

Intervention for the control of STDs including HIV among commercial sex workers, commercial drivers and students in Nigeria*

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As part of the Ondo State University-Australian National University collaborative research program on sexual networking, a survey of the commercial sex industry and the people engaged in it was undertaken in five major cities and large towns in Nigeria in 1992-93 (Orubuloye, Caldwell and Caldwell 1994). A total of 914 sex workers were interviewed and all participated in subsequent in-depth interviews that provided information about them and details about sexually transmitted diseases, including HIV, and condom use.

Before the sex workers study, a survey of 258 long-distance truck drivers and 467 itinerant female hawkers was undertaken in Ibadan in June and July of 1991 (Orubuloye, Caldwell and Caldwell 1993). The primary aim of the drivers and hawkers studies was to determine the extent of sexual networking among these mobile groups whose daily activities were connected with the transport network. Another purpose was to examine whether the threat of an AIDS epidemic was merely a function of the movement of large numbers of people or whether the roads form a sexual network that could be modified (Orubuloye *et al.* 1993).

A study of sexual behaviour of the young and sexually restless student population was also carried out in 1991 in the then Ondo and Oyo States. Two locations, one rural and one urban, were selected from each state for the purpose of finding out and identifying those aspects of the students' behaviour and way of life that made them vulnerable to STDs including HIV infection (Owuamanam 1995). Important findings subsequent to these earlier studies are highlighted here as background to the intervention programs that were begun in 1996-97 to slow or halt the spread of AIDS among these sexually active groups and their partners.

The commercial sex workers

Our previous investigation showed that the Nigerian commercial sex workers were mostly under 30, somewhat better educated than average for women of their age in the community, and usually from other ethnic groups than those of the local region (Orubuloye *et al.* 1994). They had migrated to new places in order to achieve anonymity. Nearly two-thirds reported themselves as single.

The main reason for entering commercial sex was that it was lucrative. The majority earned much more money than they could in other jobs with their school qualifications. They considered commercial sex work as a stage in life and an opportunity for a period of

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intensive saving in order to establish themselves for the rest of their lives. Knowledge of condoms was nearly universal. Three-quarters knew that using condoms protected them against STDs. Only one-third were using them regularly and more than one-half of the users supplied their own condoms, while others were supplied by their clients. Since the government campaign against AIDS started in 1989, there have been regular messages about condoms in the broadcast media and on billboards. The maternity wards of nearly all the government hospitals also displayed messages about condoms, not only as a method of contraception but also for prevention of sexually transmitted diseases. Trust in condoms has increased significantly and most of the sex workers believed that condoms could protect them against STDs including HIV. Their knowledge and apprehension of STDs was considerable and nearly all have now heard of AIDS. About two-fifths indicated that they had been treated for STDs, mostly gonorrhoea and syphilis. Only a few believed that there was much danger in the trade and that they could contract AIDS.

Both knowledge and use of condoms are spreading quite rapidly in the general community. In Ado-Ekiti, 46 per cent of ever-married women who had used a method of contraception before marriage used condoms, and 57 per cent of women who were using a method in June 1997 used condoms (Orubuloye 1997).

There were two obstacles to the use of condoms by the sex workers: the failure to recruit the support of the men who manage the women or own the premises where they practise their trade, and the irregularity in the supply of condoms.

The irregularity in the supply of condoms has resulted in an increase in price; it has more than doubled in the last two years because of the withdrawal of the support for cheap supplies by international agencies. Most of the sex workers were not willing to spend much money on the purchase of condoms while the few who were willing to buy at the market price settled for using each condom more than once. Previous experience elsewhere in Nigeria has shown that: (1) condom promotion constitutes an important part of any strategy for STD/HIV prevention; (2) the acceptability of condoms by prostitutes can best be guaranteed when they are made affordable and available; (3) the women themselves see a clear health and economic reason for using them regularly; and (4) sex workers can be reached quite readily and are amenable to program interventions (Esu-Williams 1995).

It was in the light of these observations that the condom intervention programs among the sex workers began in Ado-Ekiti in the period October-December 1996 as part of the SIDA/SAREC research program in Nigeria.

