6.1 Sexually Transmitted Infections (RTIs) among children and adolescents

Reproductive tract infections in children are acquired through three different ways (i) transplacental transmission occurring in utero, intrapartum transmission (during labour and delivery) e.g. syphilis, HIV, cytomegalovirus (CMV) and human papilloma virus infection (HPV) ; (ii) postnatal transmission (during breast-feeding, accidental and through sexual abuse) (iii) due to sexual abuse or in sexually active adolescents who are at risk.

Child sexual abuse is the use of a child as an object of gratification for adult sexual needs or desire. The common sexual abuse encountered by girls is genital contact, masturbation, vaginal, oral or anal intercourse by a male perpetrator, while boys are subjected to fellatio and anal intercourse.

Adolescents and youth in the age group 10-24 years contribute to about 30% of our population. The data from various Indian studies reveal that adolescents indulge in pre-marital sex more frequently and at an early age. STIs, including HIV, are most common among young people aged 15-24 years and more so in young women. The physiological risk of increased susceptibility to infections among adolescent girls is due to the presence of greater cervical ectopy which makes the cervix more susceptible to gonorrhea, chlamydia and HPV. Adolescents today face enhanced vulnerability to unwanted pregnancy and STIs including HIV/AIDS. Studies from African countries suggest that girls marrying at an early age are at high risk of HIV infections. Many interrelated and complex factors that put adolescents at risk of STIs include poor education, unemployment and poverty. Urbanization tends to disrupt family relationships, social networks and traditional values while generating more opportunity for sexual encounters. Lack of information about sexual matters, as well as STI prevention, symptoms and treatment also put both male and female adolescents at risk of STIs. Even when adolescents have accurate knowledge about STD’s, some incorrectly perceive their risk as low either due to familiarity with a sexual partner or as relationship matures or simply because they are passing through a stage of life in which risk taking is particularly attractive especially under the strong influence of their peers, migration and displacement, multiple and concurrent sexual partnership, lack of access to effective and affordable STI services. Therefore there is an urgent need for improving the accessibility of adolescents to preventive and curative services including information and counseling.

In the RCH II, Adolescent Reproductive and Sexual Health (ARSH) Strategy is to be implemented in the primary health care setting based on the implementation Guide for state and district program managers. Under this strategy, it is expected that a core package of promotive, preventive, curative, counseling, referral and outreach services would be provided through the public health care facilities. It states that services for adolescents must demonstrate relevance to the needs and wishes of the young people.

Clinical presentation of RTIs/STIs in children and adolescents

The presenting symptoms of adolescents is very peculiar as very often they present with symptoms other than those of RTI/STI. Therefore risk assessment plays a crucial role. The increasing tendency
of homosexual behavior as reported by some studies must also be kept in mind and ano-genital lesions must be looked for.

**Girls:**

- In general, endogenous vaginitis rather than an STI is the main cause of vaginal discharge among adolescent females.

- Approximately 85% of gonococcal infection in females will be asymptomatic. However, there may be vulval itching, minor discharge, urethritis or proctitis. In pre-pubescent girls, a purulent vulvo-vaginitis may occur.

- Similarly, Chlamydia trachomatis infection is asymptomatic in the majority of cases. Symptoms that may occur in the adolescent are inter-menstrual bleeding, postcoital bleeding and an increase in vaginal secretions.

- Candida albicans is uncommon in adolescents prior to puberty. If present, the adolescent may have a discharge, vulval itching, dyspareunia, peri-anal soreness or a fissuring at the introitus. Attacks of candida vulvitis may be cyclical in nature and corresponds to menstruation.

- Bacterial vaginosis does not produce vulvitis and the adolescent will not complain of itching or soreness.

- The signs of acquired syphilis in children present with small chancres or mucocutaneous moist lesions either on the vulva or anus. Presentation of syphilis is the same in adolescents and adults.

**Boys:**

- Gonorrhea among boys presents as proctitis, urethral discharge, asymptomatic pyuria, penile edema, epididyimitis and testicular swelling. Disseminated gonorrhoea presents with multiple systemic manifestations.

- Chlamydia in males presents as urethritis.

### 6.2 Sexually Transmitted Infections (STIs) among Sex Workers and MSMs

In some groups of population with high risk practices such as sex workers, men having sex with men and intravenous drug users, the prevalence of STIs and HIV is higher than the general population. Treating these clients early and appropriately will reduce risk of HIV infection and if already infected, they can be advised for seeking the available services at the integrated testing and counseling facilities for knowing of HIV status and further follow up action as indicated. It is desirable that all clients with risky behaviour are tested.
6.3 Clinical Management of STI in Most at Risk Groups

High rates of curable STIs have been observed worldwide in commercial sex settings where condom use rates are low and access to effective STI treatment services is limited.

