

**ON THE RECENT ACTION OF THE STATE WITH
REGARD TO VENEREAL DISEASE.**

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For many years it has been well known to Sanitarians that the group of diseases called "venereal" constitutes a serious menace to the Public Health, a potent cause of naval and military inefficiency, and an important element in the diminution of the birth-rate. These diseases are known to be highly contagious and infectious, but on account of the shame attached to their usual mode of transmission, it has, until recently, been customary to pass them over in silence. Local Sanitary Authorities have not made special provision for them as they have for other infectious diseases. Benevolent and Insurance Societies have in many cases explicitly declined to extend their benefits to persons so affected. Even in the filling-up of death-certificates the custom has been to avoid, so far as possible, ascribing the fatal illness to a venereal disease. In fact there has been a sort of conspiracy of silence, as the result of which the evil consequences of this important group of maladies have been allowed to go unchecked. To quote the felicitous words of Sir Malcolm Morris in his excellent little book entitled "The Nation's Health."¹ "Syphilis and Gonorrhoea, respectively, the more serious and the less serious of those diseases, bear names which from the principle of association sound evilly to the ear. So, too, does the expression 'venereal disease,' which, by the way, is a misnomer, since it implies that the diseases are only contracted in sexual intercourse. Except in medical literature these words have, until quite recently, been almost entirely tabooed, and the things they connote have for the most part been ignored." The veil has now been withdrawn and a flood of light thrown on the hidden canker that has been so long gnawing at the vitals of our modern civilisation. The moment seems opportune for a communication on the subject in view of the fact that our Public Health Authority here in Dublin is at present on the threshold of concerted action as against these diseases. In

what follows I shall endeavour to give as clear an idea of the nature and extent of the evil as I can without going into those more technical details which are properly reserved for the medical profession.

Most of what I shall have to tell is based upon the Report of the recent Royal Commission on Venereal Disease,² which constitutes a mine of wealth for all interested in the subject. The Commission was appointed on November 1st, 1913, and it finally reported in February, 1916. Its instructions were to enquire into the prevalence of Venereal Diseases in the United Kingdom, their effects upon the community, and the means whereby those effects can be alleviated or prevented. Its *personnel* comprised, in addition to high officials and administrators, leading members of the medical profession and representatives of the Churches and social workers. The final report is a most lucid and instructive document, containing many valuable suggestions, and the evidence, contained in two bulky volumes,³ runs to no less than 22,296 questions asked of witnesses who were selected for their expert knowledge on the subject in its several aspects. Not only doctors, sanitarians and statisticians, but also heads of schools and members of philanthropic associations came forward with their information and were ably examined so as to elicit their views.

Nature of the Diseases under consideration: They are called venereal because they are usually (though by no means always) acquired during sexual contact with a person already infected. They are three in number, Syphilis, Gonorrhoea, and Soft Chancre or Chancroid. The two first named constitute a serious menace not only to the individual but also to the State, whereas the third, although the source of much local trouble to the sufferer, is so rarely fatal that it exercises no appreciable influence on the public health.

SYPHILIS (a) History: In classical times there were undoubtedly venereal diseases, but no classical writer has left us a description of a disease which we can identify with certainty as Syphilis. It was not until the year 1495 that public attention was first forcibly attracted to the subject by the sudden appearance of a malady in a virulent form amongst the soldiery comprising the great expeditionary force which King Charles VIII. of France led down through Italy to the conquest of Naples. It seems that it was from the Spanish population of Naples that the French soldiery acquired the disease. They called it *Le mal Néapolitain*, and on their way home they spread it broadcast

over the countries they traversed. Its spread was greatly favoured by the laxity of morals then prevailing throughout Europe. The current opinion at the time was that this new pestilence had been imported into Europe from America by the members of the pioneer Expedition of Columbus, one of whose Captains, Pinzon, had touched at Bayona in Galicia in March, 1493. According to Thomas Ragonus, who wrote in 1508,⁴ the first epidemic of Syphilis was in Galicia in Spain, and the disease was first called *Morbus Galecum* (presumably meaning the disease of the Galicians). From Spain it was speedily carried to Naples and there it attacked the French invaders, many of whom were mercenaries and spread it throughout Europe on their return home. It was generally termed *Morbus Gallicus*, the French disease, or *Lues Venerea*. It reached England in 1497 and is often alluded to by Shakespeare, whose coarser plays bristle with references to it that sound very disagreeably in modern ears. In *Timon of Athens* (Act IV., Scene 3) he displays a knowledge of its leading symptoms that would do credit to an up-to-date contemporary physician. But the most distinguished writer on the subject was Fracastoro, an Italian philosopher and physician, who published at Verona in 1530 a Latin poem in three cantos entitled "*Syphilis sive Morbus Gallicus*."*

* This curious poem presents a strange mixture of pseudo-classical mythology with shrewd observation and well-grounded precept. It became quite popular and was translated into many languages⁵. In 1686 the then Poet Laureate, Nahum Tate, published a rendering into English verse, from which I reproduce the following passages to give an idea of its character:—

" Say Goddess, to what cause we shall at last
Assign this plague unknown to ages past
If from the western climes 'twas wafted o'er,
When daring Spaniards left their native shore;
Resolved beyond the Atlantic to descry
Conjectured worlds, or in the search to die."

