Prevention of sexually transmitted diseases

The Shurugwi sex-workers project

V. CHIPFAKACHA

Abstract **Sex-workers play an important role in the spread of sexually transmitted diseases (STDs) and this article tries to show that they can also play an important role in their prevention. Community participation by sex-workers in the prevention of STDs can also decrease the incidence thereof.**

S Afr Med J 1993; **83:** 40-41.

Sexually transmitted diseases (STDs) are among the commonest diseases in sub-Saharan Africa. STDs play a very important role in most gynaecological diseases. Zimbabwe is one country with high prevalence and incidence rates of STDs. According to Professor Ian McBrown, former head of the Obstetrics and Gynaecology Department of the University of Zimbabwe, since the Wilcock Commission of 1948 there was never a venereologist in Rhodesia until independence in 1980. The Wilcock Commission actually recommended that the then Rhodesian government employ a venereologist to monitor STDs.

Most rural women get infected by their husbands, who usually contract these diseases in the employment centres where prostitution is most rife. Only a small pool of women in the urban areas spread STDs in Zimbabwe according to Dr D. Davis, Salisbury City Medical Officer, 1980.[1] Rural dwellers are at a disadvantage compared with city dwellers. When they get infected those in the city can easily get treatment. In the rural areas, virtually no treatment possibilities exist, given the poor health care services. Most complications of STDs are therefore prevalent in the rural areas. Furthermore, in Zimbabwe the blacks believe that STDs are spread only by women, hence their being called *chirwere chechihure* (i.e. prostitute's diseases). Most women avoid treatment because of this stigma. Some women have actually been accused of infidelity and divorced after seeking treatment for an STD. Private practitioners also play a role in the increased prevalence and incidence in that they diagnose and treat some STDs wrongly.[1] Chancroid, for instance, is treated with penicillin instead of with sulphonamides, etc. Forty to 50% of black African women suffer from secondary infertility due to STDs.[1]

Mines are among the most important employment centres and are notorious for prostitution and STDs. Many work-hours are lost because of STDs. A lot of resources are wasted on treating index and secondary cases. A good preventive service would help considerably. Sex-workers descend on most mines from a radius of 50 km and this increases the risk of catching an STD.

Sex-work is illegal in nearly all African countries, which makes it practically impossible to set up preventive measures. Police blitzes are mounted regularly to arrest sex-workers and other unaccompanied women. Despite this, however, prostitution is on the increase. The Shurugwi experiment was to try a 'carrot' approach to STD prevention problems in Zimbabwe. Despite the fact that it is widely believed that sex-workers are responsible for the increased incidence of STDs, no research has ever been done to prove this assumption.

Masunga, Botswana
V. G. CHIPFAKACHA, M.D., M.SC. (COMMUN. MED.)

Accepted 20 Jan 1992.

Materials and methods

Shurugwi is a small mining town on the great dike of Zimbabwe and is in an important commercial area of the Midlands province. It is surrounded by commercial farms; 80 km to the east lies Shabani Mine, the biggest asbestos mine in Zimbabwe. Gweru, the Midlands capital, is only 30 km away. Shurugwi has a population of approximately 30 000 people, most of them mine workers and their dependants. The Zimbabwe Mining and Smelting Company (ZIMASCO) employs virtually every worker in Shurugwi (90%). There are two hospitals in the town, the Shurugwi District Hospital, a government institution, and the Railway Block Hospital that belongs to ZIMASCO. The Railway Block Hospital has its own laboratory and radiography facilities and two operating theatres. The mine hospital is also the referral hospital for three mine clinics, situated in the villages of Peak Mine, Iron Sides and Lalapanzi. Lalapanzi is a village 120 km from Shurugwi.

Mine compounds are notorious for prostitution. The sex-workers are usually found in the beerhalls and Shurugwi's only beerhall is in Makusha township. This beerhall is free to all, including mine workers.

The researcher, who was a community health specialist with ZIMASCO at the time, formed an STD committee consisting of the medical officer in charge of the Government District Hospital, a psychiatric nurse from the district hospital, the government health inspector and himself as public health consultant. The committee resolved at its first meeting that all sex-workers in the town should convene at a general meeting. The sex-workers were then given a lecture on STDs and their possible complications, especially in women. It was also stressed that they faced two major risks: (*i*) possibly contracting STDs; and (*ii*) becoming reservoirs and spreaders of STDs.

It was pointed out to the sex-workers that in spreading STDs they were killing the geese that lay the golden eggs; a sick man cannot be a client. The sex-workers were asked to form their own committee which would work hand-in-hand with the committee of health workers. At the general meeting, it was also resolved that a card system for sex-workers would be introduced. To qualify for the card a sex-worker had to undergo a physical examination by the medical officers in the committee. Those who required psychiatric counselling, e.g. for AIDS pre-testing, were referred to the nurse responsible. No sex-worker could enter a beer garden, where most clients are available, without the health card. Since all beerhalls are manned by security guards, these were informed of the committee's resolution.

