Previous studies have indicated that physicians in private practice not infrequently fail to report cases of venereal disease treated by them. A comprehensive survey was made in New York City to obtain data from practitioners that might furnish additional information about the extent of the venereal disease problem. The results are presented and confirm the need for closer and more active cooperation.

CURRENT STATUS OF VENEREAL DISEASE IN NEW YORK CITY: A SURVEY OF 6,649 PHYSICIANS IN SOLO PRACTICE

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IT MUST be acknowledged that the physician in solo practice may not have the time, experience, or resources to independently carry out those measures that are essential to the adequate control of venereal disease. Most important among these measures is the prompt search for individuals named as sources of infection. Unless these individuals are found and rendered noninfectious by adequate treatment, the venereal disease reservoir cannot be effectively reduced.[1-4] This search for contacts is necessary for unreported cases as well as for those who have been reported to local health departments. According to the Public Health Service,[5] approximately 25 per cent of privately treated patients with syphilis are being reported in the United States as a whole, the figure varying widely for individual cities and states. The proportion of gonorrhea patients treated and reported by private physicians is estimated to be even lower. It may be possible that the recent increases[6] in the actual incidence of venereal disease in this country are partly due to the failure to trace the sexual contacts of unreported private patients.

Within the past decade there have been a number of studies attempting to determine the extent to which the private physician treats venereal disease and to estimate whether there has been an adequate exchange of information between the physician and the health department. These have employed different technics for deriving this information. In 1952,[7] the Department of Health of the City of Philadelphia, together with the Committee on Venereal and Cutaneous Diseases of the Philadelphia County Medical Society, conducted a mailed questionnaire survey of 4,236 physicians practicing in Philadelphia and received a 74 per cent response. The purpose of this survey was to ascertain the actual number of cases of venereal disease treated by the private

practitioner in this area and to find out which physicians were participating in the venereal disease program. In 1957,[8] the New Mexico Department of Public Health surveyed 649 private physicians throughout the entire state of New Mexico by mailed questionnaire and within the three-week limit set for the response received a 43 per cent return. The questionnaire was sent with the purpose of using the answers as a guide for future planning in venereal disease control in that state.

In 1959,[9] the Arkansas State Board of Health initiated a survey involving 307 private physicians, using a personal visitation technic. The purpose of this survey was to acquaint the physician with current venereal disease problems and to ascertain how much venereal disease he actually treats. In February 1959,[10] a telephone survey was conducted by the Health Department in the city of Flint, Mich., to determine the extent of gonorrhea morbidity in that city. This was limited to those physicians believed most likely to be treating gonorrhea. The telephone conversation was preceded by a letter to the medical assistants of the physicians explaining the purpose of the call. The medical assistant was asked to keep a record of the cases treated for four weekly periods. Four telephone calls were then made to the physicians requesting the numbers of cases treated the previous week. At the end of the study all cards were to be returned to the Health Department. A total of 90 regular physicians and 38 osteopathic physicians were contacted.

In April-May, 1960, a group of students at the Columbia University School of Public Health and Administrative Medicine, as part of the fulfillment of their master's degree requirement, conducted a pilot study in the health district surrounding the school.[11] A questionnaire was mailed to 318 physicians whose names were obtained from the telephone directory. Information was sought regarding the number of patients with venereal disease they had treated during the previous year and the extent of their utilization of Health Department services. An analysis of the answers of the 111 physicians who responded revealed an apparent discrepancy between the number of cases actually reported from the district to the Health Department and the number of cases which the physicians indicated they had treated. The findings of this pilot study suggested the need for a more comprehensive study in all of Greater New York.

Reporting of venereal disease cases by private physicians in New York City is suspected of conforming to the general pattern of underreporting noted for the country as a whole. The New York City Health Code makes reporting of venereal disease mandatory. Morbidity reports are derived from three major sources, namely, the Health Department Social Hygiene clinics, other clinics and hospitals, and from physicians in private practice. The Social Hygiene clinics report all their patients and usually conduct an epidemiologic investigation of the sexual contacts that are named. Case reporting by hospitals is fairly adequate and is improving as a result of the clerical aid now furnished by the Health Department to a number of the larger institutions. However, hospitals are unable to interview all their patients for contacts and usually do not have the staff to carry out field investigations of named contacts. The Health Department fills this gap upon request. Similar services are also available to the private physician upon request.

The present survey of physicians in solo practice was undertaken to obtain data from them that might furnish additional information about the extent of the venereal disease problem in New York City. It was the opinion of the investigators that such information might serve to strengthen existing venereal disease control measures. The

immediate objective of the study was to determine the type of practice of the solo physician treating venereal disease, the number of cases of venereal disease under solo private care in New York City, the proportion of such cases that are not reported to the Health Department, the kind of case-finding activity carried out by the solo physician, the extent to which the solo physician treats male homosexuals for venereal disease, the proportion of patients under 20 years of age treated in solo practice, and the extent to which the solo physician utilizes the resources of the Health Department to aid him in the management and control of his patients with venereal disease.