Syphilus is the name of a shepherd. He blasphemed the Sun-God, and became the first victim of the new disease, to which he gave his name. Apparently, as an alternative theory, it is suggested that the disease was sent as a punishment for the shooting of a flock of sacred parrots.

" At length a Flock of painted Birds they view,
With azure Plumes and Beaks of Coral-hue."

The invaders make use of their newly-invented firearms.

" Each takes his Stand and singles out his Mark
The dire Ingredients with a sudden Spark
Inflamed, discharge with rage the whizzing Ball,
The unsuspecting Birds by hundreds fall."

Fracastoro and his contemporaries regarded the outbreak of Syphilis in 1495 as a new and virulent epidemic. There are, however, competent Authorities who maintain that Syphilis was known in Europe as early as the middle of the 15th century.⁶

In this severe form it lasted some 20 or 30 years. In 1579 we learn from Clowes that it was exceedingly prevalent in London and that St. Bartholomew's Hospital was three parts filled with it and that they attended more cases of it than of all other diseases put together. Since then it has maintained itself in our midst, its propagation being fostered by a conspiracy of silence.

(b) *Nature*: Syphilis is an intensely infectious and contagious disease caused by a germ that was discovered by Schaudinn in 1905 and named by him *Spirochaete pallida*. It passes usually during sexual intercourse from the diseased to the healthy and increases and multiplies first of all at the spot where it has been implanted. Subsequently it invades almost every tissue and fluid of the body, producing various ill-effects which will be briefly referred to later on. It is not my purpose in this paper to describe the biological

One of the outraged birds then utters the prophetic threat.

"Your foes o'ercome, your Fleet in Civil Rage
Shall disagree and Ship with Ship engage
Nor end your sufferings here, a strange Disease
And most obscene shall on your bodies seize."

By way of cure Fracastoro recommends active exercise:—

"With every *Beast* of Prey loud War proclaim
And make the grizzly *Boar* your constant Game
Nor yet amongst these great attempts disdain
To rouse the Stag and force him to the Plain
Some I have known to th' Chase so much inclin'd
That in the Woods they left their Grief behind;
Nor yet think scorn the sordid Plow to guide
Or with the pondrous Rake the Clods divide,
With heavy Ax and many a weary blow,
The towering Pine and spreading Oak o'erthrow;
The very House yields Exercise, the-Hall
Has room for Fencing and the bounding Ball,
Rouze, Rouze, shake off your fond desire of Ease
For Sleep forments and feeds the foul Disease
'Tis then th' Invader do's the Vitals seize."

He also recommends milk diet and plenty of fresh vegetables. He is acquainted with the virtues of mercury.

"The greater part and with success more sure
by Mercury perform the happy cure.
A wondrous virtue in that mineral lies"

Guaiacum was also a favourite remedy and he gives a minute account of its preparation. But time will not admit of further quotation.

characters of the Spirochaete nor the methods whereby its presence may be demonstrated. These are matters that concern only the medical profession. But it may not be without interest to demonstrate it on the screen as shown in stained preparations and as viewed in the living state by the optical device called dark-ground illumination. It is a minute organism spirally twisted and capable of active movement. Its length is about one three-thousandth of an inch. (*Demonstration.*)

Syphilis may be either

A. Acquired; or

B. Hereditary.

In acquired Syphilis the mode of infection is either

(1) direct; or

(2) indirect.

(1) *Direct* infection is by means of actual contact and, as above stated, is generally of sexual origin. But there are other methods of transmission—kissing, for instance, suckling syphilitic infants, and such manipulations as are carried out by dentists, accoucheurs, and nurses.

(2) The infection is said to be *indirect* when the germ is conveyed from the sick to the healthy on some object soiled with the virus. Such objects as razors, combs, spoons, tobacco-pipes, wind-instruments, implements used in glass-blowing, and, generally speaking, things likely to be placed in the mouth. Cases of the accidental inoculation of innocent persons are not all uncommon—in my experience I have come across several—one in a dentist, another in a doctor. Both of these cases proved very serious. The doctor became deaf and was forced to abandon the practice of his profession at an early age. The disease when thus indirectly transmitted to persons who have not brought it on themselves by any vicious act is called *Syphilis insonitium*, i. e., “of the guiltless.” The older writers such as Fracastoro considered that the sexual method was only one of many modes of infection.

B. Hereditary—In this form, also called “Congenital,” the disease appears in the offspring of syphilitic parents. Perhaps the most usual train of events is that a dissolute father conveys the disease to his wife, who then passes it on to her offspring. The mother need not necessarily be obviously syphilitic. By means of a test applied to the blood (and of which more anon) she can generally be shown to be the victim of the disease in a latent form.

