GONORRHOEA IN MANCHESTER*

INCIDENCE OF REPEATED INFECTIONS

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The incidence of gonorrhoea as shown by the annual returns of the Ministry of Health has not shown the fall which could reasonably be expected. It is difficult to explain this satisfactorily, since the treatment of the disease is simple and effective. The simplicity and efficiency of treatment may in some ways have contributed to this continued high incidence by allowing re-infection to occur in a comparatively short time. Before the introduction of chemotherapy and the antibiotics, an individual infected with gonorrhoea spent a considerable time under treatment and had therefore little chance of becoming re-infected within a short space of time. Nowadays, in the vast majority of cases, effective treatment takes only a few minutes, the blood level of the antibiotic falls after a few days, and re-infection may then occur. This process may be continued so that, in any one year, one individual "repeater" may account for a number of infections.

Another factor which has undoubtedly been operating since the war years has been the change in population, especially in the large towns. Disturbances in other countries and full employment in Great Britain have attracted large numbers of immigrants from Europe, Africa, Asia, and the Caribbean, and because of social difficulties these people have contributed to the incidence of venereal disease. It is estimated that greater Manchester has a population of 2,400,000 (Laird, 1957); no accurate figures are available of the number of foreign nationals, but it has been suggested that some 8,000 individuals from the Caribbean countries alone are domiciled in the area (Hall, 1957). Manchester is served by a number of venereal disease clinics and the present study concerns one of the largest, St. Luke's Clinic.

The annual return sent by venereal disease clinics in England and Wales to the Ministry of Health includes the total number of infections with gonorrhoea treated during the year, but does not take into account the number of individuals concerned. During 1955 and 1956, in St. Luke's Clinic, 1,482 individuals were treated for gonorrhoea on one or more occasions: 703 in 1955 and 779 in 1956. For the purpose of this study each individual is included only once, *i.e.* at his most recent attendance at the clinic. A patient reporting in both 1955 and 1956 is included in the figures for 1956 only. Records of nationality were kept in 1,287 cases; of these 690 (53.6 per cent.) were from the United Kingdom and 597 (46.4 per cent.) from other countries (Table I).

TABLE I
NATIONALITY OF PATIENTS

Patients' Origin	1955	1956	Total	Percentage
United Kingdom	288	402	690	53.6
Caribbean ..	30	119	169	13.1
Eire ..	37	99	156	12.1
West Africa ..	51	86	137	10.6
Europe ..	49	52	101	7.8
America ..	4	10	14	1.0
Asia ..	6	10	16	1.2
Australasia ..	1	1	2	0.1
Unknown ..	197	—	197	—
Total ..	703	779	1482	100

All patients were questioned regarding previous venereal infection with particular regard to gonorrhoea. The record of previous infections included admitted infections (this is liable to be inaccurate but must be taken to represent a low figure), and known previous infections which had been treated at the clinic. Of 1,482 males reporting with acute gonorrhoea in 1955–1956, only 810 (54.6 per cent.) were first infections, and 672 (45.4 per cent.) admitted

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These 105 accounted for 151 further infections during 1955, a total of 256 infections, 239 of which were known to have been treated in one clinic. During 1956, of 779 individuals, 139 (17·8 per cent.) had at least one re-infection during that year (Table

Table V also shows that during the 2 years under review, of the total of 1,842 gonococcal infections treated in males, 360 (19.5 per cent.) were repeat infections during these years.