Method

Preliminary Survey

Since there are over 18,000 physicians licensed to practice in New York City, it was decided that the most practical method of reaching them would be through the mailing of a questionnaire. It was also important to determine how the physician would respond to such a questionnaire if his signature were requested. Since the Health Code of the City of New York requires physicians to report each patient with venereal disease, failure to report exposes the physician to prosecution. The Health Department, however, rarely uses this drastic measure since it relies, in the main, upon education and persuasion. Nevertheless, the power to prosecute does exist, and it was important to determine whether the physician would respond more readily to an anonymous questionnaire or to one requesting his signature. For the purpose of the survey the identification of the physician was preferable since nonrespondents could then be followed with a second or third mailing of the questionnaire.

In order to determine whether the physician would object to identifying himself and to test the questionnaire before initiating the city-wide survey, a preliminary mailing was carried out in May, 1961. The material sent to the physician included the questionnaire, an excerpt from the 1961 "Summary of Today's Venereal Disease Control Problem,"[12] a covering letter, and a self-addressed stamped envelope. This was mailed to 1,014 physicians in all types of practice whose offices were located in three different health districts of the city. These included 515 physicians or a 50 per cent random sample of the practitioners in the Riverside Health District which had reported a relatively high incidence of venereal disease,[13] and all physicians in the Astoria and Richmond Health Districts, numbering 267 and 234, respectively. The names and addresses of these physicians were derived from (a) Registered Physicians Bulletin, University of the State of New York, 1959 and 1960; (b) Medical Directory of New York State for 1959; (c) Manhattan, Queens and Richmond telephone directories; and (d) the 1957 Directory of Medical Specialists. These were the most current lists available and were checked against each other for duplications. An attempt was also made to exclude as far as possible those physicians whose office addresses coincided with hospitals, clinics, medical groups, and other agencies, since data from these sources are usually available to the Health Department, and the survey was aimed at an evaluation of physicians exclusively in solo practice.

The 1,014 physicians were divided into three equal groups: (1) "signature requested," (2) "signature optional," and (3) "no signature." The name of the physician appeared only once on the outer envelope with space provided in the questionnaire for name and address in the first two groups and no space provided for this in the third group. Otherwise, the questionnaires were identical except that the name of

Table 1—Response to Preliminary Mail Survey Covering Period of Practice for the Year 1960 and the First Three Months of 1961, Physicians Queried, Physicians Responding, Respondents Who Treated Venereal Disease, and Respondents Who Signed Reports by Type of Request, New York City—Numbers and Per cent

Type of Request	No. of Physicians Queried	Respondents							
		Total		Signed Reports		Treated Venereal Disease			
		No.	% Queried	No.	% of Responses	Total	% of Responses	No. Who Signed Reports	% of Total Treating VD
Signature requested	338	121	36	116	96	25	21	25	100
Signature optional	338	139	41	128	92	31	22	25	81
No signature	338	128	38	38	30	34	27	8	24
Total	1,014	388	38	282	73	90	23	58	64

the health district in which the physican's office was located appeared in the heading.

The bulk of the responses was received within the first two weeks after the questionnaires were mailed. The limit for returns was set at one month, and at the end of this period the results were tabulated.

Results of Preliminary Survey

Table 1 gives the proportion of physicians who responded to the preliminary survey according to the request for signature, signature optional, or no signature. The percentage who responded to each type of request varied only slightly, 36 per cent for signature requested, 41 per cent for signature optional, and 38 per cent for no signature. It is noteworthy that 96 per cent of the respondents who received the signature request, 92 per cent who received the signature optional request, and even 30 per cent of those with no provision made for signature identified themselves. Among the 388 respondents, a total of 73 per cent signed their names. Among these were 58 of 90 physicians who indicated that they had treated venereal disease during 1960 and the first three months of 1961, or 64 per cent.

In Table 2, which gives the number and per cent of physicians by type of practice who treated venereal disease during the surveyed period, it can be seen that in the three health districts of New York City which were involved in the survey, private patients with venereal disease treated outside of hospitals, clinics, government agencies, insurance groups, and so on, are treated mainly by general practitioners and internists as well as by a few obstetrician-gynecologists, dermatologists, urologists, and proctologists.

