VOLUME XXI JUNE, 1922 No. 1

NOTES ON VENEREAL DISEASES IN THE ROYAL NAVY.

BY SIR DANIEL McNABB, K.B.E., C.B.
Surgeon Rear-Admiral.

ANY description of the outbreaks of venereal disease is of necessity bound up with the migration of races, or parts of races, with wars and the consequent dislocation of the social system resulting from them. There are many inferences available from current writers showing how this contagious disease was spread and there is a good deal of reason to believe that some, at least, of the numerous cases of "leprosy" for which provision was made on frequent trade routes in past times were really cases of venereal disease.

Before the end of the 15th century, extended sea voyages were seldom undertaken. The enterprise of the Portuguese and Spaniards, however, opened new fields for exploration, discovered new lands and mingled with or subdued new peoples. It is very evident from the history of these times that whatever benefits may have accrued to the nations concerned, the explorers suffered considerably from the effects of this intercourse with the inhabitants of the new lands discovered, and Columbus' voyages were followed by a virulent outbreak of venereal disease traceable to his crews and which spread through the European countries by means of the seaports to a great extent. Amongst other names the scourge was known as the "Spanish disease" but it might equally well have been called the "American disease."

In those days and for long afterwards the Kings' ships of the various navies had no regular establishment, and, though during the voyages attempts were made to deal with the diseases as they arose, yet, when the voyage was ended, the ships were paid off and the crews were scattered irrespective of whether they were diseased or not and free to infect the communities with which they mingled.

Even after the navy had had its personnel established on a regular basis little was done on board in the matter of prevention. The condition of the seaport towns was frequently animadverted on and deplored. Their condition was the ultimate cause of the Contagious Diseases Acts being enforced in 1864 and the navy appears to have relied on the operation of these acts for its safety. In the light of modern knowledge it is easy to see where the fault of these Acts lay, though the Navy and Army Venereal Diseases Committee of 1864 was quite alive to the fact that to prevent spread of disease inspection of men was just as necessary as inspection of women. I do not think that either was relished by the officers concerned or by the objects of their inspec-

tion, and in the case of the men the inspections were abrogated much to the satisfaction of all concerned, and they were made subject to the ordinance that concealment of disease was an offence. This order has remained in force ever since with good effect. Still the fact remained that the men in the navy suffered greatly from venereal disease.

Long before entering the Service, when a student, I heard one of my instructors state with reference to a patient who was being examined, "Oh the man is a sailor, and therefore has most probably suffered from syphilis." It appeared to be accepted that venereal disease in some form or another was an attribute of the sea-faring life. The fact was noted, and where the infection was established or reasonably inferred the treatment was arranged on that basis, that is as far as treatment of syphilis can be said to have gone in those days. Outside of strictly religious circles there appeared to be no organized attempt to deal with the prevention of the disease in the male, though prostitution by females was recognized as the origin of most of it, and repressive action towards such women was embarked on as stated above.

Though venereal disease was recognized as the probable cause of many other diseases yet little was known of the pathology of syphilis and as a consequence the treatment was empirical and not considered worthy of more than a passing reference in most schools. It was regarded as a "side-show" and to some extent as a disreputable "side-show." Coming into the Service then armed with such knowledge as was current it is not surprising that the young naval surgeon in the eighties was not able to make much progress with the treatment of the disease, or reduction in its incidence.

The subject was an unsavoury one and was relegated, to some extent, even by medical officers, to the class of subject which is not talked about in polite society. I have recollection of one bold spirit who was so far in advance of his time as to suggest that a ship's corporal should be stationed at the gangway to give each man going on leave a piece of soap. His suggestion was, to say the least of it, most unfavourably received and this reception served to discourage others who may have had similar ideas. At that time the incidence of venereal disease in the navy was very great and though records were kept and the patients were retained under treatment until there was no risk of communicating the disease, yet the treatment was faulty and methods of prevention were entirely lacking.

THE CONTAGIOUS DISEASES ACTS.