Year in which Patients Reported	Number of Previous Infections															Total Indi- viduals	Total Previous Infections
	Nil	1	2	3	4	5	6	7	8	9	10	11	12	13	14		
1955	392	217	46	20	10	10	4	—	4	—	—	—	—	—		703	515
1956	418	213	71	31	10	11	6	8	3	2	2	2	—	1	1	779	746
Total	810	430	117	51	20	21	10	8	7	2	2	2	—	1	1	1,482	1,261
Percentage	54·6	29·0	7·8	3·4	1·3	1·4	0·6	0·5	0·4	0·1	0·1	0·1	—	0·06	0·06		

Year	Place of Origin	Number of Previous Infections														Total	
		Nil	1	2	3	4	5	6	7	8	9	10	11	12	13		14
1955	United Kingdom	174	83	14	4	4	4	3	—	2	—	—	—	—	—	—	288
	Unknown ..	127	53	11	4	—	1	—	—	1	—	—	—	—	—	—	197
	Eire ..	27	21	3	3	2	1	—	—	—	—	—	—	—	—	—	57
	W. Africa ..	17	23	5	1	1	2	1	—	1	—	—	—	—	—	—	51
	Caribbean ..	16	15	10	5	3	1	—	—	—	—	—	—	—	—	—	50
	Europe ..	23	19	3	3	—	1	—	—	—	—	—	—	—	—	—	49
	Asia ..	5	1	—	—	—	—	—	—	—	—	—	—	—	—	—	6
	America ..	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	4
	Australasia	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
	Total ..	392	217	46	20	10	10	4	—	4	—	—	—	—	—	—	703
1956	United Kingdom	252	103	30	11	2	2	1	—	1	—	—	—	—	—	—	402
	Caribbean ..	42	34	19	9	2	3	1	6	1	—	—	1	—	—	1	119
	Eire ..	58	25	6	3	1	3	1	—	1	1	—	—	—	—	—	99
	W. Africa ..	20	32	12	6	4	2	3	2	—	1	2	1	—	1	—	86
	Europe ..	32	12	4	2	1	1	—	—	—	—	—	—	—	—	—	52
	America ..	7	3	—	—	—	—	—	—	—	—	—	—	—	—	—	10
	Asia ..	6	4	—	—	—	—	—	—	—	—	—	—	—	—	—	10
	Australasia	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
	Total ..	418	213	71	31	10	11	6	8	3	2	2	2	—	1	1	779

TABLE IV
NUMBER OF REPEAT INFECTIONS DURING 1955 AND 1956

Year	Place of Origin	Re-Infection	Repeat Infections								Re-peaters	Total Individuals	Per cent. Known Re-peaters	Total Repeaters		
			1	2	3	4	5	6	7	Total				No.	Per cent.	
1955	United Kingdom	Known	37	4	1	1	3	—	—	67	46	288	15·9	50	17·3	
		Admitted	4	—	—	—	—	—	—	4	—					
	Caribbean	Known	9	3	1	1	1	—	—	27	15	50	30	17	34	
		Admitted	2	—	—	—	—	—	—	2	2					
	Eire	Known	5	1	2	—	—	—	—	13	8	57	14·0	10	17·3	
		Admitted	2	—	—	—	—	—	—	2	2					
	Africa	Known	8	—	—	1	—	—	—	12	9	51	17·6	12	23·5	
		Admitted	3	—	—	—	—	—	—	3	3					
	Europe	Known	3	2	1	—	—	—	—	10	6	49	12·2	9	18·3	
		Admitted	2	1	—	—	—	—	—	4	3					
	Asia	Known	—	—	—	—	—	—	—	—	—	6	0	0	0	
		Admitted	—	—	—	—	—	—	—	—	—					
	America	Known	—	—	—	—	—	—	—	—	—	4	0	1	25	
		Admitted	1	—	—	—	—	—	—	1	1					
	Australasia	Known	—	—	—	—	—	—	—	—	—	1	0	0	0	
		Admitted	—	—	—	—	—	—	—	—	—					
	Unspecified	Known	5	—	—	—	—	—	—	5	5	197	2·5	6	3·0	
		Admitted	1	—	—	—	—	—	—	1	1					
	Totals			82	11	5	3	4	—	—	151	105	703	—	105	—
	Percentage			11·6	1·5	0·7	0·4	0·5	—	—	—	14·9	—	—	—	—
1956	United Kingdom	Known	29	7	—	—	—	—	—	43	36	402	8·9	42	10·4	
		Admitted	6	—	—	—	—	—	—	6	6					
	Caribbean	Known	21	11	2	1	—	—	2	67	37	119	31·0	41	34·4	
		Admitted	4	—	—	—	—	—	—	4	4					
	Eire	Known	6	1	5	—	—	—	—	23	12	99	12·1	14	14·1	
		Admitted	2	—	—	—	—	—	—	2	2					
	Africa	Known	20	7	1	—	—	1	1	50	30	86	34·8	32	37·2	
		Admitted	1	—	1	—	—	—	—	4	2					
	Europe	Known	6	—	—	—	—	—	—	6	6	52	11·5	8	15·3	
		Admitted	2	—	—	—	—	—	—	2	2					
	Asia	Known	1	—	—	—	—	—	—	1	1	10	10	1	10	
		Admitted	—	—	—	—	—	—	—	—	—					
	America	Known	—	—	—	—	—	—	—	—	—	10	0	1	10	
		Admitted	1	—	—	—	—	—	—	1	1					
	Australasia	Known	—	—	—	—	—	—	—	—	—	1	0	0	0	
		Admitted	—	—	—	—	—	—	—	—	—					
	Totals			99	26	9	1	—	1	3	209	139	779	—	139	—
	Percentage			12·7	3·3	1·1	0·1	—	0·1	0·3	—	17·8	—	—	—	—

