the vagina, penis, mouth, rectum, and eye, *N. gonorrhoeae* thrive. Sexual interaction can help spread this virus.

Most of the time, there are no symptoms, however if any do exist, they may include:

- discomfort during urinating, discharge, and genital swelling
- bleeding between periods
- If it affects the rectum, it can lead to:
- anal itching
- pain during bowel movements
- discharge

Burning discomfort in the throat and enlarged lymph nodes might be symptoms of an infection brought on by oral sex.

Infected women may develop pelvic inflammatory disease. In contrast, the tube where sperm are stored in males, the epididymis, may become inflamed. Both ailments may have an impact on fertility.

Once a person has gonorrhea, the germs can spread through physical contact to other persons and to other regions of the body. Antibiotic therapy typically helps to clear the infection.

114 days after infection, symptoms may start to manifest. Men typically start experiencing symptoms 25 days following exposure. Ladies frequently show no symptoms at all, but if they do, they typically start to show up up to 10 days after exposure.

1.7.12 Chancroid

Haemophilus ducreyi causes the unusual bacterial infection known as chancroid. Only sexual interaction can spread it.

It results in uncomfortable genital sores. Furthermore, chancroid can make HIV more likely and more difficult to treat.

Antibiotics are used as a treatment. Each person who is diagnosed with chancroid should inform any partners with whom they have had sexual contact.

1.8 Predisposing Factors to Sexually Transmitted Diseases

1) Age

In the United States, between the ages of 15 and 24 account for nearly 50% of all STD diagnoses. In this group, your chance of contracting an STD increases with the age of your first sexual contact.

2) Women

Men transmit STDs to women more frequently than women transmit them to men due to the fact that many STDs in men might be asymptomatic and that they can penetrate the female vagina during sexual activity. Although they are not failsafe, condoms can significantly lower your risk of contracting an STD. Moreover, some STDs can harm the fetus if they are contracted by pregnant women.

3) Minorities

According to research, STD incidence is higher among men and women who belong to minority groups, particularly those who are Black or Mexican in heritage.

4) Partners with a history of a STI, several partners, and newly dating partners

Inquire about your new partner's history of relationships, whether they have been screened for STDs, and whether they have ever had an STD. Before to your first sexual contact, it is advised that a healthcare professional screen you and any new partner.

5) History of STD

Anyone with a prior history of an STD, particularly HIV/AIDS, is at a higher risk of carrying any other STD. In other words, having an STD makes you more vulnerable to being infected with another STD in the future.

6) Males Who Have Sexual Contact with Men

Men who have sex with other males are reportedly more likely to be carrying a STI that can spread to other people. This is especially true for HIV, however there have also been reports of higher rates of syphilis, gonorrhea, and chlamydia.

7) Unsafe sexual behavior

Without condoms, all sexual activity has the potential to spread Diseases. Both anal and vaginal sex are included in this. Diseases like chlamydia, gonorrhea, and herpes can still be spread through oral sex. Keep in mind that even those who are symptom-free might still transmit the disease

1.9 Symptoms of Sexually Transmitted Illnesses

When an STD first manifests as a symptomatic STI, you could initially notice:

- Pain or discomfort while urinating or engaging in sexual activity
- Vaginal, penis, testicles, anus, buttocks, thighs, or mouth sores, pimples, or rashes
- unusual bleeding or discharge from the vagina or penis
- testicles that are inflamed or hurt
- Itching in or near the genital area
- unexpected bleeding or periods following sexual activity

However, keep in mind that not all STIs cause symptoms.

Symptoms can differ if a STI develops into an STD. Some of these, such as pain during sexual activity, pain while urination, and irregular or painful periods, might be similar to the aforementioned.

However, additional symptoms can vary greatly depending on the STD. They may consist of:

- I. Fever
- II. Recurring pain
- III. Fatigue
- IV. Memory loss
- V. Changes to vision or hearing
- VI. Nausea
- VII. Weight loss
- VIII. Lumps or swellings

All STDs are caused by an STI.

These infections are typically spread via sexual contact, such as through the exchange of bodily fluids or skin particles during vaginal, oral, and anal intercourse. Some of them, especially if they're treated, never develop into diseases and some of them even go away by themselves.

Yet, a STI can develop into an STD if the bacteria that caused the infection end up harming body cells and impairing its activities.

1.10 Types of Sexually Transmitted Illnesses

There are fewer STDs than STIs, despite the long list of STIs.

These range from some cancers brought on by the human papillomavirus to pelvic inflammatory disease (PID), which is brought on by STIs including chlamydia and gonorrhea (HPV). The primary STDs to be wary of are listed below:

1. Inflammatory disease of the pelvis Common STIs like gonorrhea, chlamydia, and trichomoniasis can cause PID if untreated. However, not every instance of PID is brought on by a STI as other bacterial infections can also be a factor. The Centers for Disease Control and Prevention estimates that around 2.5 million women in the United States have a reported lifetime history of receiving a PID diagnosis (CDC).

Although being a disease, this infection of the female reproductive system sometimes goes undetected. Individuals who do exhibit symptoms could go through:

- Lower abdominal or pelvic pain
- Pain when urinating or having penetrative vaginal sex
- abnormal, painful, or excessive vaginal bleeding
- strange vaginal discharge
- Nausea
- a high degree

When PID is identified early enough, antibiotics can be used to treat it successfully. Any scarring that may have developed on the fallopian tubes won't be treated, though.

Almost 1 in 10 PID sufferers experience infertility as a result of this scarring, which can increase the likelihood of an ectopic pregnancy.