The Contagious Diseases Acts, faulty as they were, were the outcome of agitation brought about by the degradation of many garrison and other large towns, notably some of the chief seaports. Whatever the opinion may be as to the wisdom of these acts they appear to be the first organized attempt in our time to deal with the conditions producing venereal diseases by means other than those which were purely religious, or moral, and the immediate result was a fall in the rate of incidence of syphilis (*vide* Table B).

In connexion with this point the experience of one seaport town may be quoted. In this town where the disease rate was notoriously high the immediate effect of the Acts was a reported reduction of these diseases to one-twentieth of their former extent[1]. In the ports abroad disease was, however, very rife, and returns from the Indian and China stations particularly showed a very high disease rate, except when controlled by Acts similar to the Contagious Diseases Acts. Soon, however, the incidence began to increase again and at the time of the repeal of the Acts (1886) the incidence of combined venereal disease was nearly as great as it was before the Acts were put in force.

PERSONAL PROPHYLAXIS.

In 1909 the first official attempt in the navy was made to deal with the subject personally. Venereal diseases were not directly talked at, but in the course of "health lectures" delivered to the ships' companies by medical officers, showing what should be done to maintain health on board ship, the subject of venereal disease was touched on, the evils which it brought in its train were pointed out, and the fact that continence was the only real safeguard was insisted on.

It was realized, as it had been before, that immediate disinfection was a great help in saving those who had succumbed to temptation; but, situated as the sailor was, it was apparent that to make use of this means some ready preparation must be carried on the person. Accordingly a soft cream containing calomel was provided in collapsible tubes for the use of those who wished to take them. At first tubes of calomel and nargol jelly were supplied, later a double-ended tube containing cream of two consistences, one for external use and one for injection into the urethra was substituted. This was an unofficial proceeding and the way in which it was carried out varied greatly. In some ships the names of the men taking these preventives were noted, in others application had to be made to the petty officer in charge of the sick bay, in others again the tubes were put in a certain place (the number of tubes being known) and those who wanted them were invited to take them, no one knowing who took them and who did not. The last-named method was the most successful, but as I have said above the practice was never officially sanctioned though it was known of and, as a matter of expediency, concurred in.

These methods were not entirely free from abuse. Cases are understood to have arisen where individuals provided themselves with an ample supply of the "preventives" and then retailed them ashore at a considerable profit. Again many men objected to the system saying, quite rightly too in many cases, that when they went ashore they had no intention of exposing themselves to risk but that under the influence of alcohol or surroundings they succumbed. At the present time in a shore establishment of over 4000 men, where some hundreds of men go on shore daily, an average of three preventive outfits

[1] *The Medical Profession*, Mapother, 1868, p. 133.

per day is all that is expended, the result being that 85 per cent. of those infected say they have taken no prevention for the reason given above.

In the meantime it must be remembered that a very considerable change was taking place in the character of the personnel of the navy. Greater atten-

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Table A. *Total Force.*

		Rate per 1000	Sick daily per 1000
Contagious Diseases Acts in force	1870	98·70	7·90
	1871	92·00	5·50
	1872	117·30	9·40
	1873	105·80	9·00
	1874	104·20	9·20
	1875	99·50	8·40
	1876	92·31	7·79
	1877	103·49	8·07
	1878	104·34	8·59
	1879	117·47	9·71
	1880	129·62	10·17
	1881	126·41	10·27
	1882	124·08	9·80
C.D. Acts suspended	1883	152·05	12·58
	1884	159·35	13·62
	1885	149·14	11·49
C.D. Acts abolished	1886	148·83	11·73
	1887	154·01	12·59
	1888	154·49	12·40
	1889	170·66	13·73
	1890	163·68	13·11
	1891	153·40	12·15
Contagious Diseases Acts abolished	1892	148·05	12·16
	1893	155·03	12·85
	1894	149·89	12·18
	1895	151·44	12·38
	1896	151·90	12·14
	1897	147·81	10·95
	1898	143·97	10·85
	1899	130·63	9·42
	1900	120·40	8·71
	1901	113·73	8·56
	1902	115·45	8·26
	1903	121·75	8·92
	1904	110·85	8·22
	1905	121·49	8·21
	1906	121·93	7·99
	1907	124·33	8·29
	1908	122·49	8·13
	1909	119·53	7·90
	1910*	118·03	7·73
	1911	114·92	7·21
	1912	105·96	6·14
	1913	93·17	5·19
	1914	73·11	3·77

* Health Lectures made general in 1910.