On the basis of these findings it was decided to include only physicians practicing in these categories in the city-wide survey, taking a calculated risk that there might be an occasional missed case among the other categories. This decision eliminated from the survey approximately 12,000 licensed physicians who might be treating little or no venereal disease or were treating it through the above-mentioned agencies which are usually under closer Health Department jurisdiction than the physician in solo practice at whom this survey was directed. Because of the observed increase of venereal disease in teenagers it was

decided to include pediatricians since they might have such cases under their care. In addition, their response might serve as an incidental test of the selective process in physician categories included in the survey. Osteopaths were also added to the list since from their reports to the Health Department they are known to treat venereal disease in New York City. It may be important to comment that this selection of physicians is specific for New York City and may not apply to other communities which might have an entirely different pattern of physician involvement in the treatment of venereal disease. In New York City, in addition to the practitioner in solo practice, there are available Health Department clinics, hospital outpatient clinics, medical groups, and Veterans' Administration outpatient clinics to which the patient might go, as well as private practitioners whose offices are located in many of the voluntary and proprietary hospitals, Union Health Centers, and industrial clinics.

City-Wide Survey of Private Physicians

An initial mailing which included a printed questionnaire set up for coding on IBM cards, a printed letter on the stationery of Columbia University School of Public Health and Administrative Medicine, the "Summary of Today's Venereal Disease Control Problem,"[12] and a self-addressed envelope was sent to 6,649 physicians in solo practice in New York City. This group consisted of physicians in the following categories of medical practice: general practice, internal medicine, obstetrics-gynecology, dermatology, proctology, urology, pediatrics, and osteopathy. The list excluding the osteopaths was purchased from a mailing house which also conducted the first mailing. The names and addresses of the osteopaths were derived from the Registered Physicians Bulletin, University of the State of New York, 1959 and 1960, and the New York City telephone directories. The mailing house list was checked against New York City

Table 2—Response to Preliminary Mail Survey Covering Period of Practice for 1960 and the First Three Months of 1961, Physicians Queried, Physicians Responding, and Respondents Reporting Treatment of Venereal Disease by Selected Types of Practice, New York City—Numbers and Per cent

Type of Practice*	No. of Physicians Queried	Respondents		Respondents Treating Venereal Disease	
		No.	%	No.	%
General practice	361	133	37	69	52
Internal medicine	57	35	61	11	31
Obstetrics-gynecology	37	21	57	3	14
Dermatology	21	8	38	4	50
Urology	21	3	14	2	67
Proctology	6	3	50	1	33
Total selected specialties	503	203	40	90	44

* Of the 388 responding physicians shown in Table 1, there were 185 in specialties other than those shown in Table 2 who were recorded as not having treated venereal disease. These were as follows: neuropsychiatrists 65, pediatricians 22, surgeons 21, otolaryngologists 9, ophthalmologists 8, and 60 others classified as radiologists, endocrinologists, allergists, physiatrists, pathologists, hematologists, and so on.

Table 3—Response to Three Mailings* of City-Wide Mail Survey, Covering the Period of Practice for 1960 and the First Nine Months of 1961, Number of Physicians Queried, Number and Per cent Who Responded, and Number and Per cent of Respondents Who Treated Venereal Disease, New York City

Type of Practice	No. Queried	Respondents†		Respondents Treating Venereal Disease	
		No.	%	No.	%
General practice	2,751	2,126	77	1,071	50
Internal medicine	1,603	1,422	89	558	39
Obstetrics-gynecology	663	572	86	87	15
Dermatology	203	170	84	103	61
Proctology	59	53	90	14	26
Urology	172	145	84	62	43
Pediatrics	473	421	89	10	2
Osteopathy	170	137	81	55	40
Total	6,094	5,046	83	1,960	39

* Fifty-four per cent responded to first mailing and 74 per cent to first and second.
† Five hundred and fifty-five respondents were eliminated from both number queried and number responding because they were in specialties other than those surveyed, were exclusively affiliated with clinics, hospitals, or medical groups, or they were interns, residents, not in practice, retired, or deceased.

post office directories to eliminate those with hospital, group, clinic, and other such addresses, and the latest American Medical Association directory, to make certain that the survey would include only those physicians from whom information was being sought. It should be borne in mind that the physician population in New York City is not static and it is difficult at any time to obtain accurate and up-to-date information about the type of practice and location from the available directories.

The name and address of the physician were imprinted directly on the questionnaire. The physician was requested to designate the type of practice and whether the practice was limited to a medical group, hospital, government agency, or other.

Results of City-Wide Survey

There were 3,291 replies to the initial mailing, a response of 54 per cent (Table 3). This was followed by a second mailing after the bulk of returns appeared to be in, or approximately one and a half to two months later. The response to this increased the total returns to 74 per cent. A third mailing brought the final response to 83 per cent. It was considered advisable to stop at this point since productivity was declining. A total of 5,601 responses were received. These included 555 respondents or 9 per cent of those queried who were either in specialties other than those surveyed, were exclusively affiliated with clinics, hospitals or medical groups, or were interns, residents, not in practice, retired, or deceased. They were excluded from the survey leaving a total of 6,094 queried, and 5,046 who responded. The nonresponding 17 per cent of the remainder numbered 1,048.