2). Tertiary syphilis

Syphilis, a very uncommon illness, is regarded as a STI in its early stages. One or more tiny, round sores on the genitalia, anus, or mouth are the infection's earliest symptoms. The latent phase of syphilis, which has no symptoms, will develop if untreated. But from here, about 25% of people will go on to acquire secondary syphilis, a process that can take anywhere from 10 to 30 years after the first infection. Many organ systems in the body may suffer major effects as a result of this condition, including:

- vision impairment
- hearing impairment

- loss of memory
- disorders of the mind
- infections of the spinal column or brain
- cardiac disease

Syphilis causes less harm when it is identified and treated earlier. Although injections of penicillin are frequently used to treat tertiary syphilis and eradicate the bacteria from the body, they cannot repair any harm that has already been done. Of course, additional medications and treatments can be necessary if the condition affects vital organs like the heart.

3.) HPV (human papillomavirus) While certain HPV strains appear to have no disease-causing properties, others can result in aberrant cell alterations.

Cancer, such as oral cancer, cervical cancer, vulvar cancer, penile cancer, and anal cancer, may result from this.

According to the National Cancer Institute, HPV 16 and HPV 18 are primarily responsible for the majority of HPV-related cancer cases in the country. Nearly all cervical cancers are brought on by HPV, as are more than 90% of anal cancers, 75% of vaginal cancers, and more than 60% of penile cancers. Depending on which parts of the body these malignancies impact, different symptoms may be present. Pain, bleeding, and swelling can all be common. Early cancer detection makes it frequently simpler to administer chemotherapy, radiation, or do surgery. There are certain screening tests available to find precancerous cell alterations brought on by HPV.

4) Warts on the genitalia

Genital warts are a condition that can be brought on by some HPV strains with lower risk. Almost 350,000 people experience these skin-colored or white lumps on the genitalia or anus each year.

Although they are treated, the virus that causes them may still exist. HPV can sometimes vanish by itself. Warts on the genitalia can also disappear on their own, although they can also reappear. Using a chemical cream or liquid, freezing them off, or burning them off are all possibilities if you want to get rid of them.

5.) AIDS: HIV can weaken the immune system, making it more likely that the patient will get other viruses or bacteria or get certain cancers. Many

people with HIV lead long, robust lives because to modern medicines. But, if the virus is not treated, it can cause AIDS, which makes the body more susceptible to dangerous infections and diseases.

Rapid weight loss, great exhaustion, sores, infections, neurologic problems, and malignancy are all potential symptoms of AIDS.

There is no known treatment for AIDS. Life expectancy without therapy is roughly 3 years because to the multitude of diseases that might be contracted as a result of a highly compromised immune system.

1.11 The Effects of Sexually Transmitted Diseases

Death is one of the serious medical effects of STDs.

Women who have gonorrhea or chlamydia may develop pelvic inflammatory disease (PID), which can impair fertility or cause persistent pain. Ectopic pregnancy with eventual maternal death can also result from PID. There is a strong correlation between some forms of HPV infection and cervical cancer. In many impoverished nations where there are little screening systems for it, this cancer is prevalent and has significant fatality rates.

Herpes and syphilis are two STDs that can have an impact on the pregnancy process and result in spontaneous abortion, early birth, and stillbirth. Gonorrhea and chlamydia can also damage the newborns born to infected women, causing eye infections and blindness. Newborns can contract syphilis, HIV, and herpes, which can result in chronic illness and even death. Herpes can also cause infants' mental impairment.

If left untreated, several STDs in males might cause infertility or urethral constriction. Of course, HIV and AIDS are lethal. Moreover, STDs may have negative societal and economic effects. Women, particularly in developing nations, may be held responsible for an STD or the subsequent infertility. Violence, abandonment, or divorce could result from this. Moreover, STDs can lead to missed work time from illness.

1.12 Long Term Consequences

1) Diarrhea

The name of gonorrhoea is as disgusting as its persistent side effects. It won't always cause symptoms, like chlamydia, so you could not even

be aware of its presence while it messes with your body.

An infection in the testicles brought on by untreated gonorrhea might result in infertility. Similar to chlamydia, it can also result in PID, which raises the chance of an ectopic pregnancy, infertility, and chronic pain.

Infection with gonorrhea also raises the possibility of HIV transmission in people of any gender.

2) HPV

Genital warts can be brought on by the human papillomavirus, or HPV, although not always. Even if there are no warts in the area, you can contract HPV. If you have warts, it can be treated. There are several HPV virus strains, and a small number of them have occasionally been associated to cancers of the mouth, throat, and cervix.

The good news is that frequent cervical screening through the National Cervical Screening Program can accurately detect an HPV infection. You should discuss getting a cervical screening test with a doctor or nurse if you have a cervix and are older than 25.

You can also receive the HPV vaccination, which is available to both sexes. On the HPV Vaccination website, you may read more about how and when to get vaccinated. (Note: Even if you have received the HPV vaccine, you should still have cervical screening examination.

3) For Syphilis In Queensland, the number of diagnosed cases of syphilis increased by more than doubling between 2015 and 2019. It is easily treatable and caused by a particular type of bacteria, but if left untreated, it can cause permanent harm.

Syphilis first causes painless, non-bleeding sores or ulcers around the mouth, anus, penis, or vagina. They resemble an ulcer you would develop if you unintentionally bite your cheek, though that doesn't always pain.

The other signs and symptoms of syphilis infection are comparable to those of the flu. In its later stages, it can result in skin rashes, swollen glands, lumps that resemble warts on your body, hair loss, headaches, exhaustion, and discomfort in your muscles, bones, and joints. Sound awful?

It gets worse. The symptoms of syphilis will appear and disappear over years if not treated. Yet, the infection will still be present in your body and may cause serious, long-lasting issues like harm to the nerves and big blood vessels close to the heart.

A woman who has syphilis during pregnancy can also transmit it to her unborn child, which can result in the infant developing a severe, incapacitating, and potentially fatal infection. For this reason, a syphilis test is frequently advised for women who are expecting.

4) HIV

One of the most typical methods to contract the HIV virus is through unprotected intercourse. Because to its complicated past, HIV is subject to a great deal of unwarranted stigma. But, the truth is that there is no need to stay away from or be afraid of HIV-positive individuals.

