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VENEREAL DISEASE AND THE PUBLIC HEALTH*†

BY

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The subject on which I have been invited to speak this evening is a wide one and you will, I feel sure, forgive me if my remarks are not as comprehensive as they might be. I will try, however, not to exercise any private hobby horses and to be as generally discursive as I can, though I have always believed that in topics such as this the discussion is usually more valuable than the paper.

After a good deal of thought I feel it will probably be most profitable first to remind ourselves of the problem as it existed in the past, for in the words of that wise man Sir Winston Churchill, "the longer you can look back, the further you can look forward". Secondly, to look at the position as it is today, and thirdly to try to discern, in the light of our past and present experience, what should be done to minimize the evils of which these infections are capable, as well as those from which they stem.

Though it is not necessary to waste too much of your time with a detailed account of the venereal diseases problem as it existed in Great Britain before the setting up of the Royal Commission in 1913, a few vignettes, for the most part derived from the Commission's report, may serve to remind you of the gravity of the position before the first World War and of the pressing need then, not only for an investigation but also for something to be done as soon as possible.

The Commission, which was set up by Parliament, was presided over by Lord Sydenham, and had four medical and seven lay members. Among the former were Sir Malcolm Morris, the well-known dermatologist, and Mr. James Ernest Lane, a surgeon interested in venereal diseases, both of St. Mary's Hospital, Paddington. The lay members included a canon of Southwark Cathedral, a well-known nonconformist divine, the Clerk to the Privy Council, a socialist member of parliament (Mr. Philip, later Lord, Snowden), and the widow of a former bishop of London. The Commission sat for over 2 years and its invaluable report was published in 1916. I think we will all agree that they showed their wisdom by stating that "no system of notification of venereal diseases should be put into force at the present time", and the report goes on "when experience has been gained by the operation of improved facilities for diagnosis and treatment, the question of notification should be further considered". Thus we were spared the results of a possible panic legislation which a scared and anxious parliament might easily have imposed on us, and the confidential clinics, which are now part of our tradition and are incidentally the envy of not a few foreign health administrations, might never have come into being. Evidence was taken from more than fifty witnesses distinguished in many walks of life, who included physicians, surgeons, statisticians, clergymen, judges, educationists, and even two eminent venereologists, each, however, of a very different school of thought.

Though the Commission was unable to arrive at any positive figure regarding the exact prevalence of the venereal diseases in the country, they declared that the number of persons infected with syphilis (acquired or congenital) could not be below 10 per cent. of the population in the large cities, and that the percentage affected with gonorrhoea greatly exceeded this figure. The re-analysis of the Brusgaard material (Gjestland, 1955) and Harrison's valuable comments on this study (Harrison, 1956), give us a fairly good idea of what the true fate of the untreated syphilitic might be expected to be, and we now know that the statement in the Commission's report that "acquired syphilis is the most frequent cause of arterial disease between 30 to 50 years of age" was to say the least a gross exaggeration. Nevertheless, we also know that certified deaths from general

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paralysis—then invariably fatal—were nearly forty times what they are to-day, whereas those from aortic aneurysm were only twice as many, in spite of the fact that from 1911 to 1939 the designation "aneurysm" on a death certificate was based on "arbitrary rules of assignment", and almost certainly then included many aneurysms that were not due to syphilis. On the other hand, it is now well known that the majority of aneurysms do not end in rupture, and that a coronary ostial occlusion, or even some non-syphilitic condition, is often the cause of death. Many such cases must have been, and probably still are, cursorily certified as having died of coronary insufficiency without a *post mortem* examination.

In the absence of clinic figures the material for estimating the prevalence of the venereal diseases, or even their annual trends of incidence, was very incomplete and unsatisfactory, and recourse was had to such official statistics as were available from the Armed Forces, the Police, the Prisons, the Lunacy Commissioners, and the Local Government Boards, as well as the Registrar General's statistics of certified causes of death already mentioned. From these it was evident that syphilis and gonorrhoea were widespread among certain sections of the population, from which then, as now, it is reasonable to suppose that there was a constant spill-over of infection into the better-off and more static and stable members of the community. It must be remembered that at that time neither disease was easily or rapidly curable and that the duration of the infectious state, even when under treatment, was considerable.

