

INTRODUCTION

Reproductive tract infections (RTIs) are diseases with profound social and health consequences for women, men and children. As one of the world's most neglected health problems, RTIs are related in important way to girls and women's basic sexual and reproductive health and to the acceptability of family planning programmes. Yet, in allocating human and financial health care resources to developing countries, policy makers, program planners, and international donor agencies are generally giving low priority to RTIs. This is because of the mistaken belief that RTIs are not fatal, that they are too expensive and too complicated to treat, and that in most developing countries they affect only small and specialized segments of sexually active adults such as prostitutes.

Reproductive Tract Infections (RTIs), including STIs and HIV/AIDS are being increasingly recognised as a serious public health problem, since 1980s, RTIs cause suffering for both men and women, but their consequences are far more devastating and widespread among women. Amongst women, RTIs often go undiagnosed and untreated, and when left untreated, they lead to complications such as infertility, pelvic inflammatory disease, ectopic pregnancy, miscarriage, cervical cancer and an increased risk of HIV transmission.

Reproductive Tract Infections (RTIs), especially sexually transmitted infections (STIs) cause a wide spectrum of pathology among women which include vaginitis, cervicitis, endometritis, salpingitis, pelvic inflammatory disease (PID), ectopic pregnancy (EP), infertility and also prematurity, stillbirth, conjunctivitis and pneumonia in the neonates. RTIs are a serious concern in the era of HIV since even the non ulcerative STIs increase the risk of HIV transmission by 3-5 folds. It is the burden of asymptomatic disease that is responsible for the frequent and severe or long term morbidity (PID/EP/infertility) and in part for the persistence and spread of STIs in the communities.

SEVERITY OF THE PROBLEM:

Many women and men suffer from reproductive tract infections(RTIs) including sexually transmitted infections (STI). An estimated 340 million new cases of curable STIs occur each year, with 151 million of them in south and southeast Asia. STI are among the top

five disease categories of which adults in developing countries seek health care, and about one-third of STIs globally occur among people younger than 25 years of age.

Young women are particularly susceptible to STI because they have fewer antibodies to fight pathogens and greater cervical ectopy. Adolescent women infected with Chlamydia trachomatis are more likely than their adult counterparts to develop cancer of the cervix, PID and consequently, infertility. Worldwide the majority of new HIV infections occur among young people aged 15-24 and young women are about six times as likely to be infected with HIV as young men.

In India, married women are reluctant to seek medical treatment because of lack of privacy, lack of a female doctor at the health facility, the cost of treatment and their subordinate social status. This reluctance is exacerbated when symptoms are embarrassing as they are with RTI especially among adolescents. A culture of silence shrouds gynecological morbidity throughout India and elsewhere. RTIs/STIs are known to facilitate the acquisition and transmission of HIV. The World Health Organisation estimates that each year, there are over 333 million new cases of curable STIs. HIV/AIDS is a non-curable sexually transmitted infection. UNAIDS calculates that in year 2002 alone, 5 million people became infected with HIV (UNAIDS, 2002).

MEANING & TYPES OF RTIS

The term reproductive tract infections (RTIs) refers to a variety of infections affecting the lower and upper reproductive tract of men and women. **Dixon-Mueller and Wasserheit (1991)** call RTIs as "gender asymmetry" and **Hatcher et al. (1989)** refer to it as "biological sexism". Uninfected women are more susceptible to acquire an infection from an infected male partner than an uninfected male from an infected woman, and women are likely to suffer more serious and long-term consequences, like, pelvic inflammatory disease (PID), ectopic pregnancy, cervical cancer and infertility.

A. Sexually Transmitted Infections (STIs) are a group of infections that are predominantly transmitted through unprotected sexual contact with an infected person. Reproductive Tract Infections (RTIs) are infections of the genital tract. Not all sexually transmitted infections are reproductive tract infections; and not all reproductive tract infections are sexually transmitted; STI refers to the way of transmission whereas RTI refers to the site where the infections develop.

B. Reproductive tract infections (RTIs) include sexually transmitted infections as well as other infections of the reproductive tract that are not transmitted through sexual intercourse. Conversely, because STIs in most cases have much more severe health consequences than other RTIs, the term STIs is used throughout the guidelines to highlight the importance of STIs within reproductive tract infections.