In order to recruit the support of the managers, we contacted one of the most influential of them, who provided accommodation for the sex workers. He was invited to a discussion at the SAREC project office and he agreed to contact the other managers during their regular monthly meeting. We were subsequently invited to their meeting where we briefed the managers on the purpose of the proposed intervention program and the need to hold a one-day sensitization lecture and meeting with all the sex workers. We agreed to hold the meeting in one of the hotels and transport the sex workers from the other hotels to the meeting.

The meeting began with the introduction of the facilitators to the sex workers and their managers. The managers also introduced themselves to the facilitators but the sex workers did not for fear of being identified. The introduction was followed by a song composed by one of the facilitators who had been working as a family planning co-ordinator with Ondo State Ministry of Health before she was deployed to Ekiti State in October 1996.

The song is:

Condoms are many
Waiting for the men
There is AIDS everywhere
And is spreading very very fast
Condoms are many
Waiting to be used
There is AIDS going round
And is spreading very very fast

We all sang the song several times before the lectures began.

The meeting began with a lecture on the global AIDS epidemic, the epidemiology of the disease, its transmission mechanisms and the consequences of contracting the disease for the individual, the family and the society in general.

The second presentation was on the mental health of commercial sex workers and was given by a clinical psychologist. The lecture dealt with a series of psychological problems that are usually associated with people in the commercial sex industry. The lecture on condom use centred on removing the old fear that condoms would cause severe physical harm to women and stressed their advantages for the prevention of unwanted pregnancies, STDs and AIDS. The lecture included a demonstration of how the condoms are worn properly on the erect penis; this was done by placing a condom on a wooden object carved in the appropriate shape.

At the end of each lecture the managers and the sex workers asked questions. A video film on AIDS followed the lectures. The film gave most of the sex workers the opportunity to see what an advanced AIDS patient looked like and to ask further questions about the disease. Each was given a form to complete, giving information on: name, location, age, level of education, marital status, number of children living, religion, state of origin or ethnic group, and number of clients per day. Information was also sought on amount charged per sexual episode, reasons for using condoms, and whether they and their clients enjoy using condoms. Because of their high level of education most sex workers completed the forms with little assistance from the facilitators, while the few with little education were assisted fully. Most were afraid to put their names and state of origin or ethnic group for fear of being identified in the future and for fear of the information being published. They were given assurance that their names would not be published and that no attempt would be made to trace them back to their place of origin, nor would the information supplied endanger their anonymity or their jobs. Most wished to retain their anonymity because no one back home knew what they were doing, and nearly all planned to return home with their earnings (see Orubuloye *et al.* 1994). Nevertheless, the information provided on names was suspect. Because of the need for subsequent visits, we insisted on some kind of identification, and we finally settled for pseudonyms such as Caroline, Joy Snr, Mary, Rose and Success. Only a few of the sex workers revealed their real names.

A packet of 48 condoms was given to each of the sex workers and each manager received two packets to keep for new sex workers who might appear before the next visit. The enthusiasm was high as all the women received the condoms cheerfully. The meeting lasted about three hours. Soft drinks and biscuits were later served. In all, six visits were made between 12 December 1996 and 22 July 1997.

A total of 47 sex workers have so far participated in the condoms intervention program; only two refused to participate for fear of being identified. The sex workers who operate from outside the hotels were not included. To date, 282 packets comprising 13,536 condoms have

been given directly to the 47 participants in the program.

Some characteristics of the 47 sex workers are presented in Table 1. The mean age was 26 years, the youngest women being 20 and the oldest 45. The women were well educated. Only 15 per cent had no formal schooling; 57 per cent had above primary school education, the majority of them having completed the West African School Certificate Examination. About 53 per cent of the woman reported themselves as single. This may be true given the age structure of the women and the very large number who reported that they had no children. About one-third were married, mostly with children, while about one-sixth were divorced or separated, nearly all with two or more children. In ethnic origin, 53 per cent were Igbo from the two Igbo-speaking states of Anambra and Imo. The remaining 47 per cent were Edo, mostly from Benin and Delta States. The two ethnic groups, Igbo and Edo, have traditionally been the major sources of sex workers in the Yoruba states. Interestingly, all the managers except one belonged to the same ethnic groups as the sex workers. The only Yoruba manager comes from a part of Yorubaland that shares a common boundary with the Ijaws of Edo-State (the old mid-western region).

