ABSTRACT

Syphilis is one of the commonest sexually transmitted infections (STIs) in the world as well as in Sri Lanka. Approximately 1000 cases of syphilis per year were reported to government Sexually Transmitted Diseases (STD) clinics during the last 10 years. So far, in Sri Lanka only a few studies have been carried-out among patients with syphilis and the last reported study was conducted in 1990.

Objectives of the study were to describe socio-demographic and behavioural characteristics of patients with syphilis, to assess their knowledge on STIs, to determine the sensitivity of VDRL test in different stages of syphilis and to assess the serological response to treatment.

The study consisted of two components, a descriptive cross sectional study and a retrospective record based study. Descriptive cross sectional study was carried out at the Central STD clinic Colombo among 150 newly registered male and female patients with a diagnosis of syphilis. Interviewer administered questionnaire was used to collect information regarding socio- demographic and behavioural characteristics and knowledge of STIs.

In the retrospective record based study, 463 patient records were analyzed. Data on the stage of syphilis, treatment regimen, pre-treatment VDRL titer and follow up VDRL titers were collected by using data extraction sheet.

According to the descriptive cross sectional study, 45% of the study population had been employed abroad. However, only 10% of the study population had sexual intercourse while abroad.

Even though 69% of patients admitted that they had sexual intercourse with multiple partners only 13% had more than 5 life time partners.

Among males, 82% had multiple life time partners where as 54% females had multiple life time partners.

Mean age of coitarche was 21 years in the study population and 45% of patients had coitarche between 20-24 years. Seventy three percent of patients had sexual intercourse with casual partners and 19% of the study population had engaged in commercial sex (female sex workers or clients of female sex workers). It is noteworthy that higher proportion of patients had used condoms while engaging in commercial sex (75%) than when having sex with casual partners (34%).

Proportion of men who had sex only with men (2%) and drug users (10%) was low.

Proportion of the study population who could name STIs was extremely low. More than 90% of the study population had not heard about common STIs like genital herpes, genital warts and nongonococcal urethritis.

More than 70% of patients knew the modes of STI transmission but proportion of patients who could accurately identify non-transmission modes like sharing clothes (45%) and toilets (38%) with STI patients and casual contact (49%) with STI patients; was lower. Approximately 50% of patients were able to identify symptoms of STIs. Asymptomatic nature of the STIs was known only to 32% of patients while 35-40% were able to identify some complications of STIs. Being a high risk group, this level of knowledge seems not adequate.

A significant proportion had certain misconceptions regarding preventive methods. Of the study population, 68% considered cleaning of genitalia was an effective way of preventing STIs while 45% believed that having sex only with healthy looking partners was a accurate method of preventing STIs.

According to the descriptive record based study sensitivity of VDRL test in late latent syphilis was extremely low (42%). Even though VDRL test has been used to screen syphilis in Sri Lanka during last few decades its sensitivity is unacceptably low to use as a screening test to identify cases of late latent syphilis.

Parenteral penicillin is the first line treatment for syphilis, but 14% of the study population were treated with non penicillin treatment regimens. Reasons given were past history of bronchial asthma (33%), age over 50 years (26%) and past history of food or drug allergy (18%). Even the penicillin skin test was not done on these patients and indications for the non penicillin therapy were questionable.

Rate of decline in VDRL titer depends on the stage of infection and pre treatment VDRL titers. Among patients with infectious syphilis significant (4 fold or more) drop in VDRL titers were seen in 41%, 63%, 70% and 82% of the study population at 3 months, 6 months, 9 months and 1 year respectively; following treatment.

High pre treatment VDRL titers drop faster than lower titers and similar findings were noted in the present study. 88% had significant drop in VDRL titer (4 fold or more than 4 fold) at 1 year following treatment in the group which had higher initial VDRL titers (8 or more) whereas only 27% had similar drop in lower VDRL (<8) group.

Health education programmes should provide more attention on clinical features, the asymptomatic nature and complications of STIs. In addition correct information

should provide to rectify certain misconceptions of STIs. As sensitivity of VDRL test was very low in late latent syphilis, alternative methods should be explored to screen syphilis. The drug of choice for treating syphilis is penicillin and every possible step should be taken to prevent unnecessary restrictions on use of penicillin. Proper set of indications should be identified to use non penicillin treatment regimens.