In 1914 a small but interesting serological survey was carried out at the London Hospital, to obtain some information on the prevalence of syphilis among persons of the class served by the hospital. Those tested were all patients of the hospital but were selected, inasmuch as no case was obviously suffering from a condition that might be attributable to syphilis. Wassermann tests were made on 616 male patients and 386 females and were positive in 10·3 per cent. of the men and 5·1 per cent. of the women. From these figures the statistician concluded that in a typical London working class population at least 8 to 12 per cent. of the adult males and 3 to 7 per cent. of the adult females had acquired syphilis. An interesting sidelight on the investigation is that an alien element in the shape of foreign Jews was present in this part of London, and in fact accounted for one fifth of all the patients tested. The percentage of positive reactions among these foreigners was roughly the same as among the British patients. I have long felt that serum tests for syphilis should be made on all hospital patients as well as on candidates for life insurance and men on discharge from national service, and that they should be performed more frequently on those contemplating marriage.

The statistics of the London Lunatic Asyla, as they were then called, showed that in the period 1908–12 *over 9 per cent. of the total admissions* (16 per cent. of males and 2·6 per cent. of females) were cases of General Paralysis, and to these must be added other cases of insanity resulting from syphilis as well as numerous idiots and imbeciles whose arrested cerebral development was due to congenital syphilis.

It was, however, the appalling disclosures in a paper submitted by Mr. Bishop Harman, the well known ophthalmologist, who for 10 years had overseen a number of the London Blind schools, that probably did most to shock the parliamentary and the public conscience into action. He produced figures to show that well over half of all cases of blindness in children were the result of venereal disease in the parents. Of 1,100 children in L.C.C. Blind Schools the cause of blindness was gonorrhoea in 268 cases (24·4 per cent.), while in 343 cases (31·2 per cent.) the cause was certainly, and in 31 additional cases (2·8 per cent.) probably, syphilis. Less thorough, though significant, investigations showed that congenital syphilis was also an important cause of deafness, and one expert witness thought it possible that about 25 per cent. of cases of congenital deafness were due to syphilis.

These few examples of the large mass of evidence given before the Commission show that in 1916 the effects of venereal disease were indeed "grave and far-reaching", not only from the point of view of the public health but also from that of the national economy.

The results of the Commission are well known. The clinics, more or less as we know them today, were set up on a free and confidential basis, the education of the public was commenced under the auspices of the National Council for Combatting Venereal Disease, later known as the British Social Hygiene Council, and the medical profession was invited to co-operate with the local authorities, who had been charged with administering the scheme, by familiarizing itself with modern methods of diagnosis and treatment and by participating in the official programme. It is interesting that the report stated specifically that "any scheme of administration for dealing with venereal diseases must be so framed as to develop the ability of the general practitioners in treating these diseases and to make them more efficient for their general functions

as the first line of defence of the community'. The commissioners also considered it essential that medical students and practitioners should "have access to the treatment of these diseases" at any of the local authority clinics, and that the co-operation of the practitioner with the local authority and the hospital should be obtained. It is, I think, a pity that this co-operation never became the universal practice, though many of us remember that it was a good deal more usual a quarter of a century ago than it is to-day.

Peace came and in 1919 the clinics were under way. In some cases they were staffed on a part-time basis by medical officers who had obtained some training and experience in male venereology while with the Armed Forces; other clinics, usually the smaller ones, were looked after by local practitioners who had attended a short course of instruction in London, Edinburgh, or elsewhere. In yet others, the surgeons or dermatologists, hardly ever the physicians, who had worked the clinics from the start, continued in charge, while in only a very few places (notably London, Edinburgh, and Liverpool) were the clinics in charge of specialists who devoted the whole of their time to the study and practice of venereology.