TABLE V
ATTACK RATE

Place of Origin	Re-Infection	Repeat Infections								Total Individuals	Total Infections	Rate per Individual
		1	2	3	4	5	6	7	Total			
United Kingdom	Known	66	11	1	1	3	—	—	110	690	810	1.17
	Admitted	10	—	—	—	—	—	—	10			
Caribbean	Known	30	14	3	2	1	—	2	94	169	269	1.59
	Admitted	6	—	—	—	—	—	—	6			
Eire	Known	11	2	7	—	—	—	—	36	156	196	1.25
	Admitted	4	—	—	—	—	—	—	4			
Africa	Known	28	7	1	1	—	1	1	62	137	206	1.50
	Admitted	4	—	1	—	—	—	—	7			
Others	Known	15	2	1	—	—	—	—	22	330	361	1.09
	Admitted	7	1	—	—	—	—	—	9			
Totals		181	37	14	4	4	1	3	360	1482	1842	1.23

Table VI shows the number of gonococcal infections, including repeat infections, which were treated in the clinic during 1955-56 divided according to the patients' place of origin. Of a total of 1,806 infections, 800 (44.2 per cent.) occurred in men born in Great Britain, 202 (11.1 per cent.) in patients whose nationality was unspecified, and 804 (44.5 per cent.) in patients from overseas. During 1956, when the nationalities of all patients were known, of 969 gonococcal infections treated, 445 (45.9 per cent.) occurred in patients born in Great Britain and 524 (54.1 per cent.) in patients from overseas.

The study shows clearly, that, at least in the area of Manchester served by St. Luke's Clinic, there is a high incidence of gonorrhoea amongst a comparatively small section of the population. This section is composed mainly of men from overseas, especially those from the Caribbean countries, from Africa, and from Eire. This is not surprising, and merely represents yet another facet of the problem of integrating such people into the community. Most of the men from Eire who are seen in the

clinic are itinerant labourers of low educational standards, who have no roots in any one area. Some from the remoter parts of Eire profess ignorance of venereal diseases, and through lack of education or low mentality fail to recognize the implications of these diseases even when they are explained and described to them in vivid popular language. To expect cooperation from such people in order to decrease the incidence of disease, something which demands a sense of social responsibility, is probably to expect too much.