RTIs included a variety of bacterial, viral and protozoa infections of the lower and upper reproductive tracts of both sexes, and most of them are STDs. Women can be infected not only from sexual intercourse, but also from the use of unclean menstrual cloths; insertion of leaves and other materials into vagina to increase a male partner pleasure, prevent pregnancy, or induce abortion, unsafe childbirth or abortion, technique; and other harmful practices such as female circumcision. Most STDs are RTIs although some STDs, such as syphilis, hepatitis, B, and AIDS, are also systemic diseases. Many STDs also affect the mouth, rectum, and urinary tract, the latter being part of the reproductive tract in males but not in females. Female RTIs originate in the lower reproductive tract (external genitals, vagina, and cervix) and, in the absence of early treatment, they can spread to the upper tract (Uterus fallopian tubes, and ovaries). Infections can ascend from the lower to the upper tract spontaneously to cause pelvic inflammatory disease (PID). But the risks of upper tract infection rise dramatically during procedures such as IUD insertion, abortion, and childbirth when instruments are introduced through the cervix.

These consequences of RTI could be particularly confounding in most developing countries where woman's status in the society, and even within the family, is usually dependent on her fertility. To make things worse, RTIs in many cases are asymptomatic among women, making their detection and diagnosis difficult. Despite such grave consequences, policy makers and health planners in developing countries have not given much attention to these infections. In part, it is due to the misconceptions that RTIs are not fatal, are expensive to treat, and that they affect only a particular segment of population, such as commercial sex workers. The risk for women getting RTIs is further exacerbated in the developing countries because of the existing socio-economic and cultural environment. These include financial constraints, gender roles in decision-making, constraints on mobility, health-seeking behaviour during illnesses, and norms related to menstruation, pregnancy and childbirth.

TYPES OF RTI INFECTIONS

Reproductive Tract Infections (RTIs) refer to three different types of infection which affect the reproductive tract, namely endogenous, iatrogenic and sexually transmitted infections, including HIV/AIDS.

Endogenous Infections are probably the most common RTIs worldwide. They result from an overgrowth of organisms normally present in the vagina. Endogenous infections include bacterial vaginosis and candidiasis. These can easily be treated and cured.

Iatrogenic Infections occur when the cause of infection, i.e. a bacterium or other micro-organism, is introduced into the reproductive tract through a medical procedure such as menstrual regulation, induced abortion, the insertion of an IUD or during childbirth. This can happen if surgical instruments used during the procedure have not been properly sterilized, or if an infection that was already present in the lower reproductive tract is pushed through the cervix into the upper reproductive tract.

Sexually Transmitted Infections are caused by viruses, bacteria or parasitic micro-organisms that are transmitted through sexual activity with an infected partner. About 30 different sexually transmitted infections have been identified, some of which are easily treatable (**Population Council, 2001**). Many others are, however, not treatable.

I.3.1 Impact of 'RTI's on Pregnancy

The impact of RTIs on pregnancy depends upon the pathogen involved, the chronicity of infection, and the stage of gestation during time of infection. In general, RTIs appear to pose much problem among pregnant adolescents than in older pregnant women.

Reproductive Tract Infections can cause many diverse pregnancy outcomes, including spontaneous abortion, premature rupture of membranes, premature delivery and consequent low birth weight, and stillbirth. In addition, many RTIs can be passed from mother to infant during pregnancy, childbirth and breast feeding, resulting in serious morbidity and even death for the neonate. Infections can also lead to infertility. Almost all RTIs can cause adverse pregnancy outcomes. STIs tend to have the most serious effects including vertical transmission and ophthalmia neonatorum, which can lead to blindness if not treated promptly. The problem with syphilis during pregnancy is one of the most widespread. In developing countries, between 1-19% of pregnant women test positive for syphilis. In Ghana the figure is

3.2% in Agomenya¹⁰⁹. Any infection that can result in pelvic inflammatory disease (PID) including iatrogenic infections can predispose a woman to ectopic pregnancy. Gonorrhea and chlamydia can also increase the risk of postpartum infection.

