

PREGNANT WOMEN WITH SEXUALLY TRANSMITTED DISEASES*

by

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SUMMARY

Of the pregnant women who attended the STD clinic, those with one or more STDs (N=197) were compared with those without STD (N=239). Those, who were single, widowed, divorced or separated, were more in number in the group with STD. More number in either group attended the clinic on referral. Among the infected, 16.75% gave history suggestive of previous episodes of STD. The spouse was the source of STD in 90.40% of women. Trichomoniasis (47.2%), Syphilis (43.1%), and Genital wart (13.7%) were the commonest STDs. Forty six out of 197 women (23.3%) had more than one STD, the commonest combination being Trichomoniasis and Syphilis. Most STDs were detected in the younger age group of 15-25 and in the third trimester. More than a quarter of the syphilitic women (27.1%) were non-compliant to treatment, still possessing the risk of transmitting syphilis to their babies unwittingly.

Introduction

Among the sexually active women who attend the STD clinic, a sizeable number are pregnant. Pregnant women should be regarded as a separate group requiring close surveillance for STD (Zahra 1984). Many causative agents of STD are known

or suspected to be capable of causing prenatal and perinatal effects when they are harboured in the female reproductive tract during pregnancy (Josey 1974). Of the total number of women with STD, who attended the STD clinic during the period 1980-1982, about 10% were pregnant women form a separate epidemiological group which deserves more attention than it has now received.

Material and Methods

The case records of pregnant women who attended the female STD clinic for an-

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ed the material for the study. The social characteristics and clinical details of 179 pregnant women with STD were studied in comparison with 239 pregnant women without STD.

Observations

Age: Most of the women in both the groups (78.17% of women with STD and 69.87% of women without STD) belonged to the age group of 15-25 years and no significant difference was found in the age factor between the groups.

Domicile: Majority of the women in either group (64.47% of women with STD and 65.59% of women without STD) hailed from urban areas. No significant difference was found between the groups.

Marital Status: Though vast majority of women in both the groups were married (92.89% of women with STD and 98.33% of women without STD), a slightly higher number of women with STD (7.11%) were either single, widowed, divorced or separated than women without STD (1.67%).

Mode of Attendance: Referral was the commonest mode of attendance in both the groups (53.3% of women with STD and 45.61% of women without STD), followed by self-reporting (39.09% of women with STD and 35.98% of women without STD). Among those who were brought as contacts on the advice of clinic personnel, the number of women without STD (18.41%) was higher than those with STD (7.61%).

Past History of STD: Though majority of women in both the groups (83.25% of women with STD and 90.79% of women without STD) did not reveal evidence of previous history of STD, a higher number of women with STD (16.75%) than those without STD (9.21%), had evidence of previous history of STD.

Previous Obstetric History: As many

as 42.64% of women with STD and 33.05% of those without STD were pregnant for the first time. Though the previous obstetric history was good in more number of women without STD (44.77%) compared to those with STD (37.06%), no significant difference is found between the groups.

Period of Gestation: A higher number of pregnant women without STD (67.78%) came to the clinic during first or second trimester compared to pregnant women with STD (57.87%). The number of pregnant women with STD (42.13%) seen in third trimester was higher than that of pregnant women without STD (32.22%). No significant difference is found between the groups.

Source of Infection: The husband was the source of infection for 178 out of 183 married women who were pregnant and had STD. Only 11 women (includes widow/divorced/separated) with STD had acquired infection through extra-marital sex.

STD Morbidity in Pregnant women: The most common STD among pregnant women was found to be trichomoniasis (93/197). Syphilis was the second common STD (85/197) followed by genital warts (27/197). Gonococcal infections (5/197), lymphogranuloma venereum (7/197), granuloma venereum (6/197), genital herpes (2/197), and other STDs (10/197) were less common. Chancroid however occupied a middle position (12/197). Forty six out of 197 patients had more than one STD. The most common combination comprised syphilis and trichomoniasis (30/46).

Distribution of STD according to Age: Sixty five out of 85, 69 out of 93 and 21 out of 27 cases of syphilis, trichomoniasis and genital warts respectively, and all cases of gonorrhoea, belonged to the youngest age group of 15-25 years.

Period of Gestation and STD: Tricho-

moniasis (39/93), syphilis (33/85) and genital wart (15/27) were more often detected in those in the third trimester of pregnancy.

Symptomatology of STD in pregnancy: The predominant symptom was 'genital sore' (125/197). Next largest group had no presenting complaint and merely came for check-up (55/197). Other complaints of pregnant women were genital discharge, swelling of genital, pruritus, burning micturition and skin rash.

Compliance to Treatment: It is found that 131 out of 197 pregnant women with STD (66.5%) complied with specific treatment, whereas the rest did not. Those of urban domicile (50/127) showed poorer compliance than those of rural domicile (16/70). Those who had no previous episode of STD (60/164) were more non-compliant than those who had previous STD (6/33). Twenty-three out of 85, 6 out of 27, 26 out of 93 and one out of 5 pregnant women with syphilis, warts, trichomoniasis and gonorrhoea respectively never reported to the clinic for treatment. Age of the patient was not found to influence the compliance to treatment.