Table B. *Home Station**.

	Year	Force	Cases of primary and secondary syphilis	Ratio per 1000 of cases of primary and secondary syphilis
No Contagious Diseases Acts	1861	22,900	2300	100·4
	1862	20,760	2255	108·6
	1863	21,570	2248	104·2
	1864	19,630	1897	96·6
Contagious Diseases Acts enforced 29. vii. 64	1865	20,980	2039	97·1
	1866	21,200	1461	69·1
	1867	21,600	1275	59·0
	1868	23,200	1232	53·0
Amended 11. vi. 66	1869	22,100	1216	54·9
„ 11. viii. 69	1870	21,000	1120	52·2
	1871	22,100	1128	51·0
	1872	23,000	1430	62·1
	1873	22,400	1228	54·8
	1874	22,500	1094	48·6

* Table taken from Health of the Navy 1874, showing effects of Contagious Diseases Acts on Syphilis.

tion was paid to the comfort of the men in ships and establishments, greater encouragement was given to organized recreation and attention was paid to the provision of suitable clubs, refreshment places and "homes" on shore (these being mostly the outcome of philanthropic effort ably assisted by the

officers and men of the navy themselves). The cult of temperance was encouraged in every way and a great improvement in this respect was certainly noticeable in the Home Ports. All these no doubt had their influence in bringing about a reduction in the incidence of venereal disease but the noticeable drop in the incidence following the introduction of the health lectures points strikingly to those lectures and to the attention which was drawn to the subject as being the cause of this reduction.

Gonorrhoea and sequelae were not tabulated because: "Gonorrhoea, however, is a simple local inflammatory infection, which only rarely creates permanent or temporary local changes and it is, as compared with syphilis, of little or no importance." (Extract from above report.)

When the Contagious Diseases Acts were passed a circular was issued by the Admiralty drawing attention to these diseases, with the result that many concealed cases were brought to light which gave the impression that an increase of gonorrhoea followed the enforcing of the Acts. (Précis of further remarks from the same report.)

Table C. *Rate per* 1000. *Total Force.*

	Date	Primary and secondary syphilis	Gonorrhoea	Combined
Contagious Diseases Acts	1870	57·56	40·52	98·07
	1871	51·07	40·74	91·81
	1872	64·00	53·30	117·30
	1873	61·09	44·36	105·45
	1874	56·79	47·54	104·33
	1875	50·81	48·89	99·70
	1876	47·47	44·87	92·34
	1877	51·69	51·80	103·49
	1878	50·94	53·40	104·34
	1879	57·77	59·71	117·48
	1880	65·55	64·08	129·63
	1881	65·54	60·75	126·29
	1882	62·46	61·62	124·08
Contagious Diseases Acts suspended... ...	1883	79·87	72·08	151·95
	1884	87·52	71·83	159·35
	1885	77·94	71·20	149·14
Contagious Diseases Acts abolished	1886	74·61	74·21	148·82

In studying the incidence of venereal disease during the operation of the Contagious Diseases Acts one is struck by the fact that while syphilis steadily diminished for a time the cases of gonorrhoea showed a steady increase. This may be partly accounted for by the attitude adopted towards gonorrhoea, namely that it was a trivial local disease without constitutional symptoms (?) and not leading to invaliding as was the case with syphilis.

Syphilis certainly seems to have bulked large in the minds of those responsible for the administration of the Acts, and while looking for this disease which was comparatively easy to discover they passed by scores who were affected by the more elusive gonococcus. Be this as it may the great increase of gonorrhoea was largely responsible for the failure of the Contagious Diseases Acts as a preventive measure.