Of the 5,046 physicians who responded, 1,960 or 39 per cent indicated that they had treated venereal disease

during the year 1960 and/or the first nine months of 1961 (Table 3). It is interesting to note that 2 per cent of the pediatricians, 15 per cent of the obstetrician-gynecologists, and 40 per cent of the osteopaths indicated that they had treated venereal disease.

Table 4 gives the number of cases and the percentage distribution of venereal disease treated by private physicians during the surveyed period. Of the 2,869 cases of primary and secondary syphilis, general practitioners treated 52 per cent, internists 26 per cent, and dermatologists 13 per cent—a total of 91 per cent treated by these physicians. Other stages of syphilis totaled 4,083 and were treated mainly by general practitioners, 67 per cent, and internists, 20 per cent. General practitioners treated 72 per cent of the 15,573 gonorrhea cases, and internists 17 per cent, obstetrician-gynecologists 2 per cent, and 2 per cent for urologists, proctologists, and pediatricians combined. Inasmuch as this was a survey requiring recall over a period of 21 months, it is subject to all the errors, dangers, and pitfalls inherent in gathering information based on recall.

Number of Cases of Venereal Disease Treated by Individual Physicians

Table 5 presents the number of physicians who treated primary and secondary syphilis and gonorrhea during the surveyed period, by the number of cases they each treated. It is apparent that the bulk of venereal disease is being treated by physicians who see only from one to five cases annually, whereas the number of physicians who indicated that they saw more than six cases each is fairly small. Of the 607 who indicated that they had treated primary and secondary syphilis during 1960, only four said that they had treated over 20 cases each; the figures for 1961 were comparable. Only 66 of the 1,285 who said that they had treated gonorrhea in 1960 saw more than 20 cases each; of these, four had treated between 101 and 225 cases each. The 1961 figures were comparable. It is significant that of the 1,960 physicians indicating that they had treated venereal disease, approximately a third said that they had treated primary and secondary syphilis, whereas two-thirds had treated gonorrhea. There were a number who

Table 4—Distribution of Cases of Venereal Disease Reported in City-Wide Mail Survey Treated by Physicians in Solo Practice, During the Year 1960 and the First Nine Months of 1961, by Type of Practice, New York City—Numbers and Per cent

Type of Practice	Primary and Secondary Syphilis		Other Syphilis		Gonorrhea		Other Venereal Disease*	
	No.	%	No.	%	No.	%	No.	%
General practice	1,493	52	2,735	67	11,282	72	158	62
Internal medicine	737	26	817	20	2,581	17	60	24
Dermatology	378	13	216	5	385	2	7	3
Osteopathy	133	5	251	6	776	5	9	4
Obstetrics-gynecology	77	3	51	1	275	2	8	3
Other†	51	2	14	0	274	2	11	4
Total	2,869	101	4,084	100	15,573	100	253	100

* Chancroid, lymphogranuloma venereum.
† Other types of practice include urology, proctology, and pediatrics.

Table 5—Distribution of Physicians in Solo Practice Responding to City-Wide Mail Survey, by Number of Cases of Primary and Secondary Syphilis and Number of Cases of Gonorrhea Treated During the Year 1960 and the First Nine Months of 1961, New York City

No. of Patients Treated	No. of Physicians Who Treated			
	Primary and Secondary Syphilis		Gonorrhea	
	Year of 1960	1st 9 mo 1961	Year of 1960	1st 9 mo 1961
1	309	335	326	439
2–5	258	237	602	560
6–10	26	28	196	142
11–20	10	7	95	80
21–30	3	3	27	28
31–40	1	0	9	11
41–100	0	0	26	18
101–225	0	0	4	2
	607	610	1,285	1,280
None	1,353	1,350	675	680
Total	1,960	1,960	1,960	1,960

had treated both of these diseases and some who had treated only other stages of syphilis.

Unreported Cases of Venereal Disease

Table 6 gives the number of cases of infectious venereal disease treated by physicians responding to the questionnaire and the number of cases actually reported to the Health Department during the survey period.

This comparison has its limitations since the figures of the survey are estimates by the responding physicians, while those of the Health Department are based on actual reports.

