STD—third African regional conference

Report of the third African regional conference on sexually transmitted diseases held at Nairobi, Kenya, on 14-19 March 1983

Situated on the East African coast, Kenya extends from a coastal plain to a broad flat plateau rising to 10 000 feet and crossed by the Rift Valley. The climate is temperate and warm in the highlands and tropical on the coastal plain. There are no great deposits of minerals and the rising standard of living depends on the production of coffee, tea, maize, wheat, cotton, tobacco, rice, meat, and timber and the export of fruit, flowers, and vegetables by air freight to Europe and elsewhere. The development of a varied industry is being encouraged, and tourism brings large numbers of air travellers to the beaches, game parks, prehistoric sites, and Nairobi to see the beautiful country, its people and animals.

Kenya became a British protectorate in 1895 and a crown colony in 1920. The country became independent in 1963 and remained within the Commonwealth. A one party state was established in 1964 under the first president, Jomo Kenyatta. The population is about 14 millions and there are strong tribal loyalties and many different languages and dialects. Although Swahili is the official language, English had to be re-introduced in 1975 as an alternative for practical reasons of communication.

STD health care

Most patients with sexually transmitted diseases (STD) in Kenya will probably never see a doctor but will treat themselves with herbal or traditional remedies or with antibiotics bought over the counter or from street pedlars. Some will be treated by medical auxiliaries, nurses, or doctors at primary health care centres and only a few will attend a specialised clinic at a hospital. There are two specialised STD clinics in Kenya, one in Nairobi and the other in the port of Mombasa. The clinic at the Kenyatta National Hospital is sited on the hospital campus and is grossly overcrowded. The total daily attendance is between 500 and 1000 patients and there are long queues

everywhere. The doctors cannot possibly see all the patients but there is a well planned system whereby the patients have the appropriate tests performed and are given treatment. Contact tracing is extremely difficult and is usually not attempted.

There is an urgent need to stimulate more interest in STD among medical students, doctors, and nurses. More clinics are needed as the number of infected patients and the number of organisms resistant to antibiotics continue to rise. Complications of infection, such as stricture of the urethra in men and pelvic inflammatory disease in women, are very costly to treat and could often be prevented if better and larger facilities for early diagnosis and treatment were available in the major centres of population.

Workshop on genital ulcers

A carefully planned and well attended workshop on genital ulcers took place in a medical school lecture theatre in the Kenyatta National Hospital on 14 and 15 March 1983 before the main African regional conference. The members of the workshop were welcomed by Professor Herbert Nsanze, director of the department of medical microbiology at the University of Nairobi.

Dr Stuart Brown of the Centers for Disease Control, Atlanta, United States, reviewed the need for accurate diagnosis of syphilis, for patient management, contact tracing, and surveillance after treatment. Although dark ground examination of serum from genital ulcers is very important in the diagnosis of early infections, its value is doubtful in centres and laboratories where it is carried out only occasionally. Many false negative results would be reported, and false positive tests could also lead to errors of diagnosis. Mr Charles Hall of the Centers for Disease Control, Atlanta, United States, reviewed serological tests for syphilis and demonstrated simple reagent tests, particularly a rapid plasma reagent (RPR) test which was suitable for use away from the main centres in Africa.

Chancroid was shown to be the commonest cause of genital ulceration in East Africa by Professor A Ronald of Winnipeg,

Canada, and Dr Peter Perine of the Centers for Disease Control, Atlanta, United States. Extensive well planned studies had been undertaken by the Winnipeg-Nairobi team during the past few years headed by Professors Ronald and Nsanze, and many important projects have been undertaken resulting in substantial progress in the knowledge of genital ulcerative disease. One such advance was the improvement in cultures for *Haemophilus ducreyi* using chocolate agar or Müller-Hinton media with added sheep serum and vancomycin. Glutamine and cystine were essential ingredients, and direct inoculation and immediate incubation at 35°C in a candle jar at 100% humidity for 72 hours gave the best results. These techniques were confirmed by Dr R C Ballard of South Africa who had worked extensively on the subject.

A review of current knowledge about donovanosis by Dr Peter Perine rapidly indicated the extent of ignorance about the causative organism, the most satisfactory diagnostic tests, the failure to find evidence of infection in sexual contacts, the extent of symptomless carriage in the rectum, and the importance of host susceptibility in the development of lesions.