Gonorrhoea (a) History—This form of venereal disease can, according to most authorities, be traced back to the

Middle Ages. It is referred to in an English work of the 14th century.⁷ Since the great outbreak of Syphilis a century later, however, Gonorrhoea came to be looked upon as one of the manifestations of Syphilis, and it was only during the 19th century, as the result of the persevering labours of the great French dermatologist, Philippe Ricord, that the threefold nature of Venereal Disease—Syphilis, Gonorrhoea and Soft Chancre, was made clear.

(b) *Nature*—The germ of Gonorrhoea was discovered in 1879 by Neisser. In shape it is plano-convex, not unlike that of an orange cut in half, and two individuals are generally juxtaposed with their flat surfaces looking towards each other. (*Demonstration*).

The *Gonococcus*, as it is called, causes an acute inflammation of the urino-genital system with purulent discharges which are highly infectious. It is contained within white blood corpuscles which it causes to emigrate from the vessels, thus producing the discharge called pus. If neglected it tends to spread, like Syphilis, throughout the whole system, and when once firmly rooted it is very hard to eradicate. The *Gonococcus* is conveyed in the vast majority of cases by sexual contact, but there are many exceptions, especially among young female children and new-born infants. The infection may be conveyed not only by direct contact, but also through the intermediary of fingers, cloths, etc., soiled with the virus. It persists in the local discharges when they have become so small in amount as to be hardly noticeable ("gleet").

Effects of Acquired Venereal Disease.

To describe the clinical course and the various symptoms of Venereal Disease would be outside the scope of the present paper. (1) Of Syphilis let it suffice to say that its effects, both recent and late, are so numerous and so varied that Sir Wm. Osler said of it before the Royal Commission that "a student who was thoroughly taught Syphilis and all its consequential diseases would acquire a good general knowledge of his profession," and that "of killing diseases, Syphilis comes third or fourth." The disease itself in its primary, secondary and tertiary manifestations is very serious. In additions to these it causes degenerative changes in the walls of the heart and blood vessels giving rise to Aneurism, *Angina pectoris*, and Aortic Disease. The microbe may also settle down in the central nervous system and set up those fatal disorders, General Paralysis of the Insane (G.P.I.) and Locomotor Ataxy. General Paralysis of the Insane, also called Paralytic

Dementia, is a very common form of mental disease responsible in Great Britain for nearly one-sixth of the total male admissions into Urban Lunatic Asylums. Amongst women it is not so frequent. The terrible symptoms—loss of memory, of sense of duty and proportion, in a word, loss of capacity for business, come on, as a rule, at least ten years after the patient's attack of Syphilis, and, gradually creeping over him, rob him of his mental power and consign him, a drivelling idiot, to an untimely grave. Locomotor Ataxy, or *Tabes dorsalis*, as it is more commonly called now-a-days, is a gradual loss of co-ordination of movement brought on by a sort of wasting of the region in the spinal cord, which has to do with the transmission of sensation. The patient gradually becomes unable to get about, suffers from lightning pains, and in the course of time becomes bed-ridden. Not unfrequently atrophy of the Optic Nerve comes on with total blindness.

2. *Gonorrhoea*. This is often looked upon by those who have caught the infection as a trivial malady, and so it would be were it at once subjected to energetic treatment. But the tendency of the sufferers to conceal it and to have recourse to quacks gives the germs time to penetrate deeply into the system so that it becomes constitutional. When neglected, it gives rise to stricture of the urethra with consequent implication of the kidney, to troublesome rheumatism, and even to inflammation of the lining membrane of the heart. In the female the remoter consequences of neglected *Gonorrhoea* are even more serious than in the other sex. In addition to joint troubles, it causes sterility and various painful inflammations in and around the womb. Sir Thomas Barlow at the Royal Commission considered that from 50 to 60 per cent. of major operations performed on women's pelvic organs were occasioned by the consequences of this disease. When once this affection has acquired a firm foothold in the female economy it is very difficult—according to some authorities almost impossible—to get rid of it.

Effects of Venereal Disease on Offspring.

In the Report of the Royal Commission will be found a harrowing account of these. For our present purpose it will suffice to say that congenital Syphilis is one of the most frequent causes of ante-natal death—causing abortion, miscarriage, and still-birth. In the organs of still-born Syphilitic children incredible swarms of *Spirochaetes* can be demonstrated by means of a special method (due to the Roumanian Scientist, Levaditi). (A photograph of

such a preparation was here projected on the screen, and also a coloured diagram by Dr. O'Farrell). Should the child be born alive it is often puny, deformed in various ways, and grows up idiotic or weak-minded. Extensive investigations by Professor Dean, of Manchester, and others have shown that the mental defect is in a very large proportion of cases due to the taint of Syphilis. Congenitally Syphilitic children are often either blind, deaf or paralysed. Some even go so far as to assert that should a Congenital Syphilitic marry and have children the disease may be transmitted to the third generation, but this is not quite certain. The diagram copied (by permission) from the Report of the Royal Commission gives a clear idea of the effects of parental Syphilis on the offspring. It also shows the relapse that may follow on the premature discontinuance of the treatment. As to the effects of Gonorrhoea on offspring, the only result that needs to be mentioned here is the very severe eye-affection called *Ophthalmia neonatorum*, which is due to the virus of the disease getting into the eyes of the child during or immediately after birth. An intense inflammation of the delicate membrane covering the front of the eye is thus produced, which, if neglected, leads to incurable blindness. This is the commonest cause of blindness among children, accounting for nearly one quarter of the total number of cases. The diagram (*demonstration*) shows the share taken by Venereal Disease in producing blindness.