How much of the reduction since 1909 was or is due to the use of preventives (or "dreadnoughts" as they are called by the sailor) it is difficult to say.

The conditions described above were those in existence on the outbreak of war. For a time the venereal diseases fell in incidence owing largely to the isolation of ships' companies from populous centres and the absence of leave. Adequate statistics to prove this statement are wanting at the moment, but no doubt will appear later when the material accumulated during the war has had time to be investigated (it can partly be seen in the figures for 1914, Table A). When however it was possible to resume leave it was found necessary for men to be provided with some form of safeguard owing to the long journey which most men had to take to get back to their ship, and the one in most common use, namely the calomel tube, was the agent employed.

The value of calomel as a disinfectant has been called in question and attention has been drawn to the excellent results obtained by the use of other substances such as permanganate of potash. But whatever substance is made use of the great difficulty both in ships and in shore establishments, but particularly in ships, is to arrange that any disinfectant will be available at once or to insure that the man concerned is in a condition to use it.

In the naval ports which, being garrison towns and under direct naval and military control and also possibly more fully alive to the need for providing well regulated counter-attraction for men on leave, the complaints as to the incidence of venereal disease were not so noticeable. As, however, new bases had to be established and ships taken for repair to places not hitherto frequented by men from the fleet then frequent complaint was made as to the unusual incidence of venereal diseases in individual ships and units frequenting these places. Medical officers and commanding officers were urged to take all possible means of warning the men of the risks they ran by means of lectures, and opportunities were given for men to provide themselves with the safeguards available. Attempts were also made under the Defence of the Realm Act to remove infected persons or to penalize intercourse with persons who were infected, but these orders were directed against women only and they proved quite useless and were given up. Reliance therefore had to be placed on the means already referred to. The problem was further complicated by the fact that during the war the navy was more than trebled by additions from the mercantile marine, fishing fleet and the shore. These men were quite unaccustomed to any instruction or any restraint in sexual matters beyond that inculcated by the religious belief to which they might subscribe, and therefore a highly increased incidence might have been expected.

It is true that seclusion in carefully guarded bases far from populous centres and also the prolonged spells at sea both helped to reduce the venereal incidence. Against these however must be set the influx of the large numbers of uninstructed men referred to above, the breaking open of new ground where the sailor was made much of after a fashion, and the somewhat natural rebound after the strenuous period of restraint which had been gone through. The

result was a greatly increased demand for hospital accommodation for venereal cases. The increase was one in actual numbers but it was not a relative one. At the end of 1917 or the beginning of 1918 I was able to obtain figures showing the daily sick rate per 1000 for venereal disease for the Grand fleet, the home ports and depots and the various bases round the coast. The rate worked out at 5 per 1000. Compare this with the figures for 1912 for the home station, namely 6·21 sick daily per 1000, and it must be admitted that, considering all the circumstances, the risks to which these men were exposed and the influx of untrained men, the state of affairs was on the whole satisfactory. That it was so must be attributed I think largely to the interest taken in the subject by medical and other officers of the R.N., and to the great care taken to keep up the morale of the ships' companies by carefully organized recreation of every form. This was an aspect which I know from personal experience appealed strongly to Lord Jellicoe and the schemes initiated under his regime had a great deal to do with the maintenance of morale and, as a further result, with maintaining self-restraint.

Table D. *Home Station*, 1912.

Average daily ratio of sick per 1000:			
	Primary syphilis	0·43	
	Secondary syphilis ...	2·72	6·21
	Gonorrhoea	3·06	
Average daily ratio of sick per 1000 for 4 years (1908–9–10–11):			
	Primary syphilis	0·27	
	Secondary syphilis ...	4·29	8·86
	Gonorrhoea	4·30	

Ships on Home Station and Depots, 1917 *and* 1918.

Average daily ratio of sick per 1000:		
	All venereal diseases ...	5·00

RECENT EXPERIENCE IN THE NAVY.