I.3.3 Transmittance of RTIs

RTIs are caused by bacterial, parasitic, and viral pathogens. Generally, the pathogens causing RTIs enter the body through the mucous membranes during unprotected vaginal, anal, or oral intercourse with an infected partner. An individual's risk of contracting an RTI or developing sequelae of an RTI is a function of five stages:

1. The risk of interaction with an infected person who may become a regular sex partner;
2. Exposure to the infection of that partner;
3. Acquisition of the RTI when exposed;
4. Development of a symptomatic RTI if infected; and
5. Development of the sequelae following the RTI. The same sexual behaviors may result in the acquisition of different RTIs, depending on which infections are most prevalent in a particular setting. Multiple infections within the same individual are also frequent, as is reinfection if partners have not been adequately treated.

For many STDs, the probability of transmission is **higher from males to females than from females to males**. Most STDs tend to exhibit a “biological sexism”; in other words, anatomic factors appear to make the transmission of STDs more efficient from male to female than from female to male. For example, the risk of acquiring gonorrhea from a single sex act (where one partner is infectious) is approximately 25% for men and 50% for women. Infections tend to occur at an earlier age in females and affect females more severely than men.

RTIs can also be transmitted from the mother to the fetus during pregnancy or to the newborn at delivery. Most adverse outcomes occur before birth or during the first 30 days after birth. Syphilis during pregnancy has been shown to cause infant death, adverse outcome, or syphilitic infants in more than 5% of cases where the pregnancy survives beyond 12 weeks. Gonococcal ophthalmia neonatorum occurs in 2%–6% of newborns.

I.5 HARMFUL PRACTICES ASSOCIATED WITH REPRODUCTIVE TRACT INFECTIONS

Although many indigenous health practices related to female sexuality and reproduction are beneficial or at least being, some practices can cause severe damage to the female reproductive tract. For example, early initiation of sexual activity among young girls: in many parts of the world, girls and married at young age to older men and expected to have intercourse with their husbands before they reach puberty, in other cases, young girls are victims of rape, incest, or child molestation. Early and expose young girls to STDs damage the vagina. Pregnancy occurring before the reproductive tract is fully developed can lead to high rates of miscarriage and stillbirth. Female circumcision: Performed usually on pre-pubescent girls, and carries an immediate risk of extreme pain, shock, severe bleeding, and infection. It is the clinical impression that female circumcision may result in severe complications including recurrent urinary tract infections, PID and infertility.

MAJOR RTI SYNDROMES AND LIKELY CAUSES

Syndrome/symptoms	Likely causes
Urethral discharge (male)	Gonorrhea, chlamydia trichomoniasis
Genital ulcer (male and female)	Syphilis, chancroid, granuloma, inguinale, genital herpes, lymphogranuloma venereum
Inguinal bubo (male and female)	Lymphogranuloma venereum, Chancroid
Scrotal swelling (male)	Gonorrhea, chlamydia
Vaginal discharge (female)	In many cases, no discernible cause; however, trichomoniasis, yeast infection, and/or bacterial vaginosis are possible causes; some vaginal discharge may be cervical discharge caused by gonorrhea or chlamydia
Cervical discharge (female)	Chlamydia and/or gonorrhea Lower abdominal pain (female) Pelvic inflammatory disease caused by gonorrhea or chlamydia

OTHER HARMFUL CONSEQUENCES of RTIs/STDs

I.5.1 Unsafe abortion

Throughout history, women have relied on indigenous methods to terminate unwanted pregnancies. Some are ineffective but harmless, others are poisonous. Leaves, twigs, or other objects inserted in the vagina or uterus can cause infections or damage the reproductive organs. Heavy abdominal massage to induce miscarriage can also damage the organs. Abortion under unsafe conditions can result in heavy bleeding, infection, permanent disability, shock, and death.

Vaginal medication in some cultures women insert roots, leaves, juices and other materials into their vaginas to treat RTIs, infertility, frigidity, or a variety of non gynecological diseases. These interventions can result in chemical or physical damage to the vaginal walls and may increase the risk of curing some RTIs.

I.5.2 Unsafe childbirth

To speed up delivery, some midwives use manual methods to dilate the cervix. Repeated digital manipulation causes vaginal swelling which impedes labor, traditional birth attendants may also reach into the vagina to extract the fetus or placenta, increasing risk of infection and damage. Heavy abdominal massages are sometimes used to facilitate the birth, and birthing material and environments may be unclean.