During sexual activity or when sharing injecting equipment, HIV can be transmitted when infected pre-cum, semen, blood, or vaginal fluid enters the body of a person who doesn't have the virus. HIV cannot be contracted through kissing, hugging, sharing utensils, shaking hands, or any other regular social interaction. Yet, because it can be passed on during pregnancy and lactation, it is advised that pregnant women have regular HIV tests.

HIV can develop into AIDS (Acquired Immune Deficiency Syndrome) if it is not treated (AIDS). As a result, the body may become more susceptible to infections that can cause significant disease and impair the immune system.

There are numerous strategies to avoid contracting HIV. They include asking potential partners about their HIV status before participating in sexual activity and using condoms during anal and vaginal sex. Pre-exposure Prophylaxis, often known as PrEP, is a daily tablet that effectively stops the HIV virus from being established in the body. When persons are participating in high-risk behaviors like unprotected anal intercourse, it is advised. If, for instance, a condom breaks and there is fear the individual may have HIV, post exposure prophylaxis, or PEP, is also a possibility to assist in lowering the risk of contracting HIV.

Using a practice known as U=U (Undetectable = Untransmissible), people with HIV can also lessen their risk of transmitting the virus to sexual

partners. A person with HIV is less likely to transmit the virus through intercourse if they are receiving HIV therapy and have an undetectable viral load (extremely low levels of HIV in their blood test). See HIV prevention for additional information. Although there has been significant progress in HIV prevention and treatment in terms of minimizing its symptoms and transmission, it is still critical to receive a diagnosis as soon as possible in order to begin treatment.

1.13 Psychological Effect of STDS

Paraphrases are essential and have a social aspect to them.

[5] "Those with STI diagnoses described feelings of guilt, anxiety, embarrassment, loneliness, fear of rejection, and fear of not being sexually attractive".

[3,4,6,7] "Shame may result from breaking a rule or norm, from performing below par, or from a character flaw that is difficult to fix. Financial impact of STDs"

In 1994, it was estimated that the annual cost of a sexually transmitted HIV infection was almost \$6.7 billion. 8 The total cost of STDs in the United States in 1994 increased to around \$17 billion when these expenses were taken into account. These cost projections highlight the significant economic impact STDs have on the United States. Failure to detect and treat STDs in their early, acute phases contributes significantly to their direct expenses. For instance, avoidable consequences from untreated, initially uncomplicated infections account for roughly three-fourths of the \$1.5 billion cost of chlamydial infections.

- present-day tactics and interventions
- Overview of the current STD prevention and control methods

An infectious syphilis pandemic that was catastrophic spread across Western Europe towards the end of the 15th century. This group of "venereal diseases" was initially disregarded as unproblematic until it was noted to be a serious problem among military personnel in the 19th and 20th centuries¹. At the time, observers quickly realized the disease was transmitted sexually. Beginning in the early 1980s, the HIV/AIDS epidemic and awareness of the role that STIs play in promoting sexual transmission

of HIV2 further fueled interest in sexually transmitted infections (STIs).

As it was demonstrated that various STI control interventions can aid in slowing the spread of HIV, interest in STI control reached a new high. Moreover, this can be accomplished by utilizing low-tech in sustainable and affordable control programs.

Yet, STIs are still prevalent today despite decades of control efforts. Because STIs are behavioral, societal, and political issues as well as biological and medical ones, it is difficult to conduct control programs effectively and economic issues, which include a wide range of aspects that have not been properly handled in the past. This realization is gradually leading to more multidisciplinary, holistic approaches to STI control. The epidemiology of STIs and HIV, however, appears to be evolving, and control initiatives may soon face a serious threat once more.

Infection rates from sexually transmitted diseases (STIs) are still very high all over the world. According to estimates, gonorrhoea, chlamydia, syphilis, and trichomonas infections are the main causes of the more than 1 million treatable STIs that are acquired every day globally. In addition, new cases of infections that are spread through sex, such as the Zika virus, Ebola, *Neisseria meningitidis*, *Shigella sonnei*, and monkeypox, as well as the resurgence of neglected STIs, increasing difficulties in providing effective care for STI prevention and control, including lymphogranuloma venereum.

Some STIs can have long-term, permanent effects if they are not treated, including chronic pelvic pain, malignancy, infertility, unfavorable pregnancies, and congenital problems, some of which can be deadly.

The implementation of the revised Global Health Sector Strategy for HIV, viral hepatitis, and sexually transmitted infections for the years 2022-2030 was approved by the 75th World Health Assembly in May 2022. (GHSS). By 2030, the new policies call for the eradication of AIDS, viral hepatitis, and STI epidemics.

The GHSS established challenging goals for STIs to:

Reduce the number of new cases of syphilis, gonorrhoea, chlamydia, and trichomoniasis;

decrease the number of new cases of congenital syphilis; increase the proportion of girls who have received the full dose of the human papillomavirus (HPV) vaccine by the age of 15; increase the percentage of people who are screened for syphilis among priority populations and pregnant women; increase the percentage of women who are

Delivering high-quality, evidence-based, patient-centered STIs services throughout the cascade of STIs care, producing STIs data, including communities and civil society, and driving diagnostic, testing, and therapeutic advancements in STI prevention.

In light of this, several strategic and operational changes must be made in the worldwide response to STIs:

Fostering a culture where people are motivated to talk about STDs, practice safer sexual behavior, and seek treatment; stepping up primary prevention; stepping up integration of STD services; enhancing accessibility of people-centered services; bridging funding gaps; promoting the uptake of point-of-care diagnostics and new technologies; and funding research.

To raise and maintain commitment to stop the STI epidemics, WHO will be the driving force behind a multisectoral coalition of allies, supporters, and impacted communities. WHO will take the lead in developing evidence-based standards and norms, and support the use of modern standards, instruments, and methods for providing services by all nations. The WHO will continue to help nations implement their national STI responses through technical support, and it will take the lead in establishing the global STI research agenda.

