The situation in Scandinavia

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Summary

The history of legislation controlling the treatment of venereal infections and undergraduate and postgraduate training in venereology is outlined. Arrangements for research into these infections and the advantages of centralized facilities for serum antibody tests are described. Syphilis, gonorrhoea, chancroid, and lymphogranuloma venereum are notifiable. One present problem is the difficulty of collecting information on non-gonococcal urethritis. There is a high incidence of infection in Greenland and further research should be undertaken there.

Introduction

Danish legislation on the treatment of venereal infections dates from the year 1773. Denmark was thus the first country in the world to introduce formal regulations for the combating of venereal disease. The basic principle of the Act was that treatment should be given free of charge if carried out by the district surgeon, who was more or less comparable to the public health medical officer of our day. The patient had the right to free treatment, which he was obliged to accept. This relationship between right and obligation has been maintained in all subsequent Danish legislation on the treatment of venereal disease.

Organization of treatment

In 1906, an important Venereal Disease Act was passed. This law prohibited public prostitution, and embodied more modern ordinances to combat venereal diseases, which were specified in the Act as syphilis, gonorrhoea, and chancroid. The law states that treatment should be paid for by public funds, without consideration of the patient's financial position. Patients are obliged to accept treatment, unless they can prove that adequate treatment has been given elsewhere. The free examination and treatment are provided by the publicly appointed

doctor, that is, the public health officer, or by a doctor specially designated for this work, a so-called 'examining doctor'—a special arrangement for the Danish provinces. In each Danish county there is a county medical officer of health and a varying number of district medical officers of health. As part of their official duties, the latter still treat patients with venereal disease free of charge. The public health officers have received a special postgraduate training, comprising 3 months' formal teaching, including epidemiology, forensic medicine, medical legislation, hygiene, psychiatry, and a short course of venereology. Formerly, public health officers had to complete a 3-month appointment as a registrar in a dermatovenereological department, but this is no longer a requirement.

'Examining doctors', who treat patients with venereal disease and are paid for this from public funds, are usually general practitioners without any special venereological training. The latest venereal disease legislation no longer requires public health officers to provide consultation facilities at public clinics, but the position of 'examining doctor' has been maintained.

Ordinary general practitioners are fully licensed to treat patients with venereal infections, but the payment is made by the patient himself, *via* the public health insurance.

Strangely enough, practising specialists in dermatovenereology are not particularly interested in receiving patients with venereal infections. This may be because Denmark is relatively short of practising specialists in dermatology, and such specialists mainly see patients with dermatological complaints. Dermatological patients have been reluctant to share a waiting room with patients with venereal disease and this may have also contributed to the poor attendance of patients with venereal disease at the specialist's consulting rooms. The payment to the practising specialist is also made by the patient himself *via* the public health insurance. Finally, in the major cities, there are clinics attached to the dermatovenereological departments, where venereological patients can have treatment free of charge. The consultants at these clinics are fully trained dermatovenereologists.

From this sketch, it will be understood that the main emphasis has been placed on providing the easiest possible access to free treatment for the patients, whereas less emphasis has been placed on the venereological expertise of the treating doctor.

The obligatory notification of venereal disease is organized in a special manner in Scandinavian countries and the law requiring the notification of these diseases has been in force in Denmark since 1877. The number of patients who have received treatment for venereal disease is notified on a special form by the doctor or clinic providing the treatment, and this form must be sent to the local public health officer once a week. Syphilis, gonorrhoea, chancroid, and lymphogranuloma venereum are notifiable. Syphilis notification must include the patient's sex, date of birth, initial of surname, and case record number, whereas the other diseases are merely notified within age groups. The weekly notifications, which are obligatory for all practising doctors, are sent to the County Medical Officer of Health, who forwards them to the Department of Public Health. On the basis of these weekly notifications, the Department publishes a monthly survey, covering the incidence of venereal diseases for the whole of Denmark.