I.5.3 Infections of the lower Reproductive Tract

According to the limited data available, lower tract infections are common in most developing countries. Studies of women visiting family planning or obstetrics and gynecology clinics, for example, have found evidence of gonorrhea among up to 12 per cent of women studied in Asian groups, 18 per cent in Latin America, and 40 per cent in Africa. Because there have been so few studies of RTIs in developing countries, information on the complications of common infections is scarce. Lack of awareness of RTIs among many health workers and in the general population increases the likelihood that lower tract infections remain untreated, and thus result both in further spread of infection and long-term complications.

I.5.4 Genital Ulcers and Other Lesions

Syphilis is declining in some countries but increasing in others. The primary and most infectious stage consists of painless ulcers that are often unnoticed by women. If untreated,

the disease proceeds to a secondary stage of systemic infection, followed by an extended latent phase, and a potentially lethal tertiary stage. In pregnant women, early stages of syphilis can result in intrauterine growth retardation, premature birth, stillbirth and congenital infection of the infant. Studies of prenatal clients in 11 African countries found evidence of infection in 2-33 percent of pregnant women, with a median infecting rate of 13 percent. Genital lesions caused by syphilis increase the risk of HIV transmission.

I.5.5 Genital herpes

Genital herpes caused by the herpes simplex virus, produces painful genital ulcers that heal spontaneously but recur, the initial outbreak being longest and most intense. Although there is no medical cure yet, symptoms can usually be controlled with therapy. Herpes is most infectious when sores are open, but the disease can also be spread to sexual partners by individuals who are not aware of any symptoms. Although childbirth during an active outbreak of a mother's primary infection is rare, 20-50 percent of babies born under these circumstances will be infested at sites such as the eyes, skin, mouth, central nervous system or lungs. The majority of infants with infections extending beyond the skin, eyes and mouth will suffer permanent neurological damage or death.

I.5.6 Chancroid

Chancroid occurs frequently in developing countries, particularly in Africa. While this disease usually causes a painful ulcer in men, it may occur without symptoms in women. As with other genital lesions, chancroid appears to increase the risk of HIV transmission.

I.5.7 Genital warts

Genital warts are small painless growths caused by the human papillomavirus (HPV) and may be the most common viral STD in industrialized countries. The precise prevalence of HPV infections is unknown, however, because most HPV infections are asymptomatic. These infections are difficult to treat and recurrent infections are common. Preliminary data have established a link between genital warts and HIV infection. Several of the over 50 types of HPV appear to be associated with increased risk of cervical cancer.

I.5.8 STD Through Vaginal Infections

I.5.8.1 Bacterial vaginosis (BV) is probably the most common of all vaginal infections. It can occur without symptoms, or be accompanied by excessive malodorous vaginal discharge. The organisms causing BV are normally found in low numbers in the vagina. BV results

from their rapid multiplication due to a variety of factors that upset the normal balance of bacteria in the vagina. BV may cause upper tract infection. In pregnant women, this may lead to the birth of a premature infant; in non pregnant women, infertility or tubal pregnancy may result.

I.5.8.2 Candidiasis like BV, results from overgrowth of normal vaginal flora. Symptoms include vaginal discharge, irritation and vaginal itching, although no long term or severe complications result. Candidiasis is a common infection, occurring among 11-25 percent of women tested in 17 studies conducted in developing countries. Pregnant women and women taking antibiotics are especially vulnerable.

I.5.8.3. Trichomoniasis a very common STD, may be associated with profuse discharge, burning during urination, bad odour or occasionally lower abdominal pain. Preliminary studies show an association with increased risk of HIV transmission. The median prevalences of trichomoniasis from studies in Africa, Asia and Latin America are 19 percent, 11 percent, and 12 percent respectively. Bacterial vaginosis, candidiasis and trichomoniasis are all treatable infections. Table 1.1 shows the prevalence, rate of transmission from mother to child, and manifestations of selected RTIs.