The World Health Organization (WHO, Reference 2006) views sexuality as a fundamental component of being human, and sexual fulfillment and good sexual function are seen as necessary and integral to quality of life (e.g., Yuen Loke, Citation2013). According to Sandfort and Ehrhardt (2004), the term "sexual health" now encompasses all facets of sexuality that are connected to health and wellbeing. These include things like non-consensual sex, sexually transmitted diseases, sexual networking, and sexual desire (STIs), including a human immunodeficiency virus infection (HIV). The focus of this study is specifically on STIs, which

continue to be a hazard to the public health globally and negatively impact sexual health.

"Around one million STIs occur every day, making them one of the most prevalent infectious disorders" (Rowley et al., Citation2019). "An estimated 1.2 billion people worldwide are affected by STIs, including HIV, which can have substantial long-term health effects" (Vos et al., 2016). "People in low- and middle-income countries bear the most of the cost of STIs, and women are more affected than men" (Unemo et al., Citation2017, for example) (e.g., James et al., Citation2020). "Moreover, younger individuals (age 25) are more impacted than older individuals (e.g., Kreisel et al., Citation2021; Mohammed et al., citation 2018) and transgender persons, as well as homosexual, bisexual, and other men who have sex with men (MSM) (e.g., Beyrer et al., Citation2016), are disproportionately afflicted by STIs".

"STI prevention behavior-promoting measures The foundation of STI control, primarily for HIV prevention, has long been interventions to minimize sexual behaviors that put people at risk for STIs (e.g., early commencement of sex) and encourage preventative behaviors (e.g., condom usage). Yet, the global HIV epidemic was mostly unabated by the late 2000s and early 2010s, which led to allegations that 30 years of behavioral prevention had failed" (cf. Kippax & Stephenson, Citation2012). Biomedical researchers cited, as an example, the lack of proof from randomized controlled studies that behavioral therapies promoting protective Sexual behaviors could lower the number of new HIV infections, and it was noted that there was evidence to support new biological therapies, such as PrEP and treatment-as-prevention, which are currently receiving a lot of attention (e.g., Padian et al., Citation2010). However behavioral prevention in biomedicine also depends on people's actions (e.g., Kippax & Stephenson, Citation2012). As a result, interventions are needed to encourage a wider variety of STI prevention behaviors, such as routine testing and starting and maintaining HIV therapy or PrEP. The idea of combination prevention (Coates et al., Citation2008), or using a variety of communication channels and utilizing the whole range of prevention techniques, including behavioral, biological, and structural treatments, centers on ways to improve HIV prevention. To encourage condom usage and lessen sexual risk behaviors, numerous research have investigated a variety of behavioral

treatments. “HIV prevention strategies for MSM focus on individuals, small groups, and communities. Individuals are the primary target of counseling or motivational interviewing by a counsellor, educator, other professional, or peer. Multisession discussions are frequently facilitated by a counsellor, facilitator, or peer” (see Herbst et al., 2007). “Sexuality education programs given in schools, after school in communities, or in health clinics are typical interventions for young people” (see Goesling et al., Citation2014).

“Behavioral interventions can effectively encourage condom usage and decrease condomless sex, the number of sex partners, and STI rates in most impacted demographic groups, including young people and MSM, according to a significant body of research” (e.g., Noar, Citation2008; Scott-Sheldon et al., Citation2011). The benefits of behavioral interventions on the number of partners were less dramatic, with an average 15% reduction found; nevertheless, they did enhance the likelihood of condom use or decrease the odds of condomless intercourse and STIs (Noar, Citation2008). Moreover, meta-analytic research has dispelled earlier concerns about a dearth of strong evidence by showing that behavioral interventions can considerably lower the frequency of HIV infections (Scott-Sheldon et al., Citation2011) (e.g., Padian et al., Citation2010).

Evidence from a meta-analysis shows that behavioral HIV prevention programs aimed at reducing sexual partner and STI rates in teenagers can also enhance condom usage and delay or avoid penetrative sex (Johnson et al., Citation2011). Although abstinence-only programs are ineffectual, evidence suggests that school-based sexual-health and relationship education programs help reduce adolescents' sexual risk behaviors (Denford et al., Citation2017). Also, an analysis of research primarily involving teenagers and young adults revealed that individual behavioral counseling in primary care can enhance condom use and lower incidence of STIs and sexually transmitted infections (STIs) (Henderson et al., Citation2020).

“The use of condoms and abstinence among young people may be increased by digital communication technology-based treatments (such as computer programs, texting, websites, social media, and combinations thereof), according to findings from a meta-analysis” (Widman et al., Citation2018)

In order to prevent and eradicate sexually transmitted diseases (STDs), which are a

significant public health concern, many policies have been put in place. They consist of:

- Education and Information Educating the public on the risks of STDs, how they spread, and how to prevent them is one of the most crucial tactics. Information on condom use, safe sexual practices, and routine testing are some of the topics covered in this.
- Testing and screening The prevention of STDs begins with routine testing. This includes screenings for prevalent STDs like chlamydia, syphilis, gonorrhea, and HIV. Early STD detection by screening lowers the risk of complications and the spread of STDs to others by enabling rapid treatment.
- Management and Treatment: Controlling the spread of STDs requires effective treatment and management. This includes antiretroviral medication for viral STDs like HIV and medicines for bacterial STDs like chlamydia and gonorrhea. In some circumstances, medicine can be used to control symptoms and stop the spread of disease.
- Contact Retracement Contact tracing is a procedure used to locate and get in touch with persons who have been in close proximity to an infected person. This lowers the danger of spreading STDs to others by enabling early detection and treatment.
- Vaccination: Vaccination is a highly effective way to prevent STDs, especially for viruses like HPV and hepatitis B. Regular vaccination can reduce the incidence of these STDs and help to control outbreaks.
- Access to Services: Making sure that people have access to comprehensive sexual and reproductive health services is important for controlling STDs. This includes measures that try to lower the risk of transmission, including condoms, as well as access to testing, treatment, and counseling services, distribution and harm reduction programs.
- Partnership and Collaboration: Effective control and elimination of STDs requires the collaboration of various stakeholders, including healthcare professionals, community-based groups, public health organizations, and the general public. Working together, these groups can implement effective prevention and control strategies and help to reduce the impact of STDs on communities.
- When effectively implemented, these techniques can minimize the spread of STDs, increase access to care, and enhance the

health of persons who are afflicted with these conditions.