In lymphogranuloma venereum the role of *Chlamydia trachomatis*, especially serotypes L1, L2, and L3, and their demonstration in the laboratory depended on many factors including sampling techniques, methods of handling, transport media, and the development of new serological tests, according to Professor Per-Anders March of Lund, Sweden.

Dr André Meheus of Antwerp, Belgium, reviewed the clinical and diagnostic features of herpes simplex of the genitalia in Africa. It became obvious that in East Africa chancroid, syphilis, and herpes (in that order) were the commonest causes of genital ulceration, whereas in Europe and North America herpes was the commonest cause followed by syphilis and chancroid.

A clinical demonstration of 15 cases of chancroid illustrated the various types of ulcers and their response to treatment. An excellent demonstration of staining and cultural techniques was followed by a review of treatment, management, and control of

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genital ulceration by Dr David Oriol of University College Hospital, London.

The workshop was a great success and made a great deal of information available. It also outlined the many areas of ignorance that still exist and pointed the way to further research and investigations.

Scientific meeting

The African Union against the Venereal Diseases and Treponematoses is the African branch of the International Union against the Venereal Diseases and Treponematoses (IUVDT). It was founded in 1979 in Ibadan, Nigeria, when Professor I Diop Mar of Dakar, Senegal, was elected president and Professor A O Osoba of Ibadan became the secretary general. A second successful regional conference was held in Dakar in 1981 when it was decided to hold the third conference in Nairobi, Kenya, in 1983. Professor Nsanze of Nairobi was elected secretary of the organising committee.

The third African regional conference was held in the New Stanley Hotel, Nairobi, from 16 to 19 March 1983 and was attended by 124 delegates. It was formally opened by the Honourable Dr Mukasa Mango, MP, minister of health in Kenya. The three day programme was crowded with interesting and important papers. Professor Osoba of Ibadan reviewed the incidence of sexually transmitted diseases in Africa. There were few reliable statistics but it was quite clear that the rates of infection (per 100 000 population) were at least double those of the United States and more than 10 times those of the United Kingdom. Late complications of infection were common, and pelvic inflammatory disease (PID) leading to sterility occurred in over 25% of women in some areas. The local Kenyan name for chancroid was cut-cut because it was believed to lead to amputation of the penis.

The situation in Africa has deteriorated with the rapid spread of penicillinase producing strains of *Neisseria gonorrhoeae* (PPNG) which have been reported from over 20 African countries. Multiple antibiotic resistance was becoming common. According to Professor Osoba (Ibadan) the Asian type of PPNG carrying plasmids with a heavier molecular weight was now isolated in Africa and both African and Asian types were now circulating in several African states. Up to 65% of all strains carried plasmids and an increasing number now had both types. These organisms are now being rapidly disseminated in the urban areas of Kenya.

Dr L Drusin (New York) discussed sexually transmitted enteric diseases, which were

increasing in the United States. Dr David Oriol (London) described the newer discoveries about genital warts, especially the establishment of multiple strains of the virus. Cervical cytology and colposcopy have demonstrated flat warts of the cervix, and their possible links with carcinoma of the cervix were discussed.

Genital herpes seemed to be less common in Africa than in North America or Western Europe according to Professor André Meheus (Antwerp, Belgium) and chancroid and syphilis were both diagnosed more frequently than herpes. Herpes virus and *H ducreyi* do coexist in the same patient in a few cases.

Dr E C Gooding (Freetown, Sierra Leone) drew attention to the heavy cost of failing to screen for gonorrhoea women attending family planning clinics. She produced impressive figures of the cost of late complications of the disease and how the number of cases could be reduced by simple screening methods. For first line treatment 16% of doctors used spectinomycin, but it was very expensive in Freetown and less than 25% of patients could afford it. Yet if penicillin was used there was a 19% failure rate. The real dilemma was that patients would not name contacts because they could not afford to pay for the treatment.

Dr D'Costa (Nairobi) showed that infection was much commoner in the lower class prostitutes in Nairobi, of whom 46% were infected compared with 11% of the upper class prostitutes. Many prostitutes had between five and 12 exposures a day or about 40 exposures a week.