For the physical examination, a wet smear and a high vaginal swab were taken from each sex-worker for culture and sensitivity testing. The erythrocyte sedimentation rate was determined, a VDRL test done and complete urinalysis performed. The card holders were subsequently examined on a monthly basis. A special gov-

ernment stamp was put on the cards of those free from disease. Those found to have a disease had their cards withdrawn until such time as they were free from disease. All beerhalls including the town council beerhall were involved in the exercise. The researcher gave lectures on STDs and their complications in all beerhalls, community halls, work-places, secondary schools and on commercial farms. Monthly morbidity statistics on STDs were collected from all clinics and hospitals. The STD committee held fortnightly meetings while a general meeting was held monthly at first and then bimonthly to review the programme. A study to evaluate the impact of the programme was undertaken between June 1988 and December 1988.

Results

The results of the study were quite encouraging. There was a definite decrease in the number of patients both male and female presenting with STDs at the mine hospitals (Table I). At the beginning of the study a total of 452 patients presented with STDs at the mine clinics, and by the end of the project only 117 cases were seen at the clinics.

Further it was clear from the results of the physical examinations done among the sex-workers that the number of VDRL-positive and vaginal discharge cases was decreasing (Table II). Thirty-five per cent of the sex-workers were found to have syphilis at the initial examination when the project started. After 7 months this number had dropped to 4,2%. There was also quite a drop in the number of cases of vaginal discharge during the same period.

TABLE I.
Sexually transmitted diseases: morbidity statistics

		Cases	
Month	Total cases	Males	%
March	452	419	92,6
April	517	492	95,2
May	485	402	82,9
June	410	385	93,9
July	319	297	93,1
August	292	270	92,5
September	213	192	90,1
October	193	171	88,6
November	130	122	93,8
December	117	87	74,4

Source: Outpatients register, Railway Block Hospital.

TABLE II.
Sex-worker examinations

	VDRL-positive		Vaginal discharge	
Month	No.	%	No.	%
June	92	35,0	103	39,6
July	55	21,2	87	33,5
August	39	15,0	79	30,38
September	23	8,8	50	19,2
October	16	6,2	35	13,5
November	18	6,9	29	11,2
December	11	4,2	23	8,8

Discussion

The results of the initial examinations of the sex-workers showed that sex-workers are a possible reservoir and transmission of STDs. The morbidity statistics were significantly lowered during the period of the Shurugwi Project evaluation. During the 7 months STD morbidity statistics at the mine hospital were reduced considerably from 452 to 117 monthly, a drop of 74%. Even among the sex-workers who came for regular check-ups, the incidence of syphilis and PV discharges was lowered from 35% VDRL positivity to 4% and from 39,6% vaginal discharges to 8,8%. There seems to be a correlation between a drop in the incidence of STDs in sex-workers and the drop in morbidity among their clients. There also seemed to be a high prevalence of syphilis among the sex-workers. In one house alone, 11 out of 13 sex-workers who lived together were VDRL-positive (84,6%). Assuming that 1 sex-worker has at least 3 clients a day, in a week 1 sex-worker could infect 21 clients who could, in turn, infect their partners.

A good preventive service is essential to reduce the prevalence and incidence of STDs. Registration of sex-workers and legalisation of their 'trade' would be the first step in this direction.

In Europe this has helped public health workers a great deal. The sex-workers themselves could help in formulating programmes. Registration of sex-workers would compel them to come for regular physical examinations. In a continent where health resources are scarce, prevention would be cheaper and easier than trying to treat the diseases and their complications. Many resources and working hours are wasted annually treating STDs and their complications in sub-Saharan Africa.

Cervical cancer, ectopic pregnancies, salpingitis and pelvic inflammatory diseases are the most commonly diagnosed conditions at Zimbabwe referral centres such as Harare and Mpilo Central Hospitals. These diseases are usually complications of STDs. Since these are hospital statistics they are underestimations. There are no statistics for rural area dwellers and those who visit general practitioners.

It was also evident that most people were unfamiliar with the complications of STDs. Health education also needs to be intensified. In the age of AIDS, programmes such as the Shurugwi Project would do a lot to prevent the spread of this dreaded disease.

Conclusion

Legalisation and regular check-ups of sex-workers could go a long way toward alleviating the scourge of STDs in Zimbabwe. Resources being wasted in treating STDs could be diverted elsewhere. Sex-workers should be involved in any preventive programmes planned. Health education on STDs and their complications should involve the whole community.

REFERENCE

1. Chipfakacha VG. Medical anthropology of the Mashona: transcultural comparisons of gynaecology and obstetrics. M.D. thesis, Marburg, 1982.