The assessment of the effectiveness and limitations of current approaches to control and eliminate sexually transmitted diseases (STDs) can provide valuable information for improving the current strategies and developing new ones.

- Education and Awareness: This approach has been effective in increasing public knowledge about STDs and reducing stigma associated with them. However, this approach may not be effective in reaching certain populations, such as those who are marginalized or have limited access to healthcare.
 - Screening and Testing: Regular screening and testing have been shown to be effective in detecting STDs in their early stages and reducing the spread of disease. However, this approach may be limited by factors such as cost, availability, and the stigma associated with testing.
 - Treatment and Management: Effective treatment and management of STDs can help to control their spread and reduce the risk of complications. However, the availability of treatment may be limited in some areas, and there may be barriers to accessing care, such as cost, stigma, and lack of healthcare facilities.
 - Contact Tracing: Contact tracing has been shown to be effective in reducing the spread of STDs and improving the timeliness of diagnosis and treatment. However, this approach may be limited by privacy concerns and the difficulty of reaching infected individuals.
 - Immunization: Studies have shown that immunization is quite efficient in preventing STDs and containing outbreaks. In some places, access to vaccines can be restricted, and there might be questions regarding the effectiveness and safety of vaccines.
 - Access to Services: It has been demonstrated that ensuring that people have access to comprehensive sexual and reproductive health care is effective in halting the spread of STDs and enhancing health outcomes. This strategy, meanwhile, might be constrained by things like cost, a lack of healthcare facilities, and the shame attached to seeking help.
 - Partnership and Collaboration: Partnership and collaboration among various stakeholders have been shown to be effective in improving the implementation and effectiveness of STD control and elimination strategies. However, there may be challenges in getting all stakeholders to agree on a common approach, and there may be conflicting interests among stakeholders.
- Current approaches to control and eliminate STDs have had varying levels of effectiveness and limitations. Regular evaluation of these strategies and addressing their limitations is essential for improving the overall impact of STD control and elimination efforts.
 - The World Health Organization (WHO) plays a crucial role in addressing sexually transmitted diseases (STDs) globally. WHO works to support countries in the prevention, diagnosis, and treatment of STDs, and to reduce the impact of these diseases on individuals, communities, and societies.
 - Technical Assistance: WHO provides technical assistance to countries to help them develop and implement effective STD control and elimination programs. This includes providing guidance on screening and testing, treatment and management, and vaccine implementation.
 - Advocacy and Awareness: WHO advocates for increased attention and investment in STD control and elimination efforts, and raises awareness about the impact of STDs on global health. WHO also works to reduce stigma and discrimination associated with STDs and to promote human rights for those affected by these diseases.
 - Surveillance and Monitoring: WHO collects and analyzes data on the incidence and prevalence of STDs to better understand the impact of these diseases and to inform prevention and control efforts. WHO also provides guidance on surveillance and monitoring methods to countries.
 - Research and Development: WHO supports research and development of new tools and technologies to prevent and control STDs, such as vaccines, rapid diagnostic tests, and new treatments.
 - Partnership and Collaboration: In order to promote comprehensive and successful STD control and elimination strategies, WHO works closely with a variety of partners, including other international organizations, governments, civil society organizations, and the commercial sector.
 - In conclusion, the role of WHO in addressing STDs is vital for improving global health

outcomes and reducing the impact of these diseases on communities and societies. By providing technical assistance, advocacy, data and research, and partnerships, WHO plays a crucial role in promoting and supporting effective STD control and elimination efforts globally

1.14 Who Response/Roles in Addressing STDS

The Global Health Sector Strategy on HIV, Hepatitis and Sexually Transmitted Diseases, 2022–2030 serves as the organization's current directive. Within this framework, WHO:

- ✓ Develops global targets, norms, and standards for STI prevention, testing, and treatment; Supports the assessment of the economic burden of STIs and the stepping up of STI surveillance; Monitors AMR to gonorrhoea globally; and Leads the setting of the global research agenda on STIs, including the development of diagnostic tools, vaccines, and additional medications for gonorrhoea and syphilis.
- ✓ WHO assists nations as part of its mission to: Create national strategic plans and directives
- ✓ Provide a supportive environment where people can talk about STIs, practice safer sexual habits, and get treatment
- ✓ Expand primary prevention (access to and usage of condoms, etc.);
- ✓ STI services should be better integrated into basic healthcare services.
- ✓ Improve and scale up health interventions for impact, such as hepatitis B and HPV vaccination, syphilis screening in priority populations, and increase accessibility to high-quality, people-centered STI care.
- ✓ STI trend monitoring capacity should be improved.
- ✓ Keep an eye out for and react to AMR in gonorrhoea.

1.15 Potential New Strategies and Intervention

There are several potential new strategies and interventions for sexually transmitted diseases (STDs), including:

- Vaccines: The development of vaccines for common STDs such as HIV, herpes, and chlamydia could significantly reduce the

transmission and prevalence of these diseases.