The coloured immigrants, who seem to be less ephemeral, pose a different and more difficult problem because of the lack of coloured women from their own countries, their different social and moral codes, and in many cases, their very bad living conditions. Should such coloured men consort, for sexual reasons, with white women, the only white women available are generally of the lowest order both socially and morally. These liaisons are transient, and it is amongst such promiscuous white women and their coloured consorts that one of the main reservoirs of gonorrhoea seems

TABLE VI
NUMBER OF INFECTIONS BY PLACE OF ORIGIN, 1955 AND 1956 *

Year	Place of Origin	U.K.	Caribbean	Eire	Africa	Others	Unspecified	Total
1955	Individuals	288	50	59	51	60	197	703
	Repeat Infections ..	67	27	13	12	10	5	134
1956	Individuals	402	119	99	86	73	—	779
	Repeat Infections ..	43	67	23	50	7	—	190
Totals		800	263	192	199	150	202	1,806

* This Table disregards admitted infections

to lie. The eradication of this reservoir offers at present considerable difficulty. The coloured men in general are unwilling or unable to name their consorts, and one woman will consort with a number of men. Thus, if infection occurs in one of the group, it is liable to be spread to others before the female source is traced. By this time she has probably already re-infected one of her consorts, and he in turn promptly re-infects her should she have been treated in the meantime. A vicious circle is thus set up, which is very difficult to break without the cooperation of all concerned.

For effective contact tracing, the clinic staff depends on the patient's giving accurate information about his consort or persuading her to attend for treatment. Among many of the coloured patients, no such details or cooperation are available, possibly because of their indifference to the disease, and the idea that it is a mild infection, not really worth bothering about. To many of these men who continually become re-infected a "leak" obviously does not mean the social disaster which it represents in other strata of society. The apparent simplicity of treatment confirms this view; as does the very rapid disappearance of such symptoms as may inconvenience the patient in his personal or sexual activities.

It would appear to be difficult to educate adults away from their already established code of behaviour. In time, with better living conditions, better understanding of the codes obtaining in their adopted country, and a probable increase in the number of available women of their own race, many of these problems may tend to solve themselves. In the meantime, the accepted and well-tried methods of contact tracing must be pursued energetically, though these by themselves cannot hope to be more than moderately successful with this hard core. Other factors mainly outside the immediate province of venereologists represent the crux of the problem: education, better living conditions, and the integration of the immigrants with the native population.

Summary and Conclusions

Of 1,482 males reporting to St. Luke's Clinic, Manchester, for treatment of gonorrhoea during 1955-56, only 810 (54.6 per cent.) were first infections and 672 (45.4 per cent.) admitted or were known to have had previous gonorrhoea. These 672 individuals accounted for 1,261 previous infections.

In 1,287 cases, records of nationality were kept, and 597 (46.4 per cent.) were found to come from

overseas. This represents a very high incidence when the total population is considered, and in fact over half (54.1 per cent.) of the gonorrhoeal infections treated in St. Luke's Clinic during 1956 occurred in patients who had immigrated to Great Britain.

During 1955, 105 (14.9 per cent.) individuals reporting with acute gonorrhoea had at least one re-infection during that year, and similarly, in 1956, 139 (17.8 per cent.) "repeated" at least once during the year. Practically one-fifth (19.5 per cent.) of the total number of cases of gonorrhoea treated during the 2 years represented "repeat" infections in individuals previously treated during this period.

"Repeat" infections occur relatively more frequently among the coloured races. Two individuals from the Caribbean area and one from Africa each had a total of eight gonococcal infections treated in one clinic during 1956. This may not represent the total number of their infections, since it is known that some of the persistent repeaters go for treatment from clinic to clinic.

The reported incidence of gonorrhoea in males as shown by the Annual Returns of the Ministry of Health has not shown the decline which could reasonably have been expected. These returns represent the total number of infections and not the number of individuals concerned, and this continued high figure represents, not so much a widespread incidence of the disease, but, in Manchester at least, a high incidence in a limited section of the community. A more accurate picture might be given if the return were modified to show the number of individuals affected, in addition to the total number of infections which these individuals contract.

The number of immigrants entering Great Britain does not decrease and interesting comparisons might be available if the place of origin of patients was also shown on the annual returns compiled by the Ministry of Health. Many of these people, because of their vastly different standards of behaviour, cannot be expected to cooperate in the accepted methods of contact tracing. Such methods by themselves can only expect to be moderately successful in dealing with this situation which is only part of a much larger problem awaiting solution.

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