Originally, most of the treatment centres were sited in general hospitals, but during the 1920s there was an increasing tendency for cities or county boroughs to maintain their clinics either in their own municipal hospitals or in *ad hoc* premises, and to put them in charge of members of the staff of the Medical Officer of Health. In a few of the larger and more progressive cities and boroughs, whole-time venereologists, usually trained in London or Edinburgh, were employed.

The quality of these services was, to say the least, uneven, though it must be said that, as far as syphilis was concerned, the treatment in the clinics was reasonably adequate and the great majority of the patients treated in the early and communicable stages were not only rapidly rendered non-infectious, but were also as a rule permanently cured. Between the two wars the incidence of early infectious syphilis treated in the clinics fell consistently, and during this period the routine serum testing of expectant mothers became increasingly more usual in ante-natal clinics, positive reactors being almost invariably promptly treated. It is significant also that at the same time the incidence of syphilis rapidly declined among the Armed Forces stationed in the United Kingdom, who were, for the most part, a group of young and lusty bachelors living away from home influences under conditions not unfavourable to infection.

With gonorrhoea, however, the case is altered, the number of new cases at the clinics showing little change in succeeding years, except for the years 1928–34, when they rose considerably. This rise has been attributed to an industrial depression, but I have often wondered how much truth there is in this, to me, rather shaky hypothesis. The recent upsurge in gonorrhoea has surely accompanied an unprecedented trade boom with a period of full employment. It is, I think, significant that the fall in syphilis continued throughout the depression, though in 1927—the year following the general strike—when there was in fact a temporary improvement in trade and employment, the clinic incidence of syphilis in males and females showed a sharp but short-lived rise. I have always felt that a more logical process of development could be—more employment, more money, more alcohol, more dancing, more V.D.

Those of us who served the clinics in the years between the two wars will agree that gonorrhoea, and perhaps to a rather lesser extent, syphilis, were still serious though diminishing public health problems. Syphilitic abortions were not unusual and the infantile death rate from congenital syphilis (though it fell from 1·75 per 1,000 live births in 1919 to 0·18 in 1938, and now stands at almost zero) was still far too high, considering that an efficient ante-natal therapy was available during the whole of that period. Babies with congenital syphilis continued to appear at the clinics, though in decreasing numbers, so that by 1938 only 216 cases of first year congenital syphilis were diagnosed in the clinics of England and Wales. Though hardly any such cases were treated privately, it is well to remember that some—not many—were and still are treated and retained on the books of general and special hospitals and are not included in the clinic totals. Clinic figures for late syphilis are available only since 1931, when infections of less than one year were first differentiated in the annual report of the Ministry; in 1938 5,842 late cases were seen, as against 6,569 in 1931. Here again it will be understood that then, and to a lesser extent now, many late cases never reached the clinics, and were in fact at first even discouraged from going there. If treated at all they were cared for in various special and general hospitals, and it is probable that larger numbers were never even diagnosed, still less treated, anywhere. It is regrettable that there seems to be no way short of notification that would ensure the diversion of these patients to a clinic, where they would not only be treated, but the necessary family investigations could be arranged. It is understandable that our colleagues in other

hospitals wish to hold on to their interesting patients, and indeed, the patients themselves, whose disease has become respectable with the passage of time, are sometimes unwilling to attend a venereal or even a so-called diagnostic clinic.

Though compassionate and slack certification must have reduced the number of ascertainable deaths from cardiovascular syphilis and neurosyphilis, the trend of certified deaths from neurosyphilis continued downwards, while those from aneurysm showed little change. It will be remembered, however, that Osler had erroneously attributed over 90 per cent. of aneurysms to syphilis, whereas Simpson (1947) and Newcomb (1953), the former with a wide experience in the Coroners' Courts, each found non-syphilitic aneurysms to occur in the *post mortem* room approximately twice as frequently as the syphilitic variety. Since 1940, aneurysm as a cause of death is no longer based on arbitrary rules, so that it is now possible to exclude those specified as "non-syphilitic or dissecting".

