

# Health Department-Physician Partnership in Syphilis Epidemiology

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THE known yearly incidence of early syphilis has more than tripled in the short span of 5 years since 1957, when approximately 6,251 primary and secondary cases were reported in the United States (1). All present signs indicate a continued upward trend. Brown and associates (2) pointed out that since the development of slow-absorption penicillin for the treatment of syphilis, private physicians have been treating a steadily higher proportion of infectious syphilitic patients. Axnick and Brown (3) further stated that despite the frequency of under-reporting among private physicians, these physicians reported about 36 percent of primary and secondary syphilis in the United States during fiscal year 1960.

Although the percentage of private patients interviewed by trained health department personnel is increasing, it is still much lower than the percentage interviewed in clinics and hospitals. Brown and associates (2) stated that "the greatest hope of further progress against syphilis in the foreseeable future lies in a private physician-health department partnership," since the rise in the incidence of reported syphilis is occurring in spite of the fact that "public health epidemiologic activities . . . have been maintained at levels which formerly produced significant declines."

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In Norfolk, Va., after two unsuccessful attempts in previous years, such a mutually satisfactory "partnership" was formed in July 1961, and after a 6-month trial, has proved easily workable. The "unwritten contract" between private physicians and the health department was based on the premise that it must provide a simplified procedure for the busy physician and a self-perpetuating system for the health department, and be of benefit to both. Basically, the partnership utilized the well-established experience that private physicians have been most cooperative for many years in supplying the health department with information concerning their patients when the request was initiated by the health department. However, the health department had neither a routine method of request nor a simplified system for obtaining this information so that the percentage of physicians who initiated a report voluntarily was negligible. The system which has proved successful in Norfolk is "spelled out" in the hope that it may serve as a blueprint for cities of comparable size for obtaining what is believed to be a fairly accurate morbidity incidence among private patients, and also for procuring interviews with almost every syphilitic patient.

## Groundwork

An epidemiologist visited 205 of the 225 private physicians in Norfolk. Semiretired physicians, pediatricians, and radiologists were not visited. Among physicians working in groups, only one physician was interviewed. New physicians in the city are visited soon after their arrival. The purposes of the visit were:

- To encourage accurate morbidity reporting by the physician for statistical purposes and to give assurance that all such reports are confidential.

- To offer aid to the physician in epidemiologic investigation of his cases of early syphilis.

- To acquaint the physician with the fact that data may be available in the health department files concerning his patients.

- To give the physician a copy of the booklet, "Syphilis—Modern Diagnosis and Management" (4), which contains a brief summary of the significant current information concerning the disease.

- To alert the physician to the increasing incidence of syphilis.

- To explain the services offered by the health department, such as dark-field examination, serologic testing and interpretation, epidemiologic investigation, consultation, and treatment.

The epidemiologist in return sought the consent of each private physician he visited to allow the venereal disease division of the health department to obtain reports of serologic tests on their patients from the hospitals and from the city laboratory, which performs almost all such tests on blood specimens submitted from the offices of private physicians.

All physicians but one gave their consent. All private laboratories in the city have discontinued the performance of serologic tests for syphilis, but if such testing were done by them no problem need be anticipated since the physicians' consent is the key to success.

### Procedures

When a reactive serologic test report is sent by the city laboratory to the venereal disease division of the city health department, the information is checked against the master file of the venereal disease clinic and the report is sent to the private physician the same day.

- If there are no data on the patient in the master file, a venereal disease morbidity card with a self-addressed stamped envelope is attached to the test report and sent to the physician, and the information is recorded in the master file. The necessary State forms are filled out as far as possible and held in the epidemio-

logic file, which is composed of State forms to be completed. The same information could be obtained from a so-called date file. If the morbidity form is not returned by the private physician within 30 days, a second request for a report is sent to him. If the completed form is not received 15 days after the second request, the physician is contacted either by telephone or personal visit.

- If data in the master file include records of previous serologic tests, dark-field examinations, spinal fluid examinations, treatment, and so on, this information is sent to the physician with a note advising that no morbidity form need be completed by him.

- If the test titers are low, the physician is advised of the availability of the treponemal (RPCF and FTA) tests and of consultation when he requests these tests.

- If test titers are high, the physician is contacted immediately.

When the morbidity card is completed and returned by the physician, the venereal disease division will, for cases of late syphilis, complete the State and clinic forms. For cases of early syphilis, either the physician will have requested an interview of the patient on the morbidity form or he will be contacted by the health department, which will request permission for epidemiologic investigation of his patient. Interviews with the patient may be conducted in the clinic, in the physician's office, or in some other suitable place, such as the patient's home. If the physician refuses to permit an interview with the patient, the case is closed without further followup.

After the epidemiologic investigation is finished, all the necessary clinic and State forms are completed, and a form letter is sent to the physician advising him of the disposition of the epidemiologic investigation. Five forms are used, each adapted to its particular health department-private physician type of communication.

### Results

During the 6 months of this program, private physicians reported 28 cases of early syphilis, of which 14 were either primary or secondary and 14 were early latent. Twenty-seven pa-

tients were interviewed. One patient, a known homosexual, refused to be interviewed, although the physician had given his consent.

The examination of contacts resulted in the discovery of 34 additional cases of early syphilis, of which 19 were primary or secondary and 15 were early latent syphilis.