Effective prevention and treatment of STIs among female sex workers requires attention to both symptomatic and asymptomatic infections. The prevention and treatment of STIs in female sex workers in STI clinics should have the following two components:

- **Treatment of Symptomatic Infections**
  - As per the flow charts included in these guidelines.

- **Screening and Treatment of Asymptomatic Infections**
  - Periodic history taking, clinical examination and simple laboratory diagnostics (where available);
  - Periodic presumptive treatment for asymptomatic gonococcal and chlamydial infections (in areas with high STI rates and minimal STI services); and
  - Semi-annual serologic screening for syphilis.

Female sex workers should be encouraged to attend the clinic for routine check-ups. During the visit, the clinic staff should take a detailed history and perform an examination. In addition, even if there is no evidence of infection, treatment is recommended if:

- the sex worker is visiting the clinic for the first time;
- six months have passed since the sex worker last received treatment.

The rationale for presumptively treating sex workers who are asymptomatic is that they are frequently exposed to STIs and they often do not show signs or symptoms even when infected. A sex worker is likely to be exposed and infected with a STI, if the time lapse is more since her last treatment. (Note: This recommendation will be reviewed and revised as data on the epidemiology of STIs among sex workers become available).

It is anticipated as STI prevalence falls, periodic presumptive treatment of asymptomatic STI treatment among sex workers will be tapered to first visit asymptomatic treatment under the following conditions:

- Evidence of low gonococcal and chlamydial infections (10% and below);
- High condom use among sex workers (>70%); and
- High quality STI services for sex workers have been established, with almost 80% of sex workers having access to STI services (80% provided with asymptomatic treatment at least once and are coming to the clinic for regular STI screening).
In such situations, regular visits for routine examination and counseling should be promoted. Sex workers should be counseled at every opportunity (in the clinic and in the community) on the importance of using condoms. Peer educators, outreach workers and clinic staff should reinforce the following message to sex workers visiting the clinic:

- The only reliable way to protect oneself from HIV and STIs is to use condoms consistently and correctly; and
- Antibiotics dispensed at the clinic are effective only for the few curable STIs.

Outreach staff should also remind sex workers about their clinic appointments and help them keep their appointments.

It is also important to cater for STI management needs of MSM population groups. Emergence of anal STIs is cause of concern. Service providers should be sensitive to the needs of the MSM population groups and counsel them about risk reduction, use of condoms and HIV testing.
Flowchart 6.1: Management of STIs during routine Clinic visit by Female Sex Workers

Clinic visit by sex worker

Take history

First visit to clinic or due for presumptive treatment? Yes

Treat for gonorrhoea and chlamydia

Unprotected sex with partner with STIs? Yes

Give treatment according to partner’s symptoms

Yes

Examine Client (external genital, speculum, and bimanual examination)

Draw blood and send to referral laboratory for syphilis test every 6 months

Look for signs of STI on exam

Genital or anorectal ulcers? Yes

Treat according to the genital ulcer flowchart

Bimanual Lower abdominal or cervical motion tenderness? Yes

Treat according to the lower abdominal pain flowchart

Mucopurulent discharge or red cervix? Yes

Treat for gonorrhoea and chlamydia

Visible vaginal discharge? Yes

Treat according to vaginal discharge flowchart

1. Without condom or condom failure
2. All currently active sex workers have positive risk assessment and should be treated for gonococcal and chlamydial cervicitis.
Flowchart 6.2: Flowchart for routine Clinics visit by Male and Transgender Sex Workers

- Clinic visit by client
  - First visit to clinic or due for presumptive treatment?
    - Yes → Treat for gonorrhoea and chlamydia
  - Take history
    - Yes → Give treatment according to partner’s symptoms
  - Unprotected sex with partner with STI?
    - Yes → Treat for gonorrhoea and chlamydia
  - Pharyngitis with history of unprotected oral sex?
    - Yes → Treat for gonorrhoea and chlamydia
  - Anal discharge or tenesmus?
    - Yes → Treat for gonorrhoea and chlamydia
  - Diarrhea, blood in stools, abdominal cramps, nausea, bloating?
    - Yes → Treat for gonorrhoea and chlamydia
      + anti-diarrheal medicines as needed

- Examine Client (oral, external anogenital, digital rectal, proctoscope)
  - Look for signs of STI on exam
    - Yes → Treat according to the genital ulcer flowchart
    - Genital or anorectal ulcers?
      - Yes → Treat for gonorrhoea and chlamydia
      - Rectral pus?
        - Yes → Treat for gonorrhoea and chlamydia
        - Urethral discharge?
          - Yes → Treat according to the urethral discharge flowchart

**Notes:**
- a. Without condom or condom failure
- b. All currently active sex workers have positive risk assessment and should be treated for gonococcal and chlamydial cervicitis.