It is, I think, true to say that no real advances were made in the treatment of gonorrhoea between the two wars and, though ophthalmia neonatorum became less common, gonorrhoea seemed to be causing nearly as much misery in the early and middle '30s as it had done in 1920. The complication rate continued to be high, and even in well-conducted clinics was often over 20 per cent. Epididymitis in the male and salpingitis in the female were the most usual complications, though peri-urethral, prostatic, and especially Bartholinian abcesses were not at all uncommon.

Chancroid in the United Kingdom was never a public health problem, though a few neglected cases sometimes gave trouble and needed prolonged in-patient treatment. Pre-war annual clinic numbers averaged between 900 and 1,200, the patients being for the most part seamen who had contracted the disease in foreign parts.

As we all know, the impact of sulphanilamide on gonorrhoea was dramatic and by 1938 it was becoming apparent not only that over 80 per cent. of new infections could be rapidly and apparently permanently cured, but also that the enormous backlog of chronic cases, which continued to haunt the clinics, more often than not responded to the drug, sometimes without regard to the demonstration of gonococci in the discharge. It will be remembered that before the second world war the problem of non-gonococcal urethritis received little recognition in the clinics. First attacks were treated with reassurance, alkaline mixtures, and oxycyanide of mercury irrigations, to which, it must be said, they generally responded within 2 or 3 weeks. Subsequent relapses were usually attributed to hypothetical, hidden gonococci, which faulty cultures had failed to demonstrate, and whose presence was sometimes thought to be suggested by weakly or doubtfully positive gonococcal complement-fixation tests.

With the outbreak of the second world war, those clinic doctors who were in uniform were able to observe and study their patients far more effectively than had been possible in civil life. Examination of early morning smears and urine specimens became routine practice and, as all patients were admitted to hospital, re-infection could be excluded with reasonable certainty. As a result it soon became apparent that primary non-gonococcal urethritis was not a rare condition and that, from the Service point of view at any rate, was an important one, for it did not respond as rapidly to treatment as did most cases of gonorrhoea, though many, if not most, attacks subsided within 3 weeks. It was also noticed that non-gonoccocal urethritis (N.G.U.) seemed to be particularly prone to relapse—far more so, indeed, than gonorrhoea—and that it was a cause of much distress and anxiety to the patient as well as of annoyance to the doctor who was treating him.

The rest of the story is recent history and is well known to all of us. The spread of the originally small proportion of sulpha-resistant strains of gonococci, more marked at first on the European mainland than at home, was followed by the timely advent of penicillin, which as soon as it became available, proved itself a safe and reliable therapy for syphilis and gonorrhoea alike. The not unexpected rise in the clinic incidence of both diseases in 1946 was followed by a rapid and consistent fall in the number of new cases of early syphilis seen at the clinics (*from* 17,675 *cases in* 1946 *to* 704 *in* 1958) and by a striking though less spectacular decrease in gonorrhoea and other conditions up to 1951; after that year the number of new cases of gonorrhoea and of N.G.U. (which since 1951 had been listed separately) rose each year, so that new cases of gonorrhoea in 1958 exceeded the number seen in 1949, and new cases of N.G.U. had increased by 70 per cent. since 1951. Perhaps the most gratifying feature of the returns from the clinics has been the fall in the numbers of babies under one year with congenital syphilis (*from* 372 *cases in* 1948 *to seventeen in* 1958). Finally, we have the comparatively recent discovery that strains of gonococci are now in circulation which are partially resistant to penicillin, and the growing awareness that the antibiotic itself is not so safe in use as had been supposed.

With the release to civil life of those venereologists who had been serving in the Forces, the overworked

clinic doctors were adequately reinforced, so that it was not too hard to deal with the bumper crop of infections in 1946 and 1947. It was also fortunate that these ex-service doctors had been in the privileged position of being able to get the feel of penicillin in the treatment of both syphilis and gonorrhoea, at a time when it was hard to come by in civilian practice. Their experience reinforced and accelerated the growing confidence in the new therapy.