I.5.9 STD Through Cervical Infections

I.5.9.1. Chlamydia

Chlamydia, the most common bacterial STD in some industrialized countries, is particularly difficult to control for three reasons. First, the majority of women with chlamydial cervicitis have no symptoms so they rarely seek care. Second, accurate tests for Chlamydia are technically demanding and expensive. Finally, at least a week of therapy is required to eradicate lower tract chlamydial infection, in contrast to the single dose regimens available for many other bacterial STDs. Chlamydia can lead to extremely serious complications. Infection in the upper tract causes infertility more frequently than does infection caused by gonorrhea. During pregnancy, Chlamydia may cause stillbirth, premature birth and congenital infections such as pneumonia or eye infections. It also appears to be associated with an increased risk of HIV transmission. Unfortunately, very little information is available about the prevalence of Chlamydia in developing countries. Five African studies found infections in 4-23 percent of women attending family planning or prenatal clinics, or presenting for delivery.

I.5.9.2 Gonorrhea

It is believed to be the most common preventable cause of PID and tubal infertility worldwide. Prevalent in most Western countries, gonorrhea is hyperendemic in parts of Central Africa. It is spread easily: a man's risk of acquiring the disease in a single heterosexual encounter with an infected partner is approximately 20-25 percent, while a woman's risk is probably higher because infected secretions from the male are retained in the vagina following intercourse. In women, symptoms of cervical infections can include abnormal vaginal discharge and burning during urination; upper tract infections may be associated with lower abdominal pain and abnormal menstruation; and a blood borne phase of infection may be manifested by rash and painful joints. Cervical gonorrhea is, however, asymptomatic in at least 20-50 percent of women. Gonorrhea can produce spontaneous abortion, prematurity and potentially blinding eye infections in newborns. Preliminary data now link gonorrhea with an increased risk of HIV transmission. Although gonorrhea can be treated with antibiotics all increasing number of strains are resistant to those antibiotic medications most readily available in the developing world.

I.5.9.3 Cervical Cancer

Although not an infection, appears to be casually related to lower tract infections from some subtypes of HPV which also cause genital warts. About half a million new cases are diagnosed each year worldwide, more than three-quarters of which are found in developing countries. One study of family planning, obstetrics and gynecology clients in Addis Ababa, Ethiopia found that cervical cancer was trice as common among women whose first intercourse had occurred before the age of sixteen, as among those whose first intercourse was at age sixteen or older (21 % of all clients were age twelve or younger at first coitus). In a number of developing countries, particularly in Africa, cervical cancer is the leading cause of death from cancer. It accounts for at least 3-5 percent of all adult female deaths in many areas of the world.

I.5.9.4 STD/RTI Through Infections of the Upper Reproductive Tract

I.5.9.4.1 Pelvic Inflammatory disease (PID)

It consists of infections of the uterus, fallopian tubes and ovaries. Although PID can occur without significant pain, symptoms usually include abdominal pain and abnormal vaginal discharge. Acute cases may require hospitalization. The spread to the upper reproductive tract of gonococcal and chlamydial infections and of bacterial vaginosis organisms is often facilitated by IUD insertion, unsafe abortion or childbirth. PID can cause

severe inflammation and scarring of the fallopian tubes and ovaries, and damage increases with the severity of inflammation and with each recurrent episode. Long-term consequences of PID include infertility, potentially fatal tubal pregnancy, chronic pelvic pain and recurrent bouts of upper tract infection. Upper tract infections during pregnancy raise the possibility that a fetus will abort spontaneously or that an infant will be born too soon and too small. Studies of the prevalence of PID in developing countries are scarce, but rates as high as 20 percent have been found in studies of village women in Kenya, Uganda and India.

Table I. 1.
Consequences of Lower Tract Infections in Women

Infection by site	Complication	Likelihood of Complication Among Infected Women
Genital Ulcers & Other Lesions		
Syphilis	HIV transmission: Fetal death: Low birth weight or prematurity: Congenital infection of infant	Possible 2-10 fold increase 0-25% for early syphilis 15-50% for early syphilis 40-50% for early syphilis
Genital herpes	HIV transmission: Fetal death: Low birth weight or prematurity: Congenital infection of infant	Possible 2-9fold increase 54%, 25%* 35%, 14% 50%, 4%*
Chancroid	HIV transmission	Possible 2-18 fold increase
Genital warts	Increased risk of cervical cancer(for some virus subtypes) Congenital infection of infant	3-10 fold increase approximately 0.25%
Vagina		
Bacterial vaginosis	Upper tract infection (PID) Low birthweight or prematurity	Not known 20-25%
Candidiasis	None	
Trichomoniasis	HIV transmission	Possible 3-fold increase
Cervix		
Chlamydia	Upper tract infection (PID) HIV transmission Fetal death Low birth weight or prematurity Congenital infection of infant	8-10% if untreated 1-23% following abortion** Possible 3-6 fold increase 10-33% 20-30% 25-30%
Gonorrhea	Upper tract infection (PID) HIV transmission Miscarriage or stillbirth Fetal death Congenital infection of infant	10-40% if untreated about 15% following abortion** possible 2-9 fold increase 5-40% 15-67% 30-45%