- Increased access to testing and treatment: Making STD testing and treatment more widely available and affordable, including through telemedicine and self-testing options, could help increase detection and treatment rates.
- Partner notification and treatment: Programs that encourage people who test positive for an STD to notify their sexual partners and provide them with testing and treatment could help lower the STD spread.
- Pre-exposure prophylaxis (PrEP): To lower the risk of contracting HIV, PrEP is taking medication before a probable exposure to the virus. Increasing PrEP availability might aid in lowering the prevalence of HIV.
- Behavioral interventions: Educational and behavioral interventions that target high-risk populations could help reduce risky sexual behaviors and prevent the spread of STDs.
- Expansion of HPV vaccination programs to reduce the prevalence of 1)genital warts and certain types of cancer
- Development of new rapid diagnostic tests for a wide range of STDs, which can increase early detection and treatment
- Implementation of digital health technologies, such as telemedicine and mobile apps, to increase access to care and improve patient education and adherence to treatment
- Use of novel antibiotic and antiviral drugs, which can improve treatment outcomes and reduce the risk of antibiotic resistance
- Overall, a multifaceted approach that combines several of these strategies is likely to be most effective in reducing the incidence and impact of STDs

2. DISCUSSION

Globally, sexually transmitted diseases (STDs) are a significant public health issue, and the rise of HIV infections over the past ten years has brought attention to the significance of infections transferred through sexual contact. According to estimates from the World Health Organization, there were 333 million new cases of gonorrhoea, chlamydial infection, syphilis, and trichomoniasis worldwide in 1995. Control programs for STDs must stop and lessen transmission as well as prevent the development of STDs, their problems, and sequelae.

Unprotected sexual contact is the main method of transmission for STIs. Certain STIs can also

spread through contaminated blood or blood products, during pregnancy, childbirth, nursing, and other conditions.

1. STIs have a profound impact on health: If untreated, they can lead to serious consequences including neurological and cardiovascular disease, infertility, ectopic pregnancy, stillbirths, and increased risk of Human Immunodeficiency Virus (HIV). They are also associated with stigma, domestic violence, and affects quality of life.

The majority of STIs have no symptoms. When they are present common symptoms of STIs are vaginal or urethral discharge, genital ulcer and lower abdominal pain.

The most common and curable STIs are trichomonas, chlamydia, gonorrhoea and syphilis. Rapidly increasing antimicrobial resistance is a growing threat for untreatable gonorrhoea.

Viral STIs including HIV, genital herpes simplex virus (HSV), viral hepatitis B, human papillomavirus (HPV) and human T-lymphotropic virus type 1 (HTLV-1) lack or have limited treatment options. Hepatitis B and HPV vaccines are available to protect against infections that can result in cancer of the liver and the cervix, respectively. There is presently no cure for any of the viral STIs HIV, HSV, and HTLV-1; however, HIV and HSV can be treated with medications that can inhibit the virus.

The prevalence of sexually transmitted diseases (STDs) is a significant global health issue. These illnesses, which include HIV infection, rank among the most difficult to treat in contemporary medicine. In underdeveloped nations, STDs have greater rates of incidence and prevalence, concerning levels of antibiotic resistance, higher rates of significant consequences, and interactions with HIV infection. Traditional illnesses including gonorrhea, chlamydial infections, and syphilis, which can have harmful effects on the unborn child and during pregnancy, are frequently left undiagnosed and untreated in these nations. Additional complications, particularly those that affect women, like cervical cancer, ectopic pregnancy, infertility, and pelvic inflammatory disease, pose serious health and societal issues. The incidence and prevalence of STDs may be 20 times higher in the majority of developing nations than they are in industrialized nations.

Most point-prevalence studies are conducted in underdeveloped countries. Such data is helpful

but limited because it is primarily collected from patients or high-risk groups of people, which means that it is not entirely representative of the entire community. Although the developing world is a diverse region, there is at least one thing that unites it: in contrast to the population of wealthy nations, the developing world's STDs are more likely to affect people between the ages of 20 and 40. The result is not just a higher absolute prevalence of STDs in developing nations, but also a potential for future worse.

2. The prevalence of STDs worldwide: Every day, more than 1 million STIs are contracted. According to the WHO, 129 million new cases of chlamydia, 82 million cases of gonorrhea, 7.1 million cases of syphilis, and 7.1 million cases of trichomoniasis will occur worldwide in 2020. (156 million). In 2016, it was estimated that more than 490 million people had genital herpes, and that 300 million women had HPV infections, which are the main causes of cervical cancer and anal cancer in males who have sex with men. Globally, 296 million people are thought to have chronic hepatitis B.

STIs can have negative effects that go beyond the symptoms of the infection.

The risk of contracting HIV can be increased by STIs such herpes, gonorrhea, and syphilis.

Stillbirth, neonatal mortality, low birth weight, preterm, sepsis, neonatal conjunctivitis, and congenital abnormalities can all be caused by mother-to-child transmission of STIs.

Cervical and other cancers are brought on by HPV infection. An estimated 820 000 people died from hepatitis B in 2019, primarily from cirrhosis and hepatocellular cancer. STIs like gonorrhoea and chlamydia are significant contributors to pelvic pain and infertility in women.

Both treatable and incurable STDs can be classified as STDs. *Neisseria gonorrhoeae*, *Chlamydia trachomatis*, *Treponema pallidum*, and *Trichomonas vaginalis* infections are the causes of curable STDs, whereas viruses including HIV, HSV, HPV, and hepatitis B virus are the causes of non-curable STDs.

The World Health Organization (WHO) is in charge of analyzing the issues caused by HIV infection and STDs. It projects that there will be 333 million new adult STD infections every year. 12 million new cases of syphilis, 62 million of gonorrhea, and 89 million for chlamydial

infections and 170 million for trichomoniasis, excluding genital papilloma virus infection which WHO itself had previously estimated at 30 million new cases per year and herpetic infection at 20 million. Genital ulcers show a relatively higher frequency among STDs, and chancroid followed by syphilis is a major cause of genital ulcers in the developing countries. WHO projections for HIV infection show a current range of 1520 million cumulative infections worldwide and it is projected that cumulative worldwide totals of HIV infections will reach 3040 million by the year 2000 [8]. STDs were concentrated in South East Asia with approximately 150 million new cases in 1995 and in sub-Saharan Africa with 64 million. An estimated 820 000 people died from hepatitis B in 2019, primarily from cirrhosis and hepatocellular cancer. STIs like gonorrhoea and chlamydia are significant contributors to pelvic pain and infertility in women.