On the appointed day in July, 1948, the responsibility for providing facilities for free examination and treatment was transferred from the Local Authorities to the newly-appointed Regional Hospital Boards and Boards of Governors of Teaching Hospitals. With this transfer I think it is agreed that the status of the clinics and of the doctors who served them improved beyond measure. From that date the venereologist was given the opportunity of taking his place in the hospital team on an equal footing with his colleagues in other specialities, and at the same time the public purse-strings, which in the days of municipal control had been in the rather unsympathetic hands of the ratepayers' representatives and consequently were often tightly drawn, were quite suddenly loosened, so that funds became available, not only to equip some of the clinics in rather less spartan style than formerly, but also to raise considerably the salaries of all the clinic doctors.

The Hospital Boards had and have an absolute discretion in apportioning and spending the Exchequer grants for all their hospital services. This, I am sure, is the right policy, and is in line with our national traditions, though it should be mentioned that the newly-constituted Boards were urged by the Ministry to appoint regional advisers or advisory committees in venereology to assist them in deciding policy in connexion with the clinics. Venereal diseases are, however, as a rule infectious diseases, and many will agree that it was a pity that the long-standing divorce between preventive and curative medicine was perpetuated, if not made absolute, by the N.H.S. Act, even though it did recognize that the Medical Officer of Heatlh is still concerned with the prevention of disease. I personally would like to see at least one M.O.H. a member *ex officio* of the medical advisory committee of every large hospital, if not indeed of the Regional Board itself. Many of us know how helpful he can be in dealing with the problems of case-finding, case-holding, ante-natal care, prostitution, and destitution and I feel that he is often in a position to provide equally invaluable information and help to many of our colleagues in other departments.

With the striking fall in syphilis and gonorrhoea during the years immediately following the war, it is not too difficult to appreciate, though not necessarily to agree with, the opinion of many of our colleagues, that *from the public health aspect* the venereal diseases no longer pose a grave problem and could not be regarded as so serious as cancer, coronary disease, poliomyelitis, rheumatism, and chronic bronchitis, not to mention the common cold to which gonorrhoea was so often compared. This view was, of course, reinforced by the common knowledge that, taken in their early stages, the diseases could be easily cured and could be prevented from doing serious harm to the patient. For a time this attitude even permeated certain sections of our own specialty and the returns from some of the clinics certainly confirmed the complaints of their doctors that there was not enough work to do. It was significant, however, that after the abnormal peak year of 1946, when new cases of early syphilis and gonorrhoea were already falling fast, the number of patients with "other conditions" formerly classified as "non-venereal", showed little change in many areas, and I consequently decided to risk unpopularity in certain quarters by asking that these numbers be subdivided into those requiring and not requiring treatment and also, in the case of male patients, those suffering from N.G.U. The results of this request were most rewarding and since 1951 the returns from the clinics have shown not only that new cases of gonorrhoea have risen by over 60 per cent. and new cases of N.G.U. in men by 70 per cent., but also that the number of patients of both sexes suffering from other conditions, most of them with a venereal background, has likewise steadily increased.

Though the fall in early syphilis has exceeded the most optimistic expectations—in 1958 it was one-twenty-fourth of what it was in 1946—it is not generally realized that, whereas 83,024 new cases of all kinds were seen at the clinics in 1939, no fewer than 107,501 new cases were seen in 1958. Still, if we are honest, we must admit that these increased numbers cause us far less trouble, tedium, and anxiety than did the smaller numbers before the war. Gone are the days when many of us always had some patients gravely ill with dermatitis or hepatitis, and when the complications of gonorrhoea were so much commoner and more serious. Today gonorrhoea and, indeed, early syphilis, promptly and properly treated with one or, if necessary, more than one of the agents at our disposal, still have a cure rate of not much less than 100 per cent. Our therapeutic problems now for the most part comprise relapsing N.G.U. in men with its occasional complications, and trichomoniasis in women patients, the latter condition being increasingly sent on to us by

our gynaecological colleagues. How then, we may be asked, can we say that venereal disease is still an important problem? Though it is not easy to give a quick convincing reply to the uninitiated, it is a fact that, in spite of the free availability of the most effective therapeutic agent in medical history, the reservoir of gonorrhoea in the United Kingdom and many other countries is once again filling rapidly, and that in some lands (including our own) the spectacular decline in syphilis has recently come to a halt. In the United States syphilis has been increasing since 1954, and in 1959 early infectious cases rose by 15 per cent. over the total in the preceding year, so that syphilis now ranks fourth amongst the notifiable diseases.