Losses to the State due to Venereal Disease.

When we consider the fact that sterility in both sexes—a serious matter in view of the falling birth-rate—is frequently due to Gonorrhoea, and that a large proportion of abortions, miscarriages, and still-births are due to Syphilis; when, moreover, we call to mind the economic inferiority of children born with the taint of Venereal Disease and the number of institutions for the blind,* deaf and dumb and feeble-minded that have to be maintained chiefly for its innocent victims; when we learn that in 1912 the Navy, with an average strength of 119,540, lost 269,210 days, and the Army on a strength of 107,582 lost 216,445 days due to invalidity caused by Venereal Disease (the average number off the strength being 593 per day) *then* we begin to form an idea of the vast economic loss attributable to this cause. We have no corresponding

* There are in the London Co. Council schools for the blind 1,100 children, 55 per cent. of whom owe their blindness to Gonorrhoea or Syphilis. The cost of their education is 7 times as much as that of ordinary children. *R. C. Report* § 102.

figures for the civil population. The data just mentioned for the Army and Navy apply to pre-war strengths. Since the war began, things are not much better. Speaking at the 2nd Annual Meeting of the National Council for Combatting Venereal Disease, the Director-General of the Army Medical Service, Sir A. Keogh, tells us (on June 13th last) that in France the admission-rate for these diseases is 21, in Egypt 32, and at home 48 per thousand.

“ It is an awful thing, said Sir A. Keogh, “ to realise that these diseases are so prevalent amongst our forces: it deprives us of an enormous amount of military strength. It might go a long way towards losing the war if so many men are incapacitated by these diseases.” The number affected is certainly very large, and special hospitals containing numbers of beds ranging up to a thousand and staffed by experts and nurses innumerable have had to be set up in order to cope with the evil—and this despite the fact that heavy disabilities such as loss of rank and pay are imposed on those who, disregarding prophylactic measures,⁸ have acquired the infection.

Prevalence of Venereal Disease.

In endeavouring to ascertain this the first source of information is, of course, the figures supplied by the Registrar-General. I reproduce (by permission of H.M. Stationery Office) the diagram for the three divisions of the United Kingdom (*demonstration*), having brought it down to the end of 1916 by means of data supplied to me by the Registrar-Generals for Ireland and England, to whom I wish to express my sincere thanks. The figures do not, however, give a complete idea of the real mortality due to Syphilis, for the following reasons:—On account of the stigma attaching to Syphilis death is rarely ascribed to that cause. Moreover, death is not very often due to Venereal Disease in its uncomplicated form, but is caused or contributed to by the late manifestations of Syphilis and Gonorrhoea which appear under names that do not suggest any connection with Venereal Disease.

Thus, for example, most of the deaths ascribed to Aneurism, Aortic disease and Angina pectoris are in reality due to Syphilis, and so are nearly all those registered as General Paralysis of the Insane and Locomotor Ataxy. Gonorrhoea lurks behind many cases where death is ascribed to Nephritis, Peritonitis, etc. At first sight one would be inclined to think that a considerable fall in the mortality—amounting to nearly 50 per cent.—has taken place since 1875. But the absence of any corresponding fall in the

deaths due to the late manifestations of Syphilis throws doubt on the reality of the decline.

The evidence with regard to the prevalence of these diseases in Ireland was given by four witnesses: The Registrar-General (Sir William J. Thompson), who dealt with the statistics, Dr. Geo. Pugin Meldon (Senior Surgeon, Lock Hospital), who spoke on behalf of the medical profession, the late Dr. Brian O'Brien, Medical Inspector of the Local Government Board, who dealt with the general distribution of the diseases throughout Ireland, more especially in poor law institutions, and Dr. Edgar Flinn, who spoke as to their prevalence amongst prisoners. From a study of their carefully compiled figures I have come to the conclusion that these diseases are much less prevalent in Ireland than in the Sister Isle.* They are particularly uncommon in the rural districts, and a leading practitioner in a medium-sized provincial town assured Dr. Brian O'Brien† that in the course of an active practice lasting over many years he had not seen a single case of Venereal Disease.