Thirteen patients were referred for dark-field examination, and three of these were dark-field positive. Patients were referred by 12 physicians.

One hundred forty-seven cases of late syphilis were reported for the first time, of which 86 had been adequately treated but never reported.

Of 9,248 blood specimens taken in physicians' offices, 648 were reactive, according to reports received by the venereal disease division from the city laboratory for processing. Specimens were sent to the laboratory by 180 private physicians, of whom 69 had one or more patients with reactive tests. Thus, it is significant to note that 34 percent of the participating private physicians had at least one patient with reactive serologic tests during the first 6 months of this program.

Only 48 (7 percent) of the morbidity reports were not returned within a month; 39 of these were received by the health department within a few days after the second notice was sent to the physicians. In the nine instances in which there was no response, the physician was contacted and, in each case, he stated that the patients were still under diagnostic observation.

Sixty-four physicians reported 3 cases or less, but one physician reported 15 cases. Approximately 30 percent of all physicians in Norfolk treated at least one case of syphilis during the first 6 months of the program, indicating that syphilis is seen by many, not few, physicians.

Information on 109 cases in the master file was forwarded to the physicians and was greatly appreciated by them.

An epidemic was discovered as the result of an interview with one private patient. Sixty-two contacts were involved; 56 were examined and 33 were infected with early syphilis. The infected contacts included 8 patients of other physicians, 18 clinic patients, 2 persons in the United States Navy, 3 in neighboring counties, 1 in Richmond, Va., and 1 in Georgia.

Since reporting of syphilis cases had been negligible and no appreciable epidemiologic investigation had been done by private physicians before this program was begun, we consider this 6-month pilot study highly successful. Private physicians reported about one-half the number of early cases reported by the city health department, 28 and 54 respectively, and more cases of late syphilis, 147 and 82 respectively.

### Conclusions

A cooperative system of reporting and epidemiologic investigation between private physicians and the health department is feasible and valuable. In Norfolk, Va., a program operating on a voluntary basis and on the premise that all of the administration and groundwork are to be performed by the health department was successfully formulated and continues to operate by its own momentum. No investigation—medical, epidemiologic, or laboratory—is initiated without the physician's consent and the implied consent of the patient, since the physician is expected to ask the patient for this consent.

A survey of private physicians to determine the extent of syphilis morbidity reporting had been conducted twice before in the city of Norfolk but, retrospectively, it was felt that the failure to stimulate reporting over long periods of time was due to the fact that morbidity forms were left with the physician who put them in a drawer and, despite good intentions, promptly forgot about them. Usually, within a few months after a survey morbidity reporting dropped to an insignificant number of cases. The health department, therefore, never had accurate information concerning the frequency of syphilis among patients of private physicians until the present program was begun.

This program accomplishes the objectives (a) of the health department, in that almost every blood specimen taken by a private physician for serologic test for syphilis is processed through the venereal disease division of the department; and (b) of the physician, in that he is given a simplified procedure by which the morbidity form, the report of the serologic

test, and the patient's chart are available to him at the same time. In order to report a case he simply needs to check the appropriate boxes and enclose the card in the self-addressed, stamped envelope supplied by the health department. This takes only a few seconds of his time. In addition, he is often given significant medical information concerning his patients.

It is gratifying to note that almost 100 percent of the physicians have reported and continue to report cases of syphilis and permit interviews of their patients. While the epidemiologic phase of the private physician program is time consuming for the health department, it is not time consuming for the physician.

This program can function on a long-range basis by its own momentum, since it utilizes the previously demonstrated willingness of most private physicians to cooperate with the health department, requires minimum effort on their part, has a "built-in" reporting and followup mechanism approved by the private

physician and the health department, and is a two-way system beneficial to the busy physician, the health department, and the patient.

NOTE: Copies of the five forms used in the epidemiologic investigations are available from the authors.

#### REFERENCES

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- (3) Axnick, N. W., and Brown, W. J.: Primary and secondary syphilis in the United States. *Pub. Health Rep.* 76: 999-1005, November 1961.
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## Foreign Medical Graduates

U.S. hospitals are becoming increasingly dependent on graduates of foreign medical schools to help fill house staff positions. In 1951 there were 2,100 graduates of foreign medical schools serving as interns and residents in this country; in 1960 there were 9,500.

The annual number of U.S. medical school graduates has increased about 40 percent since 1940, but the number of internships increased 90 percent during the same period. Even with many internships filled by foreign graduates, only 82 percent of the positions offered were filled in 1960.

The number of residency training positions has also increased much faster than the number of U.S.-trained physicians seeking such training. Only 87 percent of all residencies offered were filled in 1960. Foreign graduates served in 6,900 residency positions.

Since July 1960, certification by the Educational Council for Foreign Medical Graduates has been a prerequisite of foreign graduates for appointment as an intern or resident in a U.S. hospital. The council was set up in 1957 by the Federation of State Medical Boards of the United States, the Council on Medical Education and Hospitals of the American Medical Association, the Association of American Medical Colleges, and the American Hospital Association.

Further information on internships and residencies in the United States since 1940 is available in "Health Manpower Source Book, Section 13: Hospital House Staffs" (PHS Publication No. 263, Sec. 13). Copies are on sale by the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C., for 30 cents a copy.