Table 6—Number of Cases of Primary and Secondary Syphilis and of Gonorrhea Reported in City-Wide Mail Survey Treated by Physicians in Solo Practice by Boroughs of Practice, Compared with Number of Cases by Borough of Residence Reported Routinely to the Department of Health by all Private Physicians, for the Year 1960 Plus the First Nine Months of 1961, New York City

Borough	Primary and Secondary Syphilis			Gonorrhea		
	No. Treated in Solo Practice	Reported to Health Department by All Physicians		No. Treated in Solo Practice	Reported to Health Department by All Physicians	
		No.	% Solo Practice		No.	% Solo Practice
Manhattan	1,719	1,333	78	6,756	3,234	48
Bronx	312	222	71	2,270	902	40
Brooklyn	645	383	59	4,599	1,978	43
Queens	176	141	80	1,756	532	30
Richmond	17	6	35	192	48	25
Total	2,869	2,085	73	15,573	6,694	43

To keep a proper perspective of the magnitude of the problem, it might be well to point out the total numbers of cases of infectious venereal disease reported in New York City during the years 1960 and 1961.

Primary and Secondary Syphilis

Year	Total Reported	Reported by Private Physicians
1960	2,606	1,109 — 42.5%
1961	3,374	1,419 — 42.1%

Gonorrhea

Year	Total Reported	Reported by Private Physicians
1960	16,677	3,656 — 21.9%
1961	18,285	4,265 — 23.3%

Cases reported to the Health Department are checked routinely against a register to eliminate duplicates. It is recognized that errors are made in assigning cases to the various reporting agencies, as such. This error, however, should not seriously affect the conclusion obvious from Table 6, which is that there is an underreporting of cases seen by the solo physician.

An attempt to estimate the extent of underreporting is shown in Table 7. The number of cases reported treated by responding physicians in solo practice has been extrapolated to include the nonresponding physicians in solo practice, on the assumption that the nonrespondents will have treated venereal disease in numbers similar to the respondents. It should be recognized that there may be many sources of error in

Table 7—Estimated Number of Cases of Primary and Secondary Syphilis and of Gonorrhea Treated by Physicians in Solo Practice Queried in Mail Survey, Based on Responses, Compared with Cases Reported Routinely to the Department of Health by All Private Physicians During the Year 1960 and the First Nine Months of 1961, by Type of Practice, New York City

	No. of Physicians Queried			No. of Cases of Prim. and Sec. Syphilis		No. of Cases of Gonorrhea	
Type of Practice	Total	Prorated for Physicians Excluded*	Actual No. of Resp.	Treated by Resp.	Estimated Adjusted for Nonresp.	Treated by Resp.	Estimated Adjusted for Nonresp.
General practice	2,751	2,709	2,126	1,493	1,903	11,282	14,376
Internal medicine	1,603	1,578	1,422	737	819	2,581	2,864
Dermatology	203	200	170	378	445	385	453
Osteopathy	170	167	137	133	162	776	946
Obstetrics-gynecology	663	653	572	77	88	275	314
Proctology	59	58	53 }				
Urology	172	169	145 }	51	57	274	307
Pediatrics	473	466	421 }				
Total	6,094	6,000	5,046	2,869	3,474 (S.E. ± 180)	15,573	19,260 (S.E. ± 276)
Reported routinely to Health Department by all private physicians					2,085		6,694

* Five hundred and fifty-five or 9 per cent of total respondents were excluded from the survey since they were out-of-classification. This percentage has been applied to the 1,048 nonrespondents, thereby excluding 94.

Table 8—Distribution of Cases of Venereal Disease Among Male Homosexuals Reported in City-Wide Mail Survey as Having Been Treated by Physicians in Solo Practice During the Year 1960 and the First Nine Months of 1961, by Type of Medical Practice, New York City—Numbers and Per cent

Type of Practice	Male Homosexuals Treated for VD			
	1960		1961 (1st 9 mo)	
	No.	%	No.	%
General practice	486	45	369	43
Internal medicine	393	36	324	37
Urology	134	12	98	11
Osteopathy	27	3	35	4
Other*	39	4	39	5
Total	1,079	100	865	100

* Includes dermatology, proctology, obstetrics-gynecology, and pediatrics.

such an assumption. In spite of these limitations, Table 7 would indicate that not more than 60 per cent of the cases of primary and secondary syphilis and not more than 35 per cent of the cases of gonorrhea treated by physicians in solo practice are actually reported by them to the Department of Health in New York City.

These percentages may not be exact. Rather, they may be regarded as probable maximum percentages of cases treated by physicians in solo practice which are reported by them.

Homosexuals Treated for Venereal Disease

A question about homosexuals and venereal disease was included because of mounting concern that this is one of the important reservoirs of infectious venereal disease.[14,15] A summary of the responses is presented in Tables 8 and 9.