With regard to the prevalence of Venereal Diseases here in Dublin it is difficult to make definite statements. The only hospital exclusively devoted to them is the Westmoreland "Lock" Hospital, where there are 30 to 40 beds constantly occupied by female patients, most of whom are prostitutes, avowed or clandestine. In his evidence before the Royal Commission Dr. Meldon, the Senior Surgeon, said that 2,478 cases were admitted during the past 20 years.† Making certain deductions, the yearly average of new cases is 110. On the supposition that the average period during which these unfortunates ply their trade is 9 years, their number would amount to somewhere about 1,000. But how many actually dwell in or about Dublin, and how many come up to the Lock from outside places like Belfast, Cork,

* From statistics kindly supplied by Dr. J. O'Connor Donelan, Resident Medical Superintendent of the Richmond Asylum (number of inmates about 3,000), it appears that during 1916 only 76 men and 15 women are recorded as having Syphilis.

‡ About 35 men and 3 women were admitted suffering from General Paralysis of the Insane and about the same number died of it. In an English Urban Asylum of the same size the numbers would have been enormously higher—somewhere about 400 men and 60 women.

Figures kindly collected for me by Dr. H. R. C. Rutherford, of St. Patrick's Hospital (by request of Dr. R. R. Leeper, R.M.S.), confirm this result.

The patients at this Hospital are relatively few in number and belong to the "better" class. During the past five years they averaged 42 in number, and the G.P.I. cases averaged 2 or say 5 per cent., instead of the 15 or 16 per cent. recorded in England.

† *H.C. qv* 2210.

Liverpool, etc., is not certain. In view of the opinion held that women of this class nearly always become affected with one or other of the Venereal Diseases at the very inception of their careers, the amount of danger presented by a thousand of them is very considerable. Unfortunately the women will not always stay in until completely cured. But Dr. Meldon tells us that since the introduction of the new treatment there is a marked improvement in this respect. There is a "Lock" ward for males at Steevens' Hospital containing 10 beds, which, under the new Scheme, are to be increased to 24, 12 for each sex. Most of the other Clinical Hospitals do not take venereal cases into the house, leaving them to be dealt with in the out-patient department. After making enquiries of the Dublin Clinical and Maternity Hospitals, I have not arrived at any definite conclusion as to the prevalence of the disease in Dublin. Many cases are treated by private practitioners, many alas! by quacks. Many of those who gain entrance to hospitals, or are dealt with in the out-patient departments, come from outside places or have become infected elsewhere than in Dublin, and I can only refer to the evidence given by Sir Wm. Thompson before the Royal Commission, according to which "the total deaths from venereal and allied diseases in Ireland in 1912 numbered 339, equivalent to a rate of 78 per million of the population; 113 were registered in Dublin county borough and 60 in Belfast county borough; or, in other words, the mortality from the diseases referred to in Dublin and Belfast was more than 50 per cent. of the mortality of the whole of Ireland. In Dublin the rate per million was 385, the corresponding rate for the remainder of Ireland being 54." We shall not know the real dimensions of the evil until the new system of coping with these diseases shall have been in force for some years.

The question as to prevalence can also be looked upon from other points of view. There is, for instance, the question as to what classes of the community are most affected—in other words the social distribution of the diseases. The Table shows the recorded death-rate per million for Syphilis and three consequential diseases, distributed among eight classified groups of the population, and refers to the deaths of males over 15.

The chief point to be noted is the high incidence of the Syphilitic group of diseases in Classes 1, 2 and 3 and the relative immunity of Classes 6, 7 and 8. These diseases thus appear to be most rife amongst the lowest and the highest of the community. An interesting fact (not brought out by this Table) is that miners and agricultural

labourers are comparatively free from Aneurysm. Yet their work involves a great deal of physical strain. Now they are also comparatively free from Syphilis. Hence we seem to be justified in concluding that Aneurysm goes with Syphilis rather than with physical strain.

One of the most remarkable facts brought out in the Report of the Royal Commission is the enormous reduction in the number of recruits rejected for Venereal Disease, the figures per ten thousand having fallen from 63 in 1890 to 14 in 1911-12. The Commissioners, for reasons which they state, do not consider that these figures point to a decreased prevalence among the civil population. Extensive series of blood tests carried out by Dr. Mott, Dr. Browning, and other experts have, moreover, revealed an unexpected prevalence of latent Syphilis among men and women dwelling in large centres of population, and in view of all the facts laid before them the Commission considered itself justified in reporting that "the number of persons who have been infected with Syphilis, acquired or congenital, cannot fall below 10 per cent. of the whole population in the large cities, and the percentage affected with Gonorrhoea must greatly exceed this proportion."

Modern Methods of Diagnosis and Treatment.

Syphilis.—Since the year 1905 when Fritz Schaudinn, assisted by Eric Hofmann, announced the discovery of the germ of Syphilis a veritable revolution has supervened in our methods of diagnosing and treating of this malady. First as to diagnosis, we have the demonstration of the disease-germ. When for any reason that cannot be done we have the blood-test, called after its discoverer, Wassermann. This dates back to 1906. Then in 1910 followed the successful application by Ehrlich of organic compounds of Arsenic to the treatment of the disease.*

* "How great a difference Ehrlich's discovery has made in the management of Syphilis is shown by these facts: Gibbard and Harrison showed that under systematic mercurial treatment 83 per cent. of soldiers suffering from Syphilis required re-admission to hospital at least once during the first year for re-appearance of contagious lesions. In contrast with this, the re-admissions for clinical relapse amongst over 10,000 cases of Syphilis treated with '606' and mercury, have been less than 1.3 per cent. Under mercurial treatment a soldier spent an average of 66.2 days in hospital during the first year of the disease, while the average time spent by soldiers under '606' and mercurial treatment at Rochester Row now is twenty-five days. In this connection it should be explained that soldiers are kept in hospital for just as long as they exhibit open lesions."—(Col. L. W. Harrison, on "The Treatment of Syphilis," *Quarterly Journal of Medicine*, July, 1917, page 294.)