N.G.U. is also an increasing problem, and its known incidence in some countries now approaches that of gonorrhoea. With improving economic conditions throughout the world, it is not surprising that more and more persons with infectious venereal disease are seeking private treatment. In the United States, where syphilis is notifiable, it is estimated that private practitioners are reporting only 25 per cent. of the cases they diagnose and treat. This could also happen here, and a recent survey by the British Cooperative Clinical Group and the B.M.A. Venereologists' Group Committee suggests that "a significant proportion of venereal disease is treated outside the hospital service", largely by family doctors and more often than not under the National Health Service (*B.J.V.D.*, 1959, **35**, 111).

Though it has been truly said in a recent editorial (*B.J.V.D.*, 1959, **35**, 69) that "given adequate standards of diagnosis and treatment, the acquisition of Reiter's disease is the most serious risk to which the promiscuous patient is exposed by his way of life", we know that these unfortunates actually form a very small proportion of the patients treated at the clinics. The fact that the prevalence of N.G.U. and gonorrhoea in men and of gonorrhoea in women is increasing, must surely be regarded as a danger signal, as an indication that these diseases are on the whole becoming rather harder to cure and that more gonococcal infections are enduring longer in symptomatic and asymptomatic stages than formerly. So far this seems to occur more often in the female than in the male, and during the last 2 years I have had the impression that subacute and chronic salpingitis has been rather less uncommon, though most cases continued to respond well to treatment with one antibiotic or another. Happily, however, venereal urethritis in the male, gonococcal or otherwise, is still hardly ever accompanied by acute or subacute complications, though it is too soon to exclude the possibility of the future development of urethral stricture. In pre-sulphonamide days acute complications were common in the third week of a gonococcal infection; if treatment failures ever become numerous, these complications will be seen again.

It is remarkable that the increase in gonorrhoea during the last few years has not been accompanied by a rise in notifications of gonococcal ophthalmia neonatorum. Illegitimate pregnancies are as common as ever they were in time of peace, and many unmarried and indeed some married mothers must often be in an infectious state. It is, however, probable that the démodé Crédé's method was not all it was made out to be, that the present practice of wiping the infant's eyes with clean wool is reasonably effective, and that watchful ante-natal care is now so usual that vaginal discharge in the expectant mother is almost always investigated and treated during pregnancy.

There is evidence that many of the few cases of early syphilis coming to the clinics occur among visiting or homecoming seamen, having been contracted abroad. That these cases are not far more numerous than they are may possibly be connected with the vexed question of treatment at sea. During the last 10 years there has been an increasing tendency to treat the symptoms of venereal disease on board ship without waiting for a medical opinion or for the results of pathological tests and already it may well be that as many, if not more, seamen with venereal diseases of all kinds are treated afloat as ashore. Always provided that certain rules are followed, there can be little objection to this procedure. Properly regulated, it has much to commend it and, what is more, it has certainly come to stay. The venereologists at some important seaport clinics, however, have complained bitterly of the haphazard nature of much of this treatment and of the needless trouble and worry it sometimes gives them and their patients when the case comes up for assessment at a later date. It will, I am sure, be agreed that to try to forbid this practice would be both futile and foolish, and I personally am glad that the articles of the Brussels Agreement are in process of being redefined so that treatment at sea can be made reasonably safe and efficient, and that everything possible will be done to ensure that a diagnosis of suspected venereal disease afloat will later be verified by pathological tests. Syphilis is still a common disease in many of the ports where our Merchant Navy trades and every effort should be made to impede the importation of the treponeme into the United Kingdom. The seaman of to-day, like any other citizen, is an insured person and has a right to prompt and proper treatment for any illness. For

this reason it seems only right that, when it is not practicable for his ship to carry a doctor, a trained technician with a practical knowledge of first aid, sick nursing, and sanitation should be included in the complement of all ocean-going ships. Such an individual should always have attended a course of instruction at a well-conducted V.D. clinic at a large seaport in his own country. Here he will learn the importance of accurate diagnosis and the dangers of haphazard treatment, as well as the potential risks of side-effects from the drugs he is taught to handle, and last but not least his own limitations. The provision of facilities for the medical care of sailors at sea should not be left to the good offices of the more progressive shipping lines, but should be compulsory by law; this offers an admirable opportunity for further co-operation between the Ministries of Health, and of Transport and Civil Aviation.