Towards the end of the war public attention was drawn to the alarming increase in venereal disease more, possibly, on account of the fact that, being in the public service, concealment was not possible, rather than to any astounding increase in the actual incidence. Schemes were set on foot to deal with the question by propaganda showing clearly by lectures, pamphlets and films the dangers which were run by men who exposed themselves. Men were provided with leaflets telling them what to do after exposure and giving lists of the various centres or ablution rooms where immediate disinfection could be carried out. Naval men were warned and all were urged to use the means of disinfection provided by the Service in the same way and were provided with similar leaflets.

The provision of ablution rooms in naval barracks was approved and facilities given for men to return to these establishments at any time of night. So far however these rooms have not materialized in every port, so it is not

possible to speak of any effects due to them. There is no record to show to what extent they availed themselves of these facilities for ablution, but up to the beginning of the last quarter of 1919 no very great change had taken place in the incidence of venereal disease, at any rate there was no perceptible increase.

Lectures were delivered at all the chief naval centres and copies of a film dealing with the subject were purchased by the Admiralty and distributed through the fleet.

The present position therefore is that while "immediate disinfection" is preached as the only remedy when continence fails, yet the problem as to how the disinfection can be adequately provided for in ships and establishments is still in the majority of cases awaiting a satisfactory solution. In the meantime the treatment of cases of venereal diseases had been carried out on the principles already in force in the navy which ensured that every case discovered (and severe penalties are reserved for any concealment) was treated by the most up-to-date method, and further, was retained under treatment until all active signs had disappeared or until there was a reasonable certainty that a cure had been obtained.

For many years certain officers had been devoting their energies to the special study of these diseases. Their special knowledge was actively made use of, and by the end of the war provision was made for the establishment of a genito-urinary specialist in each large hospital and with each depot and squadron of ships. The work of these officers was so co-ordinated that a complete record of the disease and the treatment carried out was obtained in every case of syphilis and a syphilis history card giving this record accompanied the papers of every man who had suffered from the disease. This syphilis history sheet had been in operation for some years before, but during the war it was brought more up to date and in conformity with the more modern methods of treatment. Records on the medical history sheet are kept in the case of gonorrhoea, but here it cannot be said that the method of treatment is as successful in obtaining a definite result as in the case of syphilis. In gonorrhoea so much must depend on the personality of the officer in charge and on the amount of enthusiasm towards cure which he may inspire in his patients.

In the meantime a more or less standardized form of treatment has been established by which irrigation of the urethra by an effective germicide is carried out. Careful examination of secretions is made under the microscope and when all discharge has apparently ceased the prostate and other glands are examined in order that the state of their secretions may be tested. The urethroscope is also freely used. If the anterior urethra is clear and the urethral and prostatic glands show no sign of infection then the case may be safely regarded as cured. This however is not always easy to attain.

At the end of the war and in connexion with demobilization the subject of venereal disease again acquired great prominence. At one time the public appeared to imagine that a flood of actively diseased men was to be foisted

on it in the process of demobilization. This point however had not been overlooked by those who were responsible for the medical side of the question. Every man was medically examined and those found to be suffering from venereal disease were detained until such time as they could be safely regarded as innocuous. Where it was not desirable to retain such a man his consent was first obtained and then his name and address were communicated to the medical officer of health of the district in which he was going to reside. In no case was a man notified without his consent. By these means it is believed that as far as the navy is concerned practically no men were returned to civil life with venereal disease in a communicable form. It is quite true however that men may have exposed themselves just prior to discharge and have developed the disease subsequently, but beyond taking the measures above alluded to it was not possible to prevent this occurrence. During the deliberations on the subject of the possible spread of venereal disease during the demobilization I drew attention to the fact that while every attention was being directed to the men in the Services the Merchant Seaman was unprovided for at sea and on shore to a great extent, and was free to pass on the disease to anyone with whom he might come in contact. Whether as a result of my remarks or not I am not able to say, but the matter has been actively taken up by both the Ministry of Health and the National Council for Combating Venereal Disease, and I venture to hope the results will be worthy of the attention given to the subject.