Discussion

The problem of STD in pregnancy is of great magnitude. The pregnant women with STD belong to the sexually active age group like the general STD clinic population. The number of unmarried/widowed/divorced/separated women is slightly higher in the group of women with STD than those without. Women in these categories have greater chances of promiscuity and thereby increased risk of STD. More pregnant women with STD attend STD clinic on referral. This only implies their lack of awareness about STD and the availability of treatment

facilities exclusively for STD. Hence it is desirable that obstetricians and gynaecologists and general medical practitioners have a high index of suspicion about STD. Thirty-three pregnant women with STD (16.75%) had previous episode of STD compared to less number of those without STD (9.21%). This is probably attributable to the promiscuity of their husbands who might have had many previous episodes of STD, since 90.36% of those with STD acquired the disease through their marital partners.

Trichomoniasis is found to be common during pregnancy. The sexual transmission of trichomoniasis is now well established (Catterall and Nicol 1960). Trichomoniasis is the most common STD among the general female STD clinic attenders at Madurai also (Jeyasingh *et al* 1982).

The incidence of syphilis among pregnant women is very high. Syphilis is the commonest STD among the total number of men and women with STD in our centre (Jeyasingh *et al* 1985). Such a high prevalence of syphilis in many developing countries is attributed to the different social and environmental patterns, poor or non-existent control measures, illiteracy and many competing priorities for the very limited human and economic resources available (Harris 1975). The number of pregnant women with syphilis detected as early as first trimester is small (22/85) and the majority were seen in the third or second trimester (33/85 and 30/85). While the treatment of the infected mother before the sixteenth week of pregnancy will almost always prevent foetal infection, treatment thereafter will cure the foetus in utero; however, the later the treatment is begun the greater the chance that the infant, although cured, may have

some of the stigmata of congenital syphilis (Fukumara 1981).

Next to trichomoniasis and syphilis, genital wart is found to be common in pregnancy. Such an increased association between wart and pregnancy is well known. Genital warts enlarge in size during pregnancy due to hyperaemia of ano-genital area or more likely because of immune suppression. Warts do not generally pose serious threat during pregnancy and often regress or even clear spontaneously in puerperium (Rein and Chapel, 1975).

The incidence of gonorrhoea is very less as in the general population of women attending our STD clinic. Gonorrhoea is asymptomatic in most women and in many, the relatively mild symptoms do not prompt the patient to seek medical attention. The low incidence of gonorrhoea is also due to lack of routine culture tests for *Neisseria gonorrhoeae* for all women attending the STD clinic.

The unacceptably low incidence of genital herpes is mainly due to lack of confirmatory evidence of diagnosis through viral isolation. The majority of genital herpetic infections are asymptomatic and difficult to recognise on clinical examination, making identification of women whose infants are likely to develop neonatal infection very difficult. Some cases of genital herpes are probably misdiagnosed as chancroid in the absence of confirmatory culture tests since both the conditions may present with multiple, soft, shallow and painful ulcers. Chancroid formed 4.88% (12/247) of total STDs among pregnant women. This is far higher than expected since chancroid is rare in women. The only reason could be overdiagnosis of chancroid, the diagnosis being made

only on clinical grounds (Jeyasingh *et al*, 1985).

Among STDs, syphilis and trichomoniasis are often associated with each other. This is because 1 out of every 4 women who attend our STD clinic is infested with *Trichomonas vaginalis* (Jeyasingh *et al*, 1982), and syphilis is found to be the most common STD next only to trichomoniasis among women (Jeyasingh *et al*, 1985).

Eventhough 66.5% of all pregnant women with STD complied with treatment, it is disturbing to note that 23 out of 85 those with syphilis had not received specific treatment. Thus a proportion of pregnant syphilitic women still possessed the risk of transmitting syphilis to their innocent babies. Very often STD patients, in general, and women, in particular, do not comply with treatment and remain as transmitters of STD in their sexual milieu. The main hindrances to the good treatment compliance are social stigma and lack of awareness about the serious complications of STD. Better case holding, should be achieved in STD clinics, since good compliance to treatment of STD patients is an important factor in the control of STD. A preponderance of rural women with good compliance is possibly due to fear of STD and greater faith in physicians. The increased incidence of non-compliance to treatment among those who had no previous episode(s) of STD is attributable to their ignorance about the seriousness of the problem of STD.

Following suggestions are made, based on our findings:

1. Pregnant women should be regarded as an 'at risk' group and they should be screened for all STDs, in general, and syphilis, gonorrhoea and genital herpes,

in particular, irrespective of their social background.

2. Serological tests for syphilis (STS) should be performed for all pregnant women at the time of their first visit and in the third trimester of pregnancy to detect syphilis, overt or latent, in order to prevent the mortality and morbidity due to congenital syphilis.

3. Antenatal clinics should function in close association with STD clinics. The services of a venereologist should be readily sought for the interpretation of STS, since it can be problematic at times. The fact that pregnancy is one of the causes of biological false positive reaction (BFP) to the non-treponemal test like Blood VDRL slide test, should be remembered.

4. The obstetricians and gynaecologists should be well versed with current treatment schedules for STD recommended by the World Health Organisation.

5. Whenever any STD is diagnosed in a pregnant woman, efforts should be made to refer her husband or sexual partner(s) to STD clinic for investigation and treatment.

tion and treatment. This is of utmost epidemiological importance.

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The disappearance of mucosal folds and formation of polypoid processes have been reported in tubes from women who have been sterilized for more than 5 years (Vespaux et al 1980). But the

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