All the women except one were Christians, conforming to the dominant religion in their places of origin. The average number of clients per day is estimated at 4.4. The smallest number of clients per day was one while the largest was eight. The older women had fewer clients per day. With an estimated charge of 49.8 Naira or 62 US cents per sexual episode, a sex worker can earn 219 naira (US\$ 2.70) per day or a monthly income of 6,573 naira (US\$ 82.20).

Most sex workers experience a drop in income during the Christian and Muslim fasting periods, and when there is a petrol scarcity which prevents the truck drivers, their major clients, from transporting foods and passengers to their destinations. They often make up for this shortfall by charging more for special services or by serving more clients during Christmas and Easter celebrations when the demand for their services is usually high. Nevertheless, a sex worker's earnings are substantial and more than she would earn in any other form of employment in the private or public sector in Nigeria.

From this they pay for food, room, health care and what they remit home regularly. The Local Government Council now charges about 100 naira (US\$ 1.25) per annum as a Development Levy from each of the sex workers operating in Ado-Ekiti. This suggests some kind of record keeping by the local government.

The findings of this study are in agreement with our earlier study of commercial sex workers except that there are more single and younger woman than those interviewed in 1991. They also charge more for their services than in 1991. The 1991 study included older women who operated from outside the hotels. These were mostly married women who needed the income from prostitution to supplement their family income. The charges have also gone up because of the general rise in the cost of living and the dwindling exchange rate of the naira. In 1991, the rate was about 22 naira to one US dollar; now it is 80 naira to the dollar and most prices of important goods are quoted in dollars.

Table 1
Characteristics of commercial sex workers Ado-Ekiti, 1997

Characteristics	N	%
All	47	100
Age		
20-24	14	30
25 and over	32	68
Not stated	1	2
Mean age 26.3 years		
Education		
None	7	15
Primary only	13	27
Above primary	27	58
Marital status		
Single	25	53
Married	15	32
Divorced/separated	7	15
Number of children living		
0	26	55
1	2	4
2	9	19
3	8	17
4	2	4
Mean (for women with children): 2.5		
Ethnicity		
Benin (Edo)	17	36
Igbo (Imo, Anambra)	25	53
Itshekiri (Delta)	5	11
Religion		
Christian	46	98
Traditional	1	2
Clients, condom use and income		
Average number of clients per day	4.4	
Estimated number of condoms used per month	122	
Average number of condoms used per year	1584	
Average charge per episode	N49.80 (US 62 cents)	
Average income per day	N219.12 (US\$2.74)	
Average income per month	N6,573 (US\$82.17)	
Average income per annum	N78,883.20 (US\$986.04)	

Nearly all the sex workers used condoms to protect themselves against STDs, AIDS and unwanted pregnancies. The use of condoms has largely reduced their fears of their clients infecting them. They reported that some clients initially refused condoms because they believed that condoms reduced sexual satisfaction. The sex workers now refuse sex with such clients, and their managers support them. Some clients now supply their own condoms; the sex workers buy from the chemist stores when their supplies run out. Interestingly some of

the truck drivers brought the brand of condoms given to the sex workers during the meetings. This confirms our earlier findings that drivers heavily patronize sex workers (Orubuloye *et al.* 1993). The AIDS prevention unit of the Ekiti State Ministry of Health now occasionally supplies condoms to the sex workers. Given the average number of 4.4 clients per day, a sex worker now needs an estimated number of 132 condoms per month or 1,584 per year. This is a large number of contacts.

A few sex workers reported that they had experienced some cases of condoms bursting. Nevertheless, they all reported that they and their customers enjoyed using condoms. The old fears that condoms would cause severe physical harm to women, and that they limit sexual satisfaction, have largely disappeared, at least among these sex workers and their customers.

The commercial drivers

In Africa, both the general public and researchers have identified long-distance truck drivers and women who sell goods along the road as playing a role in the spread of infection (Tierney 1990). Studies of the area along a major highway in Uganda have found an HIV prevalence rate of 35 per cent among long-distance truck drivers, and 37 per cent of truckers estimated having more than 50 female sexual partners during their lifetimes (Von Reyn 1990).