Teaching

Medical students are taught dermato-venereology towards the end of their course. The teaching, which is obligatory, comprises 2 weeks of duty in a hospital department plus 45 hours of formal teaching, 30 of which are used for clinical demonstrations and 15 for lectures. In the university clinics, where the students obtain their practical training, some 10 per cent. of patients have sexually transmitted disease (STD). Registration as a doctor requires 2 years' clinical training in hospital. In addition to internal medicine, surgery, obstetrics, and psychiatry, which are obligatory parts of the clinical training, there are 3 months of training in a specialty which is chosen by the trainee. This may be in a dermato-venereological department, but the scarcity of vacancies in this specialty has so far made such appointments illusory. If the doctor enters general practice, he must take an obligatory course of 120 hours' teaching. Within this course 15 hours are devoted to dermato-venereology. This theoretical course takes place within a university framework, and teaching is given by fully-trained specialists.

The postgraduate education of specialists in dermato-venereology comprises appointments to dermato-venereological departments for a minimum of 4 years. Besides the clinical training, an obligatory course of 120 hours' teaching is given, including instruction in serology, bacteriology, and immunology.

For the general public, the elementary schools give elementary sex education at all stages. This also

comprises instruction on venereal disease for the older classes. Further information for the public on venereal disease is rather scanty in Denmark and consists mainly of a leaflet delivered to the patients—that is, when it is too late. (Sweden has a more progressive programme of public information by means of large posters in public places on the prophylactic effect of mechanical contraceptive devices.)

Research

Research in the field of sexually transmitted diseases is carried out almost exclusively by specialists and trainee specialists. Practically all clinical research in dermato-venereology takes place in dermato-venereological departments, just as practically all serological and bacteriological research is done at the State Serum Institute. This is explained by the historical fact that all serological diagnosis was concentrated from the start at the Serum Institute where, in addition to venereological serology, bacterial cultures also are carried out and gonococcal antibiotic sensitivity is determined. This centralization has been possible in Denmark because of the small area of the country, which permits all material for bacteriological and serological investigation from the whole of Denmark (but not, of course, from Greenland) to reach the Serum Institute within 24 hours. Such a degree of centralization permits uniformity of technique, but on the other hand it has had the result that the specialist and the special departments usually have only a superficial knowledge of the techniques of immunological and bacteriological investigation.

It is quite natural that treponemal investigations should require a specialized laboratory, but the culture of gonococci and lipoidal antigen serological tests could well be carried out within the individual clinical unit.

An exceedingly valuable feature of the centralization at the State Serum Institute is the so-called Wassermann Index, which was established in 1920. As a result of the centralization of venereological serology, blood samples from all patients pass through this institute, and each sample is accompanied by a special card with clinical information about the patient.

If syphilis has been diagnosed clinically, or if the blood sample from the patient is reactive, an index card for the patient is started, on which the results of subsequent serological investigations are entered. Any doctor who submits a blood sample from a patient for syphilis serology will, together with the answer to the test in question, receive a copy of the index card with information on the results of previous serological tests on the patient, if the patient is already in the index.

The Future

It would be a great advantage if we could obtain routine virus cultures from patients with sexually transmitted diseases. For instance, at present, we are trying to collect information in the dermato-venereological clinics on the number of cases of non-gonococcal urethritis. Unlike other STDs, this condition is not notifiable, and we should like to assess its importance.

The Danish statistics on venereal diseases may be regarded as being absolutely accurate, but investigation of various groups has revealed patients with asymptomatic gonorrhoea, especially in gynaecological clinics. Although the diagnosed cases are notified with a high degree of certainty we also have undoubtedly a non-recognized reservoir of infection.

Finally, it may be mentioned that Greenland, administratively and politically accepted as the northern territory of Denmark, has a large incidence of venereal infection, so that about 10 per cent. of the population in the age group 15 to 30 years have gonorrhoea. Syphilis was once unknown there, apart from sporadic cases, but since 1970 it has become established, and has spread disastrously. Thus for the year 1975 about 500 cases of syphilis were notified in Greenland, *i.e.* about ten cases per thousand inhabitants. The corresponding incidence of syphilis in continental Denmark was 0.06 cases per thousand inhabitants. Greenland today may thus be considered as a fertile field for studies in clinical epidemiology, immunology, and social medicine.