Both treatable and incurable STDs can be classified as STDs. *Neisseria gonorrhoeae*, *Chlamydia trachomatis*, *Treponema pallidum*, and *Trichomonas vaginalis* infections are the causes of curable STDs, whereas viruses including HIV, HSV, HPV, and hepatitis B virus are the causes of non-curable STDs [9-12].

The World Health Organization (WHO) is in charge of analyzing the issues caused by HIV infection and STDs. It projects that there will be 333 million new adult STD infections every year. 12 million new cases of syphilis, 62 million of gonorrhea, and In wealthy nations between 1980 and 1991, the prevalence of treatable STDs like syphilis and gonorrhea significantly decreased. Some infections either had a very low prevalence overall or were completely nonexistent in some areas of these nations. Contrarily, the situation was very different in developing nations, for instance in eastern Europe and particularly in the recently independent states of the former USSR. In the Russian Federation, the notification rate for syphilis increased 40 times between 1989 and 1995, from 0 in 1989 to 86 per 100 000 in 1994 and 172 in 1995. In comparison to certain developing nations, such as those in Eastern Europe and the Middle East, where the prevalence of HIV infection is low, Poland and Ukraine recorded a disproportionately high number of HIV infections between 1994 and 1995.

Table 1. Lists the overall number of STIs diagnosed each year (excluding HIV)

• Disease
• Total (million) (million)
• Chlamydia bacteria in the genitalia 89
• 62 Gonorrhea
• 12 syphilis
• 7 Chancroid
• Virus that causes genital papilloma 30
• 20 genital herpes
• Trichomoniasis due to protozoa 170

Among particular risk groups, the prevalence of common STDs is quite high in poor nations. Commercial sex workers (CSWs) can have a 50% gonorrhea prevalence rate, a 23–32% syphilis prevalence rate for acute or prior infection, and a 25% *C. trachomatis* positivity rate. In Kenyan urban STD clinics, for instance, 60% of men with gonococcal urethritis or chancroid reported commercial sexual exposure as the probable source of infection [8]. Prostitution is a major contributor to STDs and HIV.

Between 2 and 20% of pregnant women in Africa have gonococcal infections [4,6]. Although though this virus is a widespread STD in many impoverished nations, the industrialized world has a very low prevalence of it.

In some impoverished nations, syphilis prevalence rates among pregnant women range from 1 to 20%. There were high incidences of trichomoniasis among pregnant women in several African surveys, ranging from 10 to 30%. There was no discernible difference between the prevalence rates of this infection among CSWs and pregnant women. Another high risk group includes women and men who visit STD clinics, and infection rates are significantly higher than one might anticipate. It is unacceptable that syphilis is still widespread in many impoverished nations given that it is a treatable illness that can be identified with a very straightforward test.

Studies on HIV seroprevalence have been conducted in the majority of developing nations, particularly among CSWs, intravenous drug users, and pregnant women. Most nations in South-East Asia and sub-Saharan Africa have high rates of infection in these categories. Patients frequently have concomitant infections with HIV and other well-known STDs [13-15]. African STD patients have HIV infection rates as high as 70%, whereas STD patients in Thailand have HIV infection rates as high as 15-20%.

The prevalence or lack of national prevention programs and therapy guidelines, the variety of medical specialties treating STDs, and last but not least reliability all have an impact on the global problem of STDs. Different infecting agents with different host relationships and susceptibilities to therapy, age group, social status, sexual orientation, and sexual behavior of infected people in different continents, countries, and cultures in different time periods. The populations that are frequently researched include pregnant women, sex workers, recruits, STD clinic patrons, and inmates. Turkish STDs as a model for developing nations [16-19].

Except for diseases that are reportable, including syphilis and HIV/AIDS, there is very little information available in Turkey today about the epidemiology of STDs. The reportable diseases for which contact tracing and treatment of infected partners are enforced by law and also free of charge, if patients cannot afford the due cost in Turkey. However, genital chlamydial infections caused by *C. trachomatis* are not reportable and the diagnostic tests are not free of charge.

In developing countries, the most important problem is insufficient sexual education. In Turkey as a model among developing countries, sex and STDs were taboo until the last few decades. However, there are still some cultural values in this country [20-22].

Prostitution, free sex and homosexuality are usually rejected by society. On the other hand, these are very common in Turkey, especially in metropolitan area

To be a virgin is still an important factor for marriage;

The majority of STD patients prefer to hide their illnesses and hardly ever visit a doctor. The majority of STD patients typically ask their friends or pharmacies for medication. The majority of STD patients visit a doctor when serious complications arise.

In reality, the majority of emerging nations still struggle with the aforementioned cultural ideals.

STD prevention programs and activities

Lowering rates of new sex partner acquisition, reducing susceptibility of those exposed, and shortening the infectivity of those who spread the

disease are three areas into which STD control activities can be divided.

In order to manage these activities, national control programs, consisting of intervention strategies and support components, are developed and implemented. These interventions in developing countries include:

Health promotion to change sexual behavior and adoption of safer sex practices; Adequate management of patients with STDs and their sex partners;

Screening for HIV, gonorrhea, syphilis, and chlamydia in high risk groups known to have a high prevalence of infection.

The control programs for STDs in developing countries play an important role in the prevention of these diseases. The control programs in the prevention of STDs in these countries should include:

Professional training;

- Social, political and economic reforms;
- Research projects (early detection programs);
- Laboratory services (specific laboratory technology);
- Counselling centers;
- Safer sex behavior models;
- Treatment regimens;
- Cost-benefit analysis.