Similar findings have been reported for Nigeria. The 1991 study of the truck drivers showed that the drivers reported an average of 6.3 current sexual partners, 12 sexual partners during the previous year and 25 partners besides their wives during a lifetime (Orubuloye *et al.* 1993). Nearly all the drivers knew of STDs and 44 per cent had been treated for one or more. Their knowledge of AIDS was nearly universal. A little more than half of the drivers had ever used condoms and only 15 per cent used them on a regular basis, primarily with partners other than their wives or regular partners (Orubuloye *et al.* 1993).

Most of the drivers take multiple sexual relationships for granted, as a way of life. This, combined with the drivers' carefree attitude towards life, poses a serious danger to themselves, their sexual partners and above all to their wives who often do not know what they do outside the home. The drivers are conspicuous; they can be located and easily identified at lorry parks. They form easy targets for educational campaigns and for the provision of condoms. Our subsequent intervention program was based on the conviction that the findings of the research can be used to prevent the spread of AIDS and other STDs by educating the drivers about the need to modify their behaviour.

A one-day sensitization open-air lecture was therefore organized for the drivers for this purpose in the main lorry-park at Ado-Ekiti.

Our initial contact was with the chairman of the Ekiti State National Road Transport and Workers Union. We told him about our purpose and the benefits which his members could derive from this type of exercise. He was co-operative and a date was made for the educational campaign; a date which coincided with the visit of the Southwest Zonal Commander of the Nigerian Road Safety Corps. This arrangement was for the convenience of the drivers who could not spare two days within a short period of time because of a possible loss of income. The purpose of the Zonal Commander's visit was to educate the drivers on road safety and on the care and maintenance of motor vehicles. About 120 drivers took part. There was adequate representation of the drivers plying the major routes Ado-Ibadan-Lagos; Ado-Benin-Onitsha-Port Harcourt; Ado-Ilorin-Kaduna-Kano; and Ado-Abuja-Jos. Most of the taxi drivers plying Ado-Ekiti township and inter-city routes, within Ekiti and between Ekiti and Ondo State were also present. To ensure adequate representation, the Chairman asked the drivers to identify themselves by show of hands when the roll was called.

The Road Safety Campaign went on for about one-and-a-half hours with an additional 30 minutes for questions and answers. Our intervention was in two parts. The first part was a 45-minute talk on the AIDS situation in Africa, its epidemiology, the transmission mechanisms and the consequences to the individual, the family and the society. The second part was a 30-minute talk on the prevention and control of STDs and HIV/AIDS and a demonstration of the proper use of condoms. A modified version of the song rendered during the sex workers intervention preceded the second part. The modified version is:

Condoms are many
Waiting for Daddy
There is AIDS everywhere
Condoms are many
Waiting to be used
There is AIDS on the road

We all sang the song together several times. To ensure that the drivers knew how to fit the condom, one of them volunteered to put it on the wooden penis. Questions were asked by some of the drivers and by a few female hawkers who were present at the lorry-park during the campaign. One packet of 48 condoms was shared between two drivers and the female hawkers who wanted to give them to their husbands at home. Refreshments were served to all the participants. The whole program was recorded on videotape. There was no objection from either the Road Safety Corps or the drivers; the atmosphere was friendly. We discovered later that some of the drivers used the condoms with prostitutes in Ado-Ekiti, while a majority probably used them with partners other than their wives. Using condoms with their wives would imply irresponsible sexual activity during their journeys (Orubuloye *et al.* 1993).

It appears that the men used the condoms somewhere, judging from their reactions and enthusiasm during our subsequent visit to the lorry parks, and from a few of them who later called at our office to ask for more.

The student group

The third group, which is by no means less important, is the student group. Our first encounter with this group was in 1991 when we investigated sexual networking in both secondary and tertiary institutions in Ondo and Oyo states in Southwest Nigeria. Our investigation showed that the group experienced their first sexual encounter at an early age. They exhibit a high level of multiple sexual partnership mostly between boys and girls, and partly between young girls and 'sugar-daddies' who provide some economic support for the young girls.

