SEXUALLY TRANSMITTED DISEASES IN TEENAGE GIRLS FROM A REMAND HOME

S.K. TEOH N.F. NGEOW

SUMMARY

Thirty girls who had been detained in a remand home on suspicion of prostitution were examined in the University Hospital, Kuala Lumpur. All except two were below 21 years old. Endocervical and high vaginal swabs were taken for cultures. A sample of blood was taken for serology.

Eleven of the girls [37%] had no evidence of a sexually transmitted disease. The others [63%] had one or more of the following: 5 with positive serology for syphilis, 3 had gonorrhoea, 6 with trichomonas, 2 with candidiasis, 1 with Chlamydia trachomatis, 2 with Ureaplasma urealyticum and 1 with C. vaginale.

With such a high incidence of STD in these young girls with a history of prostitution, it is recommended that a more regular and comprehensive screening be carried out on such high-risk women.

INTRODUCTION

In the last decade or so the incidence of sexually transmitted diseases has been increasing in many countries (Willcox, 1977) including Malaysia as shown by the Ministry of Health in its survey in 1976. Screening of the population at risk is one of the main methods advocated in control programmes against the spread of sexually transmitted diseases. As in Singapore (Rajan,

S.K. Teoh, MBBS, MRCOG, AM Kelinik Nagara, Ipoh, formerly of Department of Obstetrics and Gynaecology, University of Malaya, Kuala Lumpur, Malaysia.

N.F. Ngeow , MBBS (S'pore), M.Sc., (Med. Microbi.)

Department of Medical Microbiology, University of Malaya, Kuala Lumpur, Malaysia.

1977) prostitutes form the largest reservoir of infection and their key role in the spread of STDs is recognised. In Malaysia however there are as yet no legal or social means of persuading prostitutes to be registered and medically screened.

However, girls below the age of 21 years who have been arrested for prostitution can be placed in remand homes for various periods or till they are 21 years of age. In Kuala Lumpur they are detained in the Cheras Home for Rehabilitation of Women, about 10 miles from the city. On admission to the home, blood is usually taken for VDRL serology at a nearby district hospital. The purpose of this study is to screen these young girls more comprehensively for the presence of other STDs and thereby treating them when necessary.

MATERIALS AND METHODS

A total of 30 girls were sent in batches of 5 each week to the Gynaecological Clinic of the University Hospital. These girls had been given a talk on sexually transmitted diseases by the first author about a month earlier and were thus willing to be examined. There were 12 Chinese (40%), 11 Malays (37%) and 7 Indians (23%). All except 2 girls were below 21 years old. About 40% of them were below the age of 18, the youngest being only 13 years old. The girls in this study had already been in the rehabilitation home for periods between 3 to 18 months. It is unlikely for them to be still active professionally while under custody.

At the clinic, each of the girls was examined after a brief history was taken. On pelvic examination, an unlubricated Cusco's speculum was used to expose the cervix and the upper vagina from where four swabs were taken. An endocervical swab was immediately roll-plated on

Thayer-Martin agar (VCN) (Thayer and Martin, 1966) and then placed inside a candle-extinction jar. A charcoal-impregnated swab with both endocervical and high vaginal discharge was plated on chocolate agar and then placed in Stuart's transport medium. Endocervical swab was placed in Eagle's transport medium and kept among ice in a flask. A plain swab with both endocervical and high vaginal discharges was then rolled on to a glass slide and fixed for Gram staining later.

Finally about 5 ml of blood was taken for serological studies: VDRL and TPHA for syphilis and complement fixation tests for *H. simplex, C. trachomatis* and *Mycoplasma*.

The specimens were processed on the same day in the Department of Microbiology whereby the following organisms were specially looked for: Trichomonas vaginalis by direct microscopy, Candida and other yeasts on Sabouraud/Dextose agar, Neisseria gonorrhoea by growth colonies on Thayer-Martin agar and positive results confirmed by oxidase reaction, sugar fermentation and direct flourescent antibody tests while positive isolates were also tested for p-lactamase production, Chlamydia trachomatis by tissue culture in McCoy's cells, Mycoplasma on PPLO agar and Herpes simplex by flourescent antibody and by serology.

RESULTS

Eleven of the 30 girls (37%) were found to be free of any STD. The other 19 girls (63%) had one or more of the following diseases (See Table I).

TABLE I
SEXUALLY TRANSMITTED DISEASES IN
TEENAGE GIRLS FROM REMAND HOME

5	
3	
6	
2	
1	
2	
1	
	3 6 2 1 2

Absence of symptoms was not reliable in ruling out a STD. Out of the 10 girls who had no symptoms, 5 of them had a STD: 2 had ureaplasma, 2 were VDRL reactive and one had trichomonas isolated. Of the 20 girls who complained of vaginal discharge, pruritus vulvae or dysuria, only 10 had a STD. None of the *N. gonorrhoea* cultured from the 3 patients was found to be p-lactamase producing. The appropriate treatment was given and the patients are being followed up.

DISCUSSION

Although the sample under study is small, a 63% incidence of a sexually transmitted disease is quite significant. The number of positive isolates could even be larger if the girls were seen soon after being taken into custody. The three most common STDs discovered in these young girls were syphilis, trichomonas and gonorrhoea, the incidence being 16.5%, 16.5% and 10% respectively. In a study (Goh *et al.* 1978) on 744 obstetric patients in our hospital, the incidence of gonorrhoea was only 0.54% while 2% had trichomonas and 7% had candida infections.

In a study on prostitutes in Singapore (Khoo et al. 1977, 46% of them had syphilis, 8.5% had gonorrhoea, 14.5% had chancroid and 64% had asymptomatic or old chlamydial infections. In a study on prostitutes in Taiwan (Lee et al. 1978) gonorrhoea was found in 8.3% of them.

As the girls were mainly young the figures are even more significant. In Singapore, only 5.6% of women with STD were in the age group of 15-19 years (Rajan, 1978).

ACKNOWLEDGEMENTS

Our thanks to the supervisor of the Cheras Home for Rehabilitation of Women and Ms. K. Alves for their cooperation in this study.

REFERENCES

Goh, T.H., Ngeow, F.Y., and Teoh S.K. (1978): Gonorrhoea Screening in a Malaysian Antenatal Clinic. Presented at the

- 13th Malaysia-Singapore Congress of Medicine, Kuala Lumpur.
- Khoo, R., Sng E.H., Goh A.J. (1977): Incidence of Sexually Transmitted Diseases in prostitutes in Singapore, Asian J. Infectious Diseases, 1, 77-81.
- Lee, B.C., Sebastian J.A., and See R., (1978): Gonorrhoea Screening in a Prostitute Population. *Obstet. Gynaecology*, 51, 229-232.
- National Survey of Sexually Transmitted Diseases, West Malaysia (1976): Ministry of Health, Kuala Lumpur, Malaysia. Unpublished data.

- Rajan, V.S. (1978): Sexually Transmitted Diseases on a Tropical Island. *Brit. J. Ven. Diseases*, 54, 141-143.
- Thayer, J.D. and Martin, J.E. (1966): Improved Media Selective for Cultivation of N. gonorrhoea and N. menigiti-dis. *Pub. Hlth. Rep.* 81, 559-562.
- Willcox, R.R. (1977): Epidemiology of Sexually Transmitted Diseases A Worldwide Review. First W. Pacific & S.E. Asia Regional Conference on STD. Singapore.
- World Health Organisation Technical Report Series 616 (1978): Neisseria gonorrhoea and Gonorrhoeal Infections. WHO Geneva.