The preparation generally used is an organic compound of Arsenic called Salvarsan, or 606, but there are many substitutes which act as well or nearly so. The Wassermann test is a very complex one and can only be carried out in the laboratory by a Specialist. The patient's presence is not necessary; all that is needed is a specimen of his blood, which can be easily taken by the doctor and sent to the laboratory. After a very extensive experience of the Wassermann test extending over 3,000 cases, mostly done by the full *technique*, I think that, when properly carried out, the test gives reliable indications as to the presence or absence of Syphilitic infection.* The treatment by Salvarsan, involving, as it does, the intravenous injection of the drug, has to be carried out by specially trained practitioners. It kills off the Spirochaetes and effects a cure. The earlier the treatment is begun the more certain the result. Mercurial treatment is generally combined with Salvarsan. Thus we have entered upon a new era in the history of this pestilence. Our diagnosis and treatment have been placed on a firm scientific basis. We can recognise the disease with practical certainty; we can treat it efficiently and cure the patient; and finally by means of the Wassermann reaction we can control the effect of our treatment and ascertain when the sufferer may be considered cured, and when he has relapsed. The only maladies in this group that have hitherto resisted the new treatment are the remoter nervous effects of Syphilis—paralytic dementia and locomotor ataxy, and they will probably soon be overcome.

For the cure of Gonorrhoea we have no such specific method as we possess for Syphilis. There are, however, drugs which if injected into the affected part have the power of preventing the spread of the germs and killing them off. It is all important that the treatment should be *early* and *active*, before the virus has had time to migrate into less accessible regions. In the case of Gonorrhoea we possess no such accurate blood test as that of Wassermann, but even in chronic cases the germs can usually be recognised by the aid of the microscope.

* "Considering the comparison from the point of view of the Wassermann test, Harrison showed, in an analysis of 492 soldiers whose sera were tested three months after the completion of two years' regular mercurial treatment, that 45.5 per cent. gave a positive reaction to the original test. In comparison with this, Gennerich found in 162 similar, i.e., primary and secondary, cases who were treated for less than six months with salvarsan and mercury and observed from one to two years afterwards, that 151 remained completely negative to all tests, including examination of the cerebro-spinal fluid after provocative injections."

(Harrison, *Loc. cit.*)

State Action against Venereal Disease.

Our diagnosis and treatment having thus been placed on a sound scientific basis, the moment seems appropriate for attacking those disorders in a new and systematic way. Under the present state of affairs "The man or woman suffering from Gonorrhoea or Syphilis, even if the innocent victim of another's guilt, is refused admission to the voluntary hospital, deterred, and, as often as possible, pushed out of the workhouse, and in spite of the extreme danger to the Public Health, wholly unprovided for by the Local Health Authority."⁹

Some of the recommendations of the Royal Commission are not universally agreed upon and will require legislation—such as the confidential registration of cause of death, legal protection of medical men with regard to confidential communications, and the making of Venereal Disease an incapacity for marriage. These will have to be left for consideration until after the war. On the other hand the provision of increased facilities for diagnosis and treatment is a matter on which all are agreed, and steps were at once taken by the Government to put these urgent recommendations into force. Within 5 months of the final Report an order was issued by the Local Government Board to the Borough and County Councils throughout England and Wales directing them to make the necessary arrangements with the local institutions (Hospitals and Laboratories). The Councils complied with alacrity. So rapid has progress been that after the lapse of less than a year Lord Rhondda, speaking at the 2nd Annual Meeting of the National Council for Combating Venereal Disease, on June 13th last, was able to announce that schemes for the diagnosis and treatment of Venereal Disease have been submitted by 102 of the 145 Councils, serving a population of over 26 million out of the total 36, or over two-thirds of the whole. 68 of these schemes, serving a population of over 20 million, have already been approved. Work has already commenced at 52 hospitals, serving a population of over 16 million. Up to the end of May as many as 6,000 new cases were treated in the London Clinics alone.

In October, 1917, the Local Government Board for Ireland issued to the Borough and County Councils a similar instruction and the preliminary steps have already been taken in Dublin. (It is only right to say that with regard to this matter that Belfast has taken the lead in public action. So far back as January, 1917, a representative public meeting was held at which it was decided to call

upon the Local Government Board to put in force the recommendations of the Royal Commission and to form a branch of the National Association for Combating Venereal Disease.)

Two new Acts of Parliament have dealt with this subject.