I.6 RTIS AND HIV/AIDS

AIDS is a wide spectrum of diseases caused by the human immunodeficiency virus (HIV). About half of HIV-infected persons develop AIDS within 10 years. Eighty percent of AIDS patients die within three years of the onset of AIDS symptoms. AIDS is transmitted through heterosexual and homosexual contact. Some infants are infected directly from their mothers, and significant numbers of both children and adults are infected from blood transfusions and unsafe injections (e.g., inoculation with contaminated needles). HIV infection rates have reached 15-20 percent of adults in some African countries.

In a report published in *The Lancet* this year, the World Health Organisation (WHO) estimates that eight to ten million people worldwide are now infected with the AIDS virus, and at least three million women and children were dead because of AIDS in the 1990s. In the major cities of the Americas, Western Europe and sub-Saharan Africa, AIDS is now the leading cause of death for women between the ages of 20-40 years old, and up to 40 per cent of women from 30-34 years old were found to be infected with the AIDS virus in some central African cities. The proportion of pregnant women infected with the AIDS virus ranges from 10-20 per cent in most African countries.

Genital ulceration caused by RTIs such as chancroid, syphilis and herpes increase the likelihood of HIV infection. Trichomonal, chlamydial and gonococcal infections in women may also increase risk of HIV transmission. As with other STDs the risk that a woman will acquire HIV infection from an infected male partner in a single sexual exposure appears to be higher than the risk that a man will acquire HIV from an infected female partner (Hatcher et al., 1989, James Chin, 1990).

Unlike RTIs/STIs, data on HIV/AIDS are well documented. The cumulative number of AIDS cases increased from 42 cases in 1986 to 64,317 cases by December 2002 (39.1% males and 60.9% females). According to the NACP, this represents a reporting rate of 30 percent. The peak age group for females is 30-34 years and for males, 35-39 years. More than 85% of all cases were aged between 15-49 years.

RTIs are, seen more as a 'silent epidemic' and STIs because of their direct relationship to HIV/AIDS are now compelling individuals and societies to re-evaluate their attitudes, prejudices and behaviours. This underscores the need for an enlightened public policy, which seeks to promote the prevention, control and management of RTIs and STIs in

a holistic manner. It is hoped that this policy document, directed first to the lead Health Sector and to all beneficiaries, including Ministries, Departments and Agencies (MDAs), the private sector, NGOs/CBOs, Religious bodies, the GAC, the NPC, our development partners etc., provides such a positive response in the provision of integrated RTI and STI including HIV/AIDS control and management services.

1.8 WOMEN'S BIOLOGICAL AND SOCIAL VULNERABILITY TO RTIS

The major causes of RTIs in women are STDs, poor obstetric care and unsafe abortion. Each of these causes is linked inextricably to women's biological and social roles. The gender asymmetry of STDs places women in a particularly vulnerable position in disease transmission. Not only is an uninfected woman more likely to acquire an STD from an infected male partner than vice versa, but she is likely to suffer more serious long-term consequences such as PID, tubal pregnancy, cervical cancer and infertility. Moreover, her partner's sexual behavior can affect her risk of developing cervical cancer. The association between cervical cancer and a woman's number of sexual partners is well established. Less recognized is the fact that even if a woman is monogamous, her risk of acquiring cervical cancer increases with the number of sexual partners of her husband.