We can, therefore, I think, agree that though venereal disease may not be as urgent and as grave a problem as in the past, it still threatens the public health. Past experience showed plainly what syphilis and gonorrhoea could do when neglected, and a continuing cavalier attitude on the part of the public and certain sections of our profession could land us once again in serious difficulties.

There has been no serious attempt to dismantle our venereal disease services as in some other countries, and, indeed, the main anxiety I have heard expressed in official circles has been that the supply of well-trained specialists for well-paid posts will not be maintained. Though there is, I believe, some justification for this anxiety, I am sure that those of you with wartime experience in the Forces will agree that a comparatively small group of experienced specialists with suitable assistants under their control can operate a first class service, and that not a few of our less busy clinics could and should be run as satellites by part-time clinical assistants of an area specialist. The sole qualifications for such an assistant are that he should be a good doctor who likes the work and that he should have been given careful instruction and practice in the few minor but absolutely necessary technical skills of our specialty. His clinic would be regularly visited by his consultant and his records scrutinized, and it would be made clear to him from the start that telephone consultations about problem cases would be welcomed at all times. I am sure that this arrangement is preferable to the employment of consultants in other specialties who have had some training and experience in the venereal diseases, on the grounds that the patient would then have the satisfaction of seeing a doctor with specialist status, and I say this in spite of the fact that such is the traditional practice in almost every country but our own.

It is possible that if Fleming's discovery in 1929 had immediately become a practical proposition, our specialty might never have received the recognition accorded to it in the last 20 years, and that even some of the major clinics would still be in the complete charge of doctors practising other specialties or none at all. As long as enough of the right type of recruit comes forward, and, as not many are needed, there is good reason to suppose that they will, and as long as the standards of post-graduate specialist training are kept high, we may expect to retain, not only the recognition but also the respect and regard of our colleagues and of the public.

In these days of syphilis-scarcity at home, specialist training should rightly include a spell of experience in a country where the disease is not yet under control, and it is to be hoped that exchanges may be effected between British, African, W. Indian, and some Asian Medical schools. There is some resistance to this idea in certain overseas territories, but I think everything should be done to secure even the unilateral secondment of British senior registrars to hospitals overseas; it is certain that any expenditure resulting from this temporary expatriation would certainly be repaid with interest, more particularly as immigration from these territories seems to be becoming a permanent feature.

At the present time I feel that our specialty should be kept small and select. The consultant must be not only highly trained but also widely experienced, and consequently he must be kept fully employed in his specialty if he is not to run the risk of deterioration. It is, I think, wrong to retain well-qualified and highly-trained specialists in charge of small clinics with inconsiderable numbers of new patients; when this happens, such a clinic should be demoted to satellite status and the specialist employed to better effect elsewhere.

I do not, however, share the view of those who hold that detailed diagnostic screening of all clinic patients should be carried out automatically, whether specifically indicated or not. This is not to say that a careful medical and social history must not always be taken, that the patient should not be encouraged to talk, and that detailed examinations and investigations must not always be made whenever the history, symptoms, or serology suggest it.

I like to think of the V.D. clinic as essentially a specialized non-referential, casualty department, whose proper and primary function is the diagnosis, treatment, and prevention of the venereal diseases in their widest sense. Moreover, I am inclined to think information dispensed by the press and the

radio is already creating anxiety in the minds of the public and taking a good deal of the joy out of life. I make no apology for what may seem to be rather old-fashioned opinions, and I still agree with my illustrious predecessor at the Ministry that the good venereologist should be not only a good public health-minded doctor but should also have the common touch.