The Venereal Disease Act, 1917, puts a stop to treatment or advertisement by unqualified practitioners (quacks).

The Prevention of Disease (Ireland) Act makes County Councils in Ireland Sanitary Authorities for the purpose of this scheme.

Let us now, in conclusion, consider what action would be desirable on the part of the Institutions concerned. I would suggest that

1. The Hospital already devoted to Venereal Diseases (the Westmoreland Lock) should have

- a. its Wassermann Tests done free of charge on sending in the specimens to a recognised laboratory
- b. free Salvarsan;
- c. funds to enable it to set up an out-patient department and a clinical laboratory where dark-ground work, film-staining, etc., could be done.
- d. Additional remuneration for the medical staff in consideration of the largely increased amount of work cast upon them.

2. All General Hospitals should come in under the Scheme. This would mean that they should undertake to provide

- a. Beds in the house for patients of either sex. Such beds to be in small special wards for patients in the primary and secondary stages of Syphilis. Other cases might be placed in the general wards. The number of beds required in special wards would probably not exceed half-a-dozen for each sex.
- b. Two special Clinics or Dispensaries per week, one for men, the other for women. That for men should be held in the evening, say, from 8 to 9 p.m. Patients presenting themselves at the ordinary out-patient department and recognised as being probably the subjects of Venereal Disease should be referred for diagnosis and treatment to these special Dispensaries.
- c. The special Dispensaries to be conducted *not*, as a rule, by a member of the *Resident* Staff, but by one of the *Visiting* Staff, who should receive from public funds special remuneration for his services on the basis of

length of time taken up by the work. One of the Assistant Surgeons would generally be found willing and able to take over the male Dispensary, whilst the co-operation of a Surgeon with special gynaecological training would be almost indispensable in the case of that for females. Competent nurses should be in attendance at each Dispensary. Inasmuch as skin rashes are a leading characteristic of Syphilitic affections, the Dispensary might be called "the Clinic for Diseases of the Skin," its relation to Venereal Disease being thus concealed and the patient's secrecy preserved. The Hospital Pathologist or his assistant should attend each Dispensary, carry out the microscopic diagnosis, and receive suitable remuneration from public funds for doing so. The Wassermann tests to be done free of charge not at the Hospital,* but at one or other of the approved laboratories. The students of the Hospital to be encouraged to attend these Special Dispensaries and familiarise themselves with Venereal Diseases in their clinical aspect, diagnosis and treatment. Practitioners also who have sent in patients to be invited to attend, see the diagnosis made, and participate in the treatment. Should a general hospital persist in refusing admission to Venereal patients the question might arise as to whether its certificates of attendance should be received by examining bodies—unless the student could produce evidence that he had attended for instruction in this subject elsewhere.

I am well aware that there are difficulties in the way of the realisation of this scheme. The Special Dispensaries may, I apprehend, prove a stumbling-block to many of the Hospitals, more especially that held in the evening. Possibly this evening Clinic need not be insisted on for the present, save perhaps in the case of two Hospitals, one on each side of the city. The question of remuneration, more especially that of the medical men who conduct the Dispensaries may also prove a source of difficulty unless faced in a spirit of reasonable liberality.¹⁰

3. Hospitals other than general should come in under the scheme.

Amongst them I reckon

a. Maternities.

b. Children's Hospitals in general.

* Unless there was a Laboratory attached to the Hospital, specially equipped, and a Pathologist fully trained, for the performance of these tests.

- c. Homes for Imbeciles and Weak-minded Children, the Blind, the Deaf and Dumb.
- d. Lunatic Asylums.
- e. Special Hospitals for Diseases of the Skin, Eye-and-Ear, Nose-and-Throat, and other similar institutions.

In connection with the Maternities I would strongly advocate the establishment of *ante-natal clinics* where poor women could obtain the best advice with regard to the conduct of their pregnancy and, perhaps, nourishment as well. At such clinics specimens of blood should be taken from cases giving a history of oft-repeated abortion or miscarriage, and sent to one of the recognised laboratories for diagnosis. Salvarsan, if required, to be supplied free. In return accurate histories should be taken and records kept. Students attending the Maternities to be encouraged to familiarise themselves with the stigmata of Congenital Syphilis in children. Dead-born fetuses (with the placenta) should be sent for pathological examination and report.

As regards the other Special Hospitals just mentioned, their Medical Boards should be invited to send to one or other of the approved laboratories specimens from such cases as they may suspect to be of Syphilitic origin.

4. Each laboratory where the Wassermann test is carried out should be in connection with the pathological department of a University or recognised School of Medicine. The Pathologist should be a medical man, and, if possible, a specialist in the subject. He should keep records of his results and be prepared on demand to issue outfits for the collection and forwarding of specimens for diagnosis with instructions for use. He should be remunerated according to a fixed scale for the work done.

5. Medical practitioners should be notified of the privileges extended to them under the Scheme—free diagnosis, free Salvarsan, and free outfits for the despatch of specimens to the laboratory—also the privilege of attending Hospitals and acquainting themselves with modern methods of diagnosis and treatment.