Among the 1,960 physicians in solo

Table 9—Number of Physicians in Solo Practice, Reporting in City-Wide Mail Survey, Treating Male Homosexuals with Venereal Disease, and Number of Cases Treated, by Type of Disease, During the Year 1960 and the First Nine Months of 1961, by Borough of Practice, New York City

Borough of Practice	Year	No. of Physicians Treating Homosexuals	Number of Cases of Venereal Disease					
			Prim. and Sec. Syphilis	Other Syphilis	Gonorrhea	Other VD	Type Unspecified*	Total
Manhattan	1960	270	300	13	408	3	158+	882+
	1961 (1st 9 mo)	255	240	14	373	6	119+	752+
All other boroughs	1960	104	68	8	44	4	18+	142+
	1961 (1st 9 mo)	76	45	6	36	2	9+	98+
Total	1960	374	368	21	452	7	176+	1,024+
	1961 (1st 9 mo)	331	285	20	409	8	128+	850+

* Type unspecified means that in the response to the question, the physician either did not fill in the type of venereal disease or else made a general statement of syphilis and gonorrhea without indicating how many pertained to each. In some instances the answer was just "many," hence the + sign.

practice who stated that they had treated venereal disease, 374 had treated homosexuals with venereal disease during 1960, while 331 had done so during the first nine months of 1961. The greatest concentration of patients was in Manhattan, and they were mainly treated by general practitioners and internists.

Most of the papers dealing with venereal disease in the male homosexual are concerned with early syphilis. In the findings of this survey, anal gonorrhea ranked as high if not higher than primary and secondary syphilis among this population. The survey showed that 368 cases of primary and secondary syphilis and 452 cases of gonorrhea in homosexuals had been treated by 374 physicians during 1960. In the first nine months of 1961, 285 cases of primary and secondary syphilis and 409 cases of gonorrhea in the same population were treated by 331 physicians. The statement of a physician who apparently has an extensive medical practice among homosexuals emphasizes the problem. This physician stated that during the survey period, he had treated 55 cases of primary and secondary syphilis among male homosexuals and 192 cases of gonorrhea.

Homosexuals were found to make up approximately 9 per cent of the total number of new cases of venereal disease treated in solo practice during the surveyed period. This varied by borough, being approximately 15 per cent in Manhattan, 3 per cent each in the Bronx and Brooklyn, and 1 per cent each in Queens and Richmond.

Venereal Disease Among Teenagers

It has been stated[5] that in the United States 22.5 per cent of the reported cases of venereal disease occur among the population under 20 years of age. A question was asked to determine whether the experience of the physician in solo practice in New York City conformed with this national figure. It was of interest to find that 21 per cent or 599 of the 2,869 patients with primary and secondary syphilis and 23 per cent or 3,554 of the 15,573 patients with gonorrhea were in the under 20 year group. Responses about proportions of patients under 20 years of age were received from 1,821 physicians of whom 704 or 39 per cent stated that they had treated patients under 20 years of age. It is noteworthy that among this group, 114 had treated only gonorrhea, the remaining 590 having treated both primary and secondary syphilis and gonorrhea. Among the 704 physicians who indicated that they had treated patients under 20 years of age with venereal disease, a fair number stated that they had treated homosexuals with venereal disease as well. There was no way of knowing, however, how many of their homosexual patients were under 20 years of age.

Case Finding

The series of questions relating to the physician's effort to bring sexual contacts of his patients under treatment elicited the following responses. Among 1,828 physicians who responded to the question about bringing the regular sex partner or spouse of the venereal disease patient in for treatment and examination, 586 or 32 per cent said "always," and 514 or 28 per cent said "often." When asked whether they examine and treat these individuals in their own offices, among 1,718 respondents, 734 or 43 per cent said "always" and 481 or 28 per cent said "often." When asked whether they try to obtain names and addresses of the sex contacts of their patients other than their regular sex partner or spouse, among 1,864 responses, 1,034 or 55 per cent said "always" and 347 or 19 per cent said "often." In answer to the last ques-

tion in this series, which was whether they then examine and treat any of these sex contacts, among 1,734 answers, 156 or 9 per cent said "always" and 264 or 15 per cent said "often."

Utilization of Health Department Services

The question relating to the utilization of services furnished by the New York City Department of Health to physicians had a dual purpose. The first was to find out how many of the responding physicians actually used these services and to what extent. The other was to inform or remind the physicians receiving the questionnaire that these services were available.

Among the 1,960 physicians who had stated yes to the treatment of venereal disease, 439 or 23 per cent said that they used the contact interviewing service, 442 or 23 per cent that they used the Health Department to assist in follow-up of delinquent patients, 213 or 11 per cent that they availed themselves of free drugs for treatment, 1,591 or 81 per cent that they used the laboratory services, 395 or 20 per cent that they used medical consultation services, and 455 or 23 per cent that they utilized venereal disease literature.