Despite higher levels of male sexual mobility in most societies, as measured by average number of sexual partners, women are often blamed for the spread of STDs. In some languages STDs are even called "the woman's disease." Published research on STDs among heterosexuals often describes female prostitutes as reservoirs of infection while neglecting to recognize the explicitly male demand for services, as well as their refusal to use condoms, and their role in spreading infections to other women. Understanding the social position of girls and women within societies and population subgroups is crucial to identifying strategies for the effective prevention, diagnosis, and treatment of RTIs. In societies where a belief in male supremacy coexists with restrictive social structures that limit women's economic, social and legal independence, men often maintain strong control over female sexuality. Due to double standards of sexual behavior, sexual coercion, and gender discrimination in schooling, employment and property and legal rights, girls and women are frequently powerless either to avoid intercourse with an infected man or to insist that he use a condom or remain monogamous. As a village woman in Sri Lanka explains, "What is the good of refusing [a husband's sexual demands], they will never let us alone. [If I refuse] he will go to some other woman and then what will become of me and my children.

It can be very difficult both for women in non-marital relationships as well as for married women to ask a man to be tested for an STD, to seek treatment, or even to use a condom, especially where the use of priority over fears of health consequences, making infected women reluctant to inform their male partners of their diagnosis, and non-infected women reluctant to inquire about the health status or other sexual involvements of the men they are with. For many women, the perceived risk of being beaten, divorced or abandoned, or of losing a source of emotional or financial support, far exceeds the perceived health risk of acquiring an STD. In many cultures women accept vaginal discharges, discomfort during intercourse, or even the chronic abdominal pain which accompanies some RTIs as an inevitable part of their womanhood. RTIs are something to be endured, along with other reproductive health problems such as sexual abuse, menstrual difficulties, contraceptive side effects, miscarriages, stillbirths and potentially life threatening clandestine abortion or childbirth. RTIs have an additional element of shame and humiliation for many women because they are considered unclean, whereas for young men the symptoms of RTIs are sometimes taken as a sign of sexual potency.’ The invisibility and taboos surrounding RTIs and the belief that they should be endured, create a culture of silence within families and communities that can severely compromise women’s health.

I.13 SURVEILLANCE FOR RTIS

Surveillance is an essential component of effective prevention and control programs for RTIs and is used to determine the need for public health action and assess the effectiveness of interventions and programs. Surveillance is an important means of obtaining baseline information before establishing RTI services. It is also a mechanism for collecting the information needed to calculate the long-term indicators discussed earlier. Ongoing surveillance is used to identify temporal trends in RTI morbidity and is often used to guide decisions regarding the allocation of resources for control and prevention programs. Reporting cases may be mandatory or voluntary, but ideally every country should have an active RTI surveillance system to which cases of disease are reported. In countries that have good vital registration and reporting systems, the number of reported cases is a reliable proxy for the total number of infections of disease with very definite symptoms. Sources of information include medical records, health care facilities, commercial and reference laboratories, and research projects. In general, specialty STD clinics tend to be the most reliable at reporting cases of infection, followed by government facilities and, lastly, private practitioners.

Rapid assessment is another important method for collecting data that uses a similar methodology and is fraught with many of the same issues as surveillance. Unlike surveillance, which is ongoing, rapid assessment is an accelerated form of epidemiologic research used to determine the prevalence of a condition at a point in time and rapidly link the information to public health action. In some situations this method is preferable to conventional epidemiologic research approaches, which can be time-consuming and often lack the capacity to inform policy or program decision making in time. Rapid assessment may be especially important in acute emergency or crisis situations where timely interventions are necessary to improve the reproductive health of women. Surveillance and rapid assessment surveys are useful tools for obtaining information to guide public health efforts to reduce morbidity and mortality associated with RTIs. Determining the level of morbidity in a population has important implications for influencing STD/ RTI program activity. Three epidemiologic measures of disease frequency are commonly used: case counts, proportions, and incidence. These measures are useful for calculating the long-term outcome indicators discussed earlier. For accuracy of all measures of disease frequency, care must be taken in distinguishing between incident, prevalent, and recurrent infections.

I.13.1 Epidemiological Surveillance

An epidemiological surveillance system shall be instituted to monitor the trend of RTIs and other types of infection to be reported at all the levels of the health system. The specialised STIs clinics, Private hospitals and clinics (including Maternity Homes) and pharmacies will also be encouraged to submit periodic returns on the number and types of such cases treated or referred to specialised hospitals. Standardised forms for such reporting purposes will be instituted at all levels. The Integrated Disease Surveillance and Response strategy (IDSR) of the MOH/GHS will continue to be supported and strengthened.