Lastly, a concerted effort should be made to diffuse among the proper sort of people a correct knowledge of these diseases and how they may be avoided. As Sir Malcolm Morris well says, ‘The old notion that Venereal Disease is too delicate a subject to be spoken of or written about has been sufficiently discredited by its calamitous fruits.’ This disease is peculiar in this respect that it is the only one where there exists a strong temptation to

incur the risk of infection. This temptation ought, no doubt, to be overcome by moral considerations, but experience has abundantly shown that these are not always operative. Knowledge as to the danger should be conveyed somehow to those liable to temptation. It ought not to be possible for a young man when he finds himself the victim of infection to say, 'Why was I not told of this?'

The question as to how the knowledge is to be conveyed, and by whom, bristles with difficulties. Fathers might inform their sons—but many will shrink from such a topic. Schoolmasters could do it more easily, and many actually summon the departing boys and give each privately his note of warning. The subject is one which can hardly be dealt with in Church before a mixed congregation, but might possibly become the theme of sermons to selected classes of hearers. In the Catholic Church the Confessor would, I should think, have many an opportunity of uttering words of warning that could not fail to make a deep impression. Furthermore, he could advise persons about to marry to subject themselves to medical examination. In the Catholic Church the betrothed couple must have been purified from the taint of sin before they appear at the Altar—why not from that of physical impurity also?

England, with her capacity for combination, has already devised a plan of campaign. A National Council has been formed for Combating Venereal Disease. Lord Sydenham of Combe, who presided over the Royal Commission, is its President, and 7 members of the Commission, including the five doctors, are on the Council. It promotes lectures and circulates suitable literature. Its operations appear to be most successful in England. Ought we to start a branch here in Dublin? The question is a difficult one. Our Irish way of looking at these matters is so different to that which prevails in the Sister Isle! I am a little doubtful as to whether the people who need to be approached could be reached in this way. Information ought assuredly to be conveyed to the members of the Borough and County Councils who are entrusted with the administration of the schemes. I should like to place in the hands of each of them some really convincing and temperately written work such as "The Nation's Health," by Sir Malcolm Morris, and give it time to soak in, if I may use the expression. Nothing is to be gained and something may be lost by precipitate speech or action. Public addresses were better avoided—for the present at least—unless limited to selected groups such as nurses, health-visitors, or the like. Delicacy

on these matters is very highly developed here in Ireland and care should be taken not to produce a bad impression by wounding it. The holding of conferences to which clergymen, doctors, members of hospital boards, municipal representatives and health-workers could be invited, would be, in my opinion, the best way to spread the light.

In conclusion, I desire to express my sense of deep obligation to Professor Sir Wm. Osler of Oxford, who kindly lent me the literature mentioned in reference No. 5; to Dr. T. Percy C. Kirkpatrick for a loan of the third part of Dryden's "Examen Poeticum" (London, Tonson, 1693) containing Tate's Translation of Fracastorius' Poem; to Prof. C. H. Oldham for calling my attention to the Poem in question; to Drs. Wallace Beatty, R. A. Stoney, O'Conor Donelan, H. R. C. Rutherford, Pugin Meldon, C. M. O'Brien, T. T. O'Farrell, W. D. O'Kelly and J. A. Small for kindly furnishing me with statistics from their respective Hospitals; also to H.M. Stationery Office, The Oxford University Press, and Mr. Edward Arnold for permission to reproduce diagrams.

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4. According to McIntosh and Fildes, "Syphilis from the modern Standpoint," London, Arnold, page 2.
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7. "The common name for it in England, enshrines that given to the brothels in France in the time of Charlemagne The disease is referred to in John of Gaddesden's Rosa Anglica, 1314," quoted from "Prostitution, the Moral Bearings of the

Problem by M.F., with a chapter on Venereal Diseases by J. F. (formerly Resident Medical Officer, London Lock Hospital)," published for the Catholic Social Guild by P. S. King & Son, Orchard House, Westminster, 1917, price 2/6 net. (This excellent little book has a Foreword by the Archbishop of Liverpool and may be taken as an authoritative statement of these vexed questions from the Catholic standpoint).

8. For a good statistical discussion of the results of early Prophylaxis in the U.S. Army and Navy see the *Lancet*, 1917, Vol. 1, page 308. There is likewise an interesting and suggestive debate on the precise meaning and moral aspects of "Prophylaxis" as applied to Venereal Disease, in the "Nineteenth Century and After" for January and March, 1918. See articles by Sir Brian Donkin and Sir Francis Champneys.
9. Sidney and Beatrice Webb, "The Prevention of Destitution," page 33.
10. For a detailed account of the staffing, equipment and running of a Venereal Disease Clinic in connection with a General Hospital, see H. L. Bayley, *Lancet*, Vol. II., 1917, page 620. See also the account of the City of London Treatment Centre, London, Vol. II., 1917, page 471. As to the question of remuneration see suggestions as to fees recommended by the Council of the British Medical Association (*Lancet*, 1917, Vol ii., p. 254).