Knowledge of contraceptives, particularly condoms, was universal but only a small fraction used condoms. The awareness of STDs and AIDS was high. About three-quarters had modified their sexual behaviour since learning of AIDS (Owuamanam 1995). The students were conscious of their risky sexual behaviour and were ready to do something about it. Similar findings have been reported from a recent survey of 2,460 secondary school students from 23 high schools in the two southeastern states of Anambra and Enugu, Nigeria (Amazigo *et al.* 1997)

Most higher educational institutions in Southwest Nigeria now have student clubs or organizations that offer AIDS education to their members and to the general student population. In some of the institutions such clubs are known as AIDS Awareness Clubs, while in others they are known as the AIDS Prevention Society, and they are recognized by

the authorities of their various institutions.

It was under the auspices of one of these clubs, the AIDS Awareness Club, that we began the intervention program among the students. The program took place at a lecture hall in one of the tertiary institutions at Ado-Ekiti at a convenient date, and guests were invited from the Ado-Ekiti community.

The intervention was in two parts: first the lecture on the global AIDS situation, then the director of medical services at the institution gave a 30-minute lecture on the epidemiology of AIDS. Then there was a question and answer session, which lasted for about one hour. Condom use was not demonstrated because the students were sufficiently knowledgeable about this. The students composed and sang their own song:

All we are saying give us condoms
All we are saying give us durex
All we are saying give us raincoat
All we are saying give us cover

Condoms are popularly known as 'raincoat' or 'durex' in Nigeria. About 250 male and female students participated in the education campaign. Ten sachets each containing two condoms were distributed to each student. They were enthusiastic and would be happy if we could come back again. The whole program was videotaped.

Although we did not go back to enquire whether the students used the condoms, from previous experience girls are more likely to have used theirs with their boy friends. Most boys would use theirs with their regular girl friends, and a few with sex workers or casual partners.

Discussion and conclusion

The outcome of the intervention programs reported in this paper shows that the sex workers, the commercial drivers and the students have a high rate of partner change. They equally run abnormally high risks of being infected with STDs including HIV/AIDS, and can transmit them to their partners or clients. The studies also show that the groups were conscious of their risky sexual life and were willing to do something about it. There was also evidence that trust in the condom had increased, and misgivings about physical harm and reduced satisfaction had largely disappeared. Sex workers, commercial drivers and students all believe that condoms can protect them against sexually transmitted disease; these groups can be reached quite readily and are amenable to behaviour change, while the partners of the drivers and students and the clients of the sex workers can also be reached through them.

Two points are important for the success of future intervention programs of this nature. They are the sustainability of the programs and the co-operation of those who are directly connected with them.

An adequate supply of cheap condoms is vital to the continuity and success of the current program and future ones. The price of condoms has more than doubled in the last year or two, and may soon be beyond the reach of the people who need them most.

Managers of hotels, the leaders of the National Road Transport and Workers' Union and the executives and members of the various student organizations such as the AIDS Awareness Club and the AIDS Prevention Society, or any student organization, can effectively be used for the distribution of highly subsidized condoms to their members. One advantage of this arrangement is that they will ensure that their members or the sex workers have condoms regularly and use them.

The campaigns against adolescent sexual networking and extramarital sexual activities are important. Schoolgirls need to be told of the enormous risks posed by 'sugar-daddies' and married women should take an active concern regarding their husbands' extramarital activities (Caldwell, Caldwell and Orubuloye 1995)

The spread of the AIDS epidemic is now a major source of concern to the government and the general public. Since 1991 54,134 blood samples taken in Nigeria have revealed 8077 HIV-positive people. The rate of HIV infection has been estimated at 34 per cent among sex workers, 15 per cent among STD patients, 13 per cent among TB patients and five per cent among women attending antenatal clinics (data from the Federal Ministry of Health and Social Services, Nigeria 1997).

The AIDS death of one of the most popular Nigerian musicians recently is a motivation to intensify information campaigns on AIDS among the general population and to extend intervention programs to other high-risk groups. The arrest of scores of sex workers in Lagos streets by the police may be counterproductive in that many of the sex workers would continue to operate surreptitiously, making intervention difficult so it would be impossible for the government to stem the AIDS epidemic.

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