3. CONCLUSION

In conclusion, developing nations require more funding for STD screening, diagnosis, treatment, and of course education than developed nations do. The appropriate mix of medical, behavioral, and social therapies should be included in these.

The most frequent way that sexually transmitted illnesses are contracted is through hazardous sexual behavior. So, it is the individual's duty to ensure protected sex. Also, immediate medical treatment should always be sought in the event of any symptoms.

To protect against STIs and HIV, condoms must be used appropriately and often. The best chance for effective treatment, as well as for avoiding problems and further transmission, is through early detection and screening of STI carriers and their sexual partners.

The public health issue of sexually transmitted diseases (STDs) is significant and there are

several strategies in place to control and eliminate them. These include:

Education and Awareness: Educating the public on the risks of STDs, how they spread, and how to prevent them is one of the most crucial tactics. This includes providing information about safe sex practices, condom use, and regular testing.

Screening and Testing: The prevention of STDs begins with routine testing. This includes chlamydia, gonorrhea, syphilis, and HIV testing, as well as testing for other common STDs. Early STD detection by screening lowers the risk of complications and the spread of STDs to others by enabling rapid treatment.

Treatment and Management: Effective treatment and management of STDs is essential to controlling their spread. This includes antibiotics for bacterial STDs such as chlamydia and gonorrhea, and antiretroviral therapy for viral STDs such as HIV. In some cases, medication can also be used to manage symptoms and prevent the progression of disease.

Contact Tracing: Contact tracing is a process used to identify and reach out to people who have had close contact with an infected individual. This allows for early diagnosis and treatment of STDs, reducing the risk of transmission to others.

Vaccination: Vaccination is a highly effective way to prevent STDs, especially for viruses like HPV and hepatitis B. Regular vaccination can reduce the incidence of these STDs and help to control outbreaks.

Access to Services: To effectively combat STDs, it is crucial to guarantee that people have access to comprehensive sexual and reproductive health services. This covers programs that try to lower the risk of transmission, like condom distribution and harm reduction programs, as well as access to testing, treatment, and counseling services.

Partnership and Collaboration: In order to effectively control and eradicate STDs, it is necessary for the public, healthcare professionals, community-based groups, and other stakeholders to work together. These organizations can lessen the burden of STDs on communities by collaborating to adopt efficient prevention and control measures.

When effectively implemented, these techniques can minimize the spread of STDs, increase access to care, and enhance the health of persons who are afflicted with these conditions.

B. The assessment of the effectiveness and limitations of current approaches to control and eliminate sexually transmitted diseases (STDs) can provide valuable information for improving the current strategies and developing new ones.

Effectiveness

Education and Awareness: This approach has been effective in increasing public knowledge about STDs and reducing stigma associated with them. However, this approach may not be effective in reaching certain populations, such as those who are marginalized or have limited access to healthcare.

Screening and Testing: Regular screening and testing have been shown to be effective in detecting STDs in their early stages and reducing the spread of disease. However, this approach may be limited by factors such as cost, availability, and the stigma associated with testing.

Treatment and Management: Effective treatment and management of STDs can help to control their spread and reduce the risk of complications. However, the availability of treatment may be limited in some areas, and there may be barriers to accessing care, such as cost, stigma, and lack of healthcare facilities.

Contact Tracing: Contact tracing has been shown to be effective in reducing the spread of STDs and improving the timeliness of diagnosis and treatment. However, this approach may be limited by privacy concerns and the difficulty of reaching infected individuals.

Immunization: Studies have shown that immunization is quite efficient in preventing STDs and containing outbreaks. In some places, access to vaccines can be restricted, and there might be questions regarding the effectiveness and safety of vaccines.

Access to Services: It has been demonstrated that ensuring that people have access to comprehensive sexual and reproductive health care is effective in halting the spread of STDs and enhancing health outcomes. This strategy, meanwhile, might be constrained by things like

cost, a lack of healthcare facilities, and the shame attached to seeking help.

Partnership and Collaboration: Partnership and collaboration among various stakeholders have been shown to be effective in improving the implementation and effectiveness of STD control and elimination strategies. However, there may be challenges in getting all stakeholders to agree on a common approach, and there may be conflicting interests among stakeholders.

Current approaches to control and eliminate STDs have had varying levels of effectiveness and limitations. Regular evaluation of these strategies and addressing their limitations is essential for improving the overall impact of STD control and elimination efforts.

C. The World Health Organization (WHO) plays a crucial role in addressing sexually transmitted diseases (STDs) globally. WHO works to support countries in the prevention, diagnosis, and treatment of STDs, and to reduce the impact of these diseases on individuals, communities, and societies.

Technical Assistance: WHO provides technical assistance to countries to help them develop and implement effective STD control and elimination programs. This includes providing guidance on screening and testing, treatment and management, and vaccine implementation.

Advocacy and Awareness: WHO advocates for increased attention and investment in STD control and elimination efforts, and raises awareness about the impact of STDs on global health. WHO also works to reduce stigma and discrimination associated with STDs and to promote human rights for those affected by these diseases.

Surveillance and Monitoring: WHO collects and analyzes data on the incidence and prevalence of STDs to better understand the impact of these diseases and to inform prevention and control efforts. WHO also provides guidance on surveillance and monitoring methods to countries.

Research and Development: WHO supports research and development of new tools and technologies to prevent and control STDs, such as vaccines, rapid diagnostic tests, and new treatments.

Partnership and Collaboration: In order to promote comprehensive and successful STD control and elimination strategies, WHO works

closely with a variety of partners, including other international organizations, governments, civil society organizations, and the commercial sector.

In conclusion, the role of WHO in addressing STDs is vital for improving global health outcomes and reducing the impact of these diseases on communities and societies. By providing technical assistance, advocacy, data and research, and partnerships, WHO plays a crucial role in promoting and supporting effective STD control and elimination efforts globally.

CONSENT AND ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Authors have declared that no competing interests exist

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