Dr Stuart Brown (Atlanta) stated that 15-20% of pregnant women in Ethiopia had positive serological tests for syphilis and that 20% of newborn babies had clinical manifestations of congenital syphilis. There were 6% of stillbirths or abortions and the perinatal mortality rate was 70 per 1000 live births.

The Winnipeg-Nairobi group reported that five plasmids were known to occur in *Haemophilus ducreyi*—namely a 23 Megadalton (Mdal) plasmid mediating a conjugal transfer, a 30 Mdal plasmid conferring tetracycline resistance, a 4.9 Mdal plasmid conferring sulphonamide resistance, and 7 and 5.7 Mdal plasmids mediating β -lactamase production. Multiple plasmids occurred in 24 out of 74 strains. The prevalence of β -lactamase plasmids in strains of *Haemophilus ducreyi* isolated in Kenya had increased to 100% during the time of the study.

Many other papers on a wide variety of problems affecting Africa were read, and

the overall standards of presentation were high. Dr David Oriol (London) gave an invited lecture on non-gonococcal urethritis at the Intercontinental Hotel before an audience of over 300 guests.

Business meetings

The executive committee of the IUVDT held two meetings during the week, the first time an executive committee meeting of the Union had been held in Africa.

A general meeting of the African Union attracted a large audience to discuss the recommendations of its executive committee. There were long debates on many subjects and great care was taken to ensure the maintenance of a proper balance of Francophone and Anglophone members of the executive committee. The new president is Professor A O Osoba of Ibadan and the retiring president, Professor I Diop Mar of Dakar, was made an honorary vice president. Professor Mbina C Nguemby of Libreville, Gabon, is the new secretary general. The next meeting of the African Union will be in Libreville, Gabon, in 1984, at a date to be decided later and the next general assembly of the International Union will be in Montreal on 4-7 June 1984.

Seminar on gonorrhoea and genital ulcers

A seminar was held after the conference, on 19-21 March at the Safarilands Hotel, Naivasha, attended by 36 delegates from Africa and elsewhere. The object was to establish a strategy for the future treatment of gonorrhoea and genital ulcers in Africa. Most African countries used some form of penicillin in the treatment of gonorrhoea but 20-25% strains of gonococci are β -lactamase producing (PPNG) and there was a 30-36% treatment failure rate. Failure rates of more than 10% should result in critical review of treatment and a possible change of regimen. There was a strong feeling that penicillin had reached the end of its useful life in the treatment of gonorrhoea in Africa. Alternative antibiotics discussed were spectinomycin, thiamphenicol, kanamycin, and trimethoprim-sulphamethoxazole. No resistance to spectinomycin has been reported and there was only a 7% failure rate with trimethoprim-sulphamethoxazole. The second and third generations of cephalosporins were believed to be highly effective against all African strains but the cost was prohibitive. Organisers of national programmes, however, can obtain drugs through WHO and UNICEF at special low prices. It was

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unanimously agreed that monitoring gonococcal sensitivities to antimicrobials should be encouraged throughout Africa.

Genital ulcers were an important African health problem, with chancroid causing 30-80% of cases in eastern, central, and southern Africa but few in West Africa, syphilis common throughout the continent, and herpes causing only 5-15% of ulcers. In primary health care clinics accurate diagnosis was difficult and it was recommended that treatment should be given for both syphilis and chancroid. Treatment of chan-

croid with a single oral dose of trimethoprim-sulphamethoxazole of 640-3200 mg gave excellent results as did multiple dose regimens of erythromycin, thiamphenicol, and other sulphonamides. Syphilis treatment was benzathine penicillin 2.4 Mega-units in a single dose or aqueous procaine penicillin 600 000 units daily for 10 days. Tetracycline was recommended for patients sensitive to penicillin. Antibiotics should be avoided in the treatment of herpes, and tetracycline was recommended for lymphogranuloma venereum. Trimethoprim-supha-

methoxazole was considered to be the treatment of choice for donovanosis. Despite the many difficulties in carrying out contact tracing, it was regarded as essential for the control of genital ulcers.

The conclusions of the Naivasha seminar will be made available to all governments and planners of health care policy, as well as interested doctors throughout Africa.

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