Utilization of Private Laboratories

Since all positive serologic tests for syphilis (STS) reported by the New York City Health Department Laboratory are followed up whenever possible, it was decided to ascertain how many physicians were utilizing laboratories other than that of the Health Department for the diagnosis of syphilis. Of the 1,810 physicians who responded to this question among the 1,960 who treated venereal disease, 68 per cent indicated that they utilized private laboratories. The greatest utilization was found to be among Brooklyn physicians (89 per cent), and among osteopaths (81 per cent). The least utilization was found to be among Richmond physicians (27 per cent) and among obstetrician-gynecologists (52 per cent).

Availability of Facilities for Darkfield Examination

Unless facilities for darkfield examinations are readily available and conveniently located, such examinations, so important in the diagnosis of the earliest stages of infectious syphilis, may often be omitted. With this in mind, a question pertaining to darkfield examination availability was asked. Of the total of 1,960 physicians who had treated venereal disease during the period under survey, 297 did not respond to this question. Among the remainder, 30 per cent indicated that they did have difficulty in having a darkfield examination performed.

Venereal Disease Cases in Neighborhood Practice

The physicians were asked to indicate whether their practice was of the neighborhood type or not without defining neighborhood. An evaluation of the responses indicated that in the main, neighborhood physicians treated 49 per cent of primary and secondary syphilis, 65 per cent of other stages of syphilis, and 63 per cent of gonorrhea. An analysis of this information by borough revealed that in Manhattan, nonneighborhood practice accounted for 80 per cent of all primary and secondary syphilis, 68 per cent of other types of syphilis, and 64 per cent of gonorrhea. In the four other boroughs, these diseases were treated primarily by neighborhood physicians.

Physicians' Impressions of Venereal Disease Trends

The response to the question about impressions of the venereal disease prob-

lem in which the physician was asked to check whether the individual diseases were increasing, decreasing, or remaining unchanged should be viewed merely as an impression. The responses showed that 21 per cent thought that primary and secondary syphilis was increasing, 18 per cent that it was decreasing, and 35 per cent that it had remained unchanged. The figures for gonorrhea showed that 36 per cent believed that it was increasing, 13 per cent that it was decreasing, and 33 per cent that it had remained unchanged.

Recommendations by Physicians

A question requesting recommendations relating to improvement in the control of venereal disease was asked. Responses contained advice about education of the public in general, and specifically adolescents, high school and college students, parents, and foreign language groups. A number dealt with the problems of homosexuality and prostitution. Still others touched on the reluctance to reveal names of patients. Others requested better services by the Health Department with respect to speed in receiving reports and requested that darkfield examinations be made more readily accessible. A few complained about the reaction of the Health Department to a positive report and stated that they were plagued by many phone calls and visits as a result of a single report. However, as a whole, the emphasis was on the need for educating a public which was apathetic and ignorant about the venereal diseases.

Discussion

In selecting the physicians to be queried in the survey, an intensive effort was made to include only physicians in solo practice. The majority of practicing physicians are in this group. Health Department reports indicate that they treat most of the private patients with venereal disease. Due to lack of time they may be unable to keep up-to-date in their reporting and are usually too busy to carry out any epidemiologic activities.

It was of significance to learn from the survey that venereal disease in New York City is treated mainly by physicians in only seven types of practice, and even more significant that the general practitioner and the internist together treat 78 per cent of primary and secondary syphilis and 89 per cent of all gonorrhea cases. It is clear that while the education and control program of the Health Department should involve all practicing physicians, an intensive program including personal visitation should be mainly directed at the physicians in these seven categories of medical practice.

It is of importance for the application of control measures to establish in which health areas of the city physicians treat the greatest numbers of patients with venereal disease. Further analyses of the responses by health areas may delineate those requiring greater concentrations of effort.

The findings that approximately 15 per cent of all new cases of venereal disease treated by physicians in solo practice in Manhattan during the survey period were among male homosexuals merely confirms the importance of this problem. This may be due to inadequate educational and control measures directed at this group. Epidemiologic investigation of male homosexuals with venereal disease is of vital importance. This was evidenced by a recent investigation conducted in New York City of an early syphilis epidemiologic chain among male homosexuals. The initial case had secondary syphilis. Investigations eventually yielded 246 male sexual contacts of whom, to date, 31 have been found to be infected with syphilis. These included 10 cases of primary and secondary and 15 with

early latent syphilis. This investigation is still in progress.

Twenty-two per cent of the new cases of venereal disease among the patients of physicians in solo practice occurred in individuals under 20 years of age. This corresponds to the national figure of 22.5 per cent for all teenagers, which includes patients in hospitals and clinics as well as those privately treated. It suggests that venereal disease is not confined to teenagers in lower socioeconomic groups and is increasing among teenagers in all social classes.

The findings that a large proportion of readily identifiable sex contacts, either regular sex partner or spouse, and an even larger proportion of sex contacts, other than regular sex partner, were not brought to examination and treatment suggest the need for intensification of epidemiologic assistance to the physicians treating venereal disease in solo practice. It should be made clear to the physician that such control methods are to the advantage of both the patient and physician and do not violate the confidential relationship which exists between them.