I.13.2 Behavioural Surveillance

Behavioural surveillance shall be conducted periodically among various vulnerable high-risk groups such as long-distance drivers, students, street children (including ‘kaaya ye’), commercial sex workers, men who have sex with men (MSM), etc., in order to determine appropriate policy and programme modifications.

To curb the medical, social and economic impact of Reproductive Tract Infections as a major public health problem in the country. This Policy guideline on RTIs is the first step in

the efforts to tackle this silent epidemic in India. It is hoped that the Policy guidelines will help to define the strategic and administrative framework for the management and control of RTIs/STIs in the country as well as create the necessary environment for all stakeholders to make a commitment towards creating awareness within the populace especially among the youth on the epidemic. The Policy guidelines also aim at encouraging employers, other stakeholders and members of society to clearly identify their roles in the prevention and control of RTIs/STIs. There is a need for commitment on the part of all stakeholders including donors, the private sector, community associations and civil society to play their part in ensuring that the Policy guidelines are translated into action for the benefit of all Indians.

I.14 NEED FOR THE STUDY

The culture of silence surrounding RTIs must be broken not only by women, who often place their own health needs after those of their husbands, children, and other family members, but also by health professionals and the international health and family planning communities.

An effective RTIs prevention and management strategy can only succeed if it is supported and linked to a comprehensive programme of research. Research on RTIs shall in conjunction with research in all aspects of STIs and HIV/AIDS, and be viewed as a cross-cutting intervention to inform policy. Such research shall be action-oriented, interdisciplinary, multifaceted, cost-effective and undertaken whenever feasible in collaboration with similar-interest institutions world-wide. The success of the national research effort will depend on available expertise, research capacity, resources and willingness to undertake the research through government and private sector support. Critical research gaps already identified in on-going programmes are the following: the need to study the changing patterns of anti-microbial susceptibility to STIs, in-depth study to clarify and explain the issues of risk perception and use of preventive methods, study on health seeking behaviour to determine the level and where symptomatic RTIs patients seek care, studies to understand local perceptions and beliefs on reproductive morbidity, need for a follow up study on pricing and availability of STIs drugs with the view to making them more accessible especially to rural young women.

In spite of hectic efforts by the Govt. & Non-Govt. programmes the treatment seeking behavior has not changed much among young women, and this study aims at understanding

the level of knowledge of women on RTIs, sources of drugs, obstacles in seeking early treatment and infrastructural deficiencies in the programme, which will aid the policy makers to adopt suitable strategies. A modest attempt was made in this study to fill some of the gaps in research on RTI/STD which were mentioned above.

CHAPTER SCHEME

The INTRODUCTION deals with basic facts about STIs/RTIs and HIV/AIDS emphasizing on their aetiologies, transmission modes, symptoms, signs and common complications, significance and impact of RTIs, STIs etc on women, need and importance of the study.

The First Chapter: 'REVIEW OF LITERATURE' and overviews of the reviews pertaining to the reproductive tract infections to find the gap in research

The Second Chapter: RESEARCH METHODOLOGY and encompasses Objectives, Hypotheses, Sampling Design, Data Analysis and Limitations etc.

The Third Chapter: SOCIOECONOMIC BACKGROUND OF RESPONDENTS appraises the background conditions of the respondents.

The Fourth Chapter: 'NATURE OF SEXUAL BEHAVIOUR' identifies the life style and sexual behavior of the couples.

The Fifth Chapter: EXPOSURE TO MASS MEDIA AND HEALTH PROGRAMMES BY RESPONDENTS elicits the awareness and exposure of the respondents and spouses to mass media and health programmes.

The Sixth Chapter : 'HEALTH SEEKING BEHAVIOUR OF RESPONDENTS' ON FAMILY PLANING SERVICES, STD/RTI AND AIDS, and explains the nature of treatment sought.

The Seventh Chapter: 'STATUS OF SEVERITY OF EXPERIENCE OF RTIS/STD' observes the symptoms and experience of RTIs of the respondents & spouse.

The Eighth Chapter: 'SOCIAL WORK INTERVENTION' and stresses on the of social work, intervention strategy to increase the Reproductive Health awareness among females and improve treatment seeking behaviour.

The Ninth Chapter FINDINGS AND SUGGESTIONS elicits findings and gives suggestions for controlling STIs.