There is no need to remind you of the importance of education, case-finding, and case-holding, of the axiom that the reservoir of gonococcal infection resides in the untreated female, and that this is also probably true for N.G.U. as well. It is a pity that outside the clinics little or nothing is done to trace the contacts of men suffering from both these diseases as well as from syphilis, and I feel that there should be some way, short of legal compulsion, of getting family doctors and others to make use of contact-tracing services. Some may say that we are handicapped by the absence of a Lex Veneris on the statute book, but I am convinced that the advantages of our traditional absolute secrecy at the clinics far outweigh the possible benefits of compulsion. For this reason I doubt whether the high-powered "speed-zone" epidemiological methods of venereal disease control used in the United States would be suitable or acceptable here, though they might have some success with patients who had recently arrived from less highly developed countries and who were living in fairly circumscribed communities. Such methods include what is called the "cluster technique"; this involves interviewing and examining persons thought to be moving in the same socio-sexual environment as the patient who are not necessarily cited as venereal contacts.

In spite of the phenomenal success of penicillin and the other antibiotics, we all agree that there is still much to be learnt about the control, diagnosis, and treatment of the venereal diseases and that there is a pressing need for research in many aspects of our specialty. For instance—the diagnosis of gonorrhoea in its chronic and latent stages has always been a capricious business and we know that films and cultures often prove to be imperfect tools for the purpose. A new approach to this problem is certainly overdue and already there are indications that new diagnostic techniques (e.g., fluorescent antibody identification of the gonococcus) may supplement or even one day replace the traditional methods.

Research is already proceeding into such subjects as the aetiology of N.G.U., the resistance of the gonococcus to antibiotics, and allergic and other reactions to antibiotics, and it is surely time that further efforts were made to cultivate pathogenic treponemes on artificial media. The last-named should, I think, take high priority, as there is no telling when a reliable method for testing the antibiotic sensitivity of treponemes may not be urgently needed.

At a recent meeting of the World Health Organization Expert Committee on Venereal Diseases and Treponematoses, it was recommended that the whole question of gonorrhoea should be taken up internationally, and that an international "gonococcus centre" (which I feel could well be situated in London) should be established to co-ordinate the work of national laboratories throughout the world. Such a centre is already badly needed and once established would be an obvious focal point for research into the problems of venereal urethritis in its widest sense.

Finally, we can never forget that in the last analysis venereal disease is the result of a pattern of behaviour which, though at present largely beyond our power to influence, certainly still needs a good deal of study and research. The number of teen-aged girls coming to the clinics indicates fairly clearly where a start might be made. Ignorance about venereal diseases, especially gonorrhoea and its tendency to latency, is almost universal among women, and it is surely time that the facts about the venereal diseases should be explained to all adolescent girls and boys, as part of their *general* education. N.G.U. is almost as common as gonorrhoea, and there is much to be said for the idea of linking the two diseases under the composite name of "urethritis" when talking to boys on this subject. Not being a statutory venereal disease, N.G.U. has been neglected by the public and the medical profession alike, and is often regarded as a respectable complaint rather than a dirty disease with disgraceful implications.

I do not believe that the laws of supply and demand are anything like as inexorable as they are made out to be, and I cannot help feeling that if as a nation we took more trouble in looking after our growing girls, the reservoir of venereal disease could be reduced to an insignificant level. Such care must start in the home, and it should be recognized that young girls of respectable families are often literally driven on to the streets after school hours because their homes are locked against them by mothers who have not yet returned from work. Much glib talk about sex education has been coupled with a good deal of wishful thinking. By this we are led to believe that universal and timely sex education will of itself have the effect of lessening promiscuity. Here a definition of terms is surely important. True sex education is not merely instruction in the mechanics of

procreation, but education in the art of the good life in its widest sense. The former coupled with the knowledge that the venereal diseases can be quickly and painlessly cured will surely tend to work in the opposite direction. Factual education is, of course, necessary; alone it is but a poor prescription.

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