It was of interest to note that physicians who treat venereal disease do not avail themselves of all services offered to them by the Department of Health. The laboratory services are, however, utilized to a much greater extent than others. The offer of free drugs which had been an important incentive for case reporting in the past no longer serves such purpose since penicillin is inexpensive and readily available. The incentive for case reporting should be based rather on a better understanding of the magnitude of the problem and the important role the private physician could now play in its solution. It is also important to encourage the physician to enlist the aid of the Health Department for the follow-up of those patients who do not return for completion of treatment.

The fact that 68 per cent of surveyed physicians indicated that they utilize laboratories other than the Health Department suggests the great importance of continued surveillance of clinical laboratories so that all positive results of tests for venereal disease are promptly reported to the Health Department as required by the Health Code.

The fact that at least 30 per cent of the respondents acknowledged that they had difficulty obtaining darkfield examinations points up the seriousness of this problem. The New York City Health Department is planning to overcome this deficiency by arranging to have technicians on call to perform these tests in the physician's offices upon request. This service will be made available in all boroughs and during hours when most laboratories and clinics are closed. In addition hospital and other laboratory technicians should be trained to perform this critical test.

An interesting finding that came to light was that among the 1,960 physicians who stated that they had treated venereal disease only one-third had treated primary and secondary syphilis whereas two-thirds had treated gonorrhea. These findings included the male homosexuals among whom gonorrhea appeared to be far more prevalent than infectious syphilis.

Conclusions

Eighty-three per cent of the queried physicians responded to the questionnaire and of these 39 per cent indicated that they treated venereal disease. Their figures totaled 2,869 cases of primary and secondary syphilis and 15,573 cases of gonorrhea treated. In addition, there were 4,083 cases of other syphilis and 253 cases of other venereal disease, which included lymphogranuloma venereum and chancroid.

The greatest number of patients with primary and secondary syphilis treated

in solo practice in New York City were treated by general practitioners and internists (78 per cent). The remaining 22 per cent were divided among dermatologists (13 per cent), osteopaths (5 per cent), obstetrician-gynecologists (3 per cent), and proctologists, urologists combined (2 per cent). The greatest number of patients with gonorrhea were treated by general practitioners and internists (89 per cent). The remaining 11 per cent were divided among dermatologists (2 per cent), osteopaths (5 per cent), obstetrician-gynecologists (2 per cent), and proctologists, urologists, and pediatricians combined (2 per cent).

In New York City approximately one-half of all venereal disease patients are treated by neighborhood practitioners. A breakdown by borough, however, shows that in Manhattan, nonneighborhood practice accounts for the majority of cases, whereas in the other boroughs, the neighborhood practitioner treats the majority of cases.

A comparison between the results of the survey and Health Department reported figures indicated that not more than 60 per cent of the cases of primary and secondary syphilis and not more than 35 per cent of the cases of gonorrhea treated by physicians in solo practice are actually reported by them to the Health Department.

From the responses to the series of questions dealing with the subject of case finding, it appears that although the physicians indicated that they do try to follow up for sex contacts whenever possible, a large proportion of readily identifiable sex contacts, either regular sex partner or spouse, and an even larger proportion of sex contacts, other than regular sex partner, were not brought to examination and treatment.

Approximately 9 per cent of all new cases of venereal disease seen by the queried physicians were male homosexuals with primary and secondary syphilis, gonorrhea, and occasional cases of other stages of syphilis, lymphogranuloma venereum, and chancroid. They constituted approximately 15 per cent of new cases treated by Manhattan physicians during the surveyed period.

Among the 1,960 physicians who responded that they treated venereal disease, 704 or 39 per cent answered that they had treated patients under 20 years of age. Among the cases of venereal disease which they stated they had treated, an estimated 599 cases of primary and secondary syphilis or 21 per cent of the total number and 3,554 or 23 per cent of the gonorrhea cases were attributed to individuals under 20.

Most of the physicians or 81 per cent of the 1,960 respondents said that they used the laboratory services furnished by the Health Department. However, only 23 per cent indicated that they used contact interviewing, assistance in the follow-up of delinquents, and venereal disease literature. Twenty per cent indicated that they used the medical consultation services and 11 per cent that they availed themselves of free drugs for treatment.

Sixty-eight per cent of 1,810 respondents indicated that they used other laboratory services in addition to the Health Department or exclusive of it.

Among the 1,663 physicians who responded to the question about availability of darkfield examination, 30 per cent indicated that they had some difficulty in obtaining such examinations.

Private physicians in solo practice (83 per cent of them) are cooperative about answering questions about venereal disease even when identified by name and office address.

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