STUDENTS’ HEALTH SERVICE AT THE UNIVERSITY OF MINNESOTA

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Although for ten to fifteen years numerous of the leading American universities have had organized departments to care for the health of their student bodies, the University of Minnesota made no provision to assume this responsibility until after the outbreak of the late war. Then with the establishment of a Reserve Officers Training Corps at the university, the United States Army provided medical service for students belonging to this training corps. The advantages to be derived from this medical service were so evident that arrangements were made by the university authorities to extend the service to all students of the university. In 1918 a beginning was made and the first staff, in reality an emergency one, was organized.

The first two years of this new organization were particularly trying ones. The war made it difficult to obtain sufficient and satisfactory medical service and the two years of influenza, which happened to come at this time, swamped even the most highly developed of medical institutions. The Students' Health Service, however, was able to weather the storm and since then has been rapidly developing into an efficient, scientific organization for the protection and conservation of the students' health.

PURPOSE

The purpose of the service, simply stated, is to assist each student to have and to enjoy the advantages of the best possible health. To accomplish this purpose, however, numerous lines of activity are necessary. Physical defects must be discovered and assistance given to the student in correcting them. Precautions must be taken to prevent the introduction and spread of communicable diseases. Medical advice and care must be made available so that students will seek care for diseases while they are still in their incipieny; and the student body must be educated as to the value of periodic physical examinations and regular medical service.

CLINICAL STAFF

The staff of the Health Service for the current year consists of fourteen physicians, eleven dentists, ten graduate nurses, three dental assistants, one laboratory and x-ray technician, stenographers, clerks, etc. Of the physicians, six are on full time and eight on part time; of the dentists, one is on full time and ten on half time. The staff includes physicians well trained in internal medicine, diseases of the chest, surgery, ophthalmology and oto-laryngology, physical therapy, gynecology, and dermatology and genito-urinary diseases. With such a staff consultations are frequent, and the advantages of group medicine are available to every student. The students are also encouraged to call in consultation at their own expense physicians not connected with the Health Service staff. In cases in which students cannot afford to pay or in which staff physicians desire consultation for their own satisfaction, the various clinical departments of the Medical School have generously given their services.

EQUIPMENT

The Health Service maintains two institutions, one on the main campus and one on the agricultural campus. The former is temporarily located
on the ground floor of Pillsbury Hall. This location near the center of the campus is a happy one, but the building and the available space are far from satisfactory. It is hoped and expected that within a few years a new building will be erected for the Students' Health Service. This building, too, should be situated on the academic campus and as near to its center as is possible. The expense of maintaining a Health Service so situated will be greater than though it were included in the group of medical buildings, but the better service to the student body, due to its easy accessibility and to the fact that in it students are less apt to feel that they will be used for teaching purposes or be treated by medical students, will more than justify the additional expense.

At present in Pillsbury Hall a medical and a dental dispensary and an infirmary of twenty-five beds are maintained. In conjunction are an operating room, a laboratory, a small x-ray and fluoroscopic equipment, and a pharmacy. On the agricultural campus a separate building was assigned to the Students' Health Service and completely remodelled to suit its needs. In it we now have a very satisfactory out-patient dispensary and a hospital of forty beds, most of them in small rooms.

PHYSICAL EXAMINATIONS

The beginning of the physical examination of freshmen students at the University of Minnesota is deserving of special mention. Years ago, with little or no encouragement and with no assistance, Dr. L. J. Cooke, of the department of physical education for men, began to examine freshmen. His other duties were more than sufficient to occupy his time, but believing in the importance of physical examinations he kept at them and during the year personally examined each one of the freshmen men. From this beginning the progress has been gradual until now every student entering the University or the University High School must have as part of the requirements for matriculation a physical examination. If a student first enters the University High School, a second examination is required when he enters the university proper. An additional examination is required of those students who enter the medical school and another is given at the beginning of the third year in medicine. Furthermore all athletes who compete in intercollegiate sports are required to have an examination at the beginning of each season, and every student who desires a locker in the gymnasium must have a medical inspection and an examination if his previous record shows any indication for it.

These physical examinations are extremely exhaustive, comprising, in addition to a careful history of past illnesses, complaints, and family tendencies, blood pressure readings, reclining and standing; pulse rate before and after exercise; vital capacity; height, weight and chest circumference measurements; general orthopaedic inspection; examination for hernias, goiters, venereal disease, etc.; visual and hearing tests; eye, ear, nose and throat examinations; physical examination of heart and lungs; dental examinations; urinalyses; Schick tests; nose and throat cultures; Dr. Larson's precipitin test for tuberculosis—the so-called "ring test"; and smallpox vaccination of all students who need vaccination and who do not flatly refuse it. Upon the completion of an examination one of the members of the staff sums up for the student the findings recorded, advises him as to any medical or dental care that he needs and gives him a classification on the basis of his physical condition. A card index is then made of those
students who showed any of the more serious defects and during the year these students are called back for re-examination. A discussion of the results of these examinations would be interesting, but space will not permit of it at this time.

**Dispensary Visits on Main Campus**

<table>
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<th>Year</th>
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<tr>
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<tr>
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<td>1800</td>
</tr>
<tr>
<td>1921-22</td>
<td>2400</td>
</tr>
<tr>
<td>1922-23</td>
<td>3000</td>
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**Medical and Dental Service**

The Health Service maintains an out-patient dispensary for students at which one or more physicians are in attendance at all hours of the day. To this dispensary students are encouraged to come upon the first appearance of symptoms of illness, the prevention of disease being the primary purpose of the service. The student who comes to the dispensary is examined, given immediate treatment if any is indicated, and advised as to what he should do. If his condition indicates that he should remain in bed, he is directed either to go home to bed and call his family physician or to enter the students' infirmary. At the infirmary the student is cared for until he can return to classes, or, if his illness happens to be a prolonged one, until he can be removed to his home or to a private hospital. A student who becomes ill at his room will be visited once by a physician from the Health Service, but for prolonged treatment it is necessary that he enter the infirmary or call a private physician.

A dental clinic of six chairs was recently added to the Health Service dispensary. Here dental examination, prophylaxis and reparative work are made so easily available that no student should neglect his teeth.

During the school year 1922-23 students made 35,654 visits to the Health Service dispensary (of these probably ninety per cent would never have reached a physician in private practice); 861 students were admitted to the infirmary and stayed on the average just 3.7 days; 578 calls were made upon students at their rooms; and 6,233 visits were made by students to the dental clinic.

**The Control of Communicable Disease**

In universities located in large cities and having a large percentage of their students living at home, as is the situation with the University of Minnesota, the control of communicable diseases is extremely difficult. Many precautions, which would be unnecessary were the university an isolated community, must be served. In general the routine is as follows: (1) the careful examination for communicable diseases of all students who come to the Health Service dispensary; (2) isolation of all
students with symptoms suggestive of a contagious disease; (3) quarantine of all cases or suspected cases of contagious diseases; (4) daily observation or isolation of close contacts; and (5) inspection of all students who have been absent from classes on account of illness and wish to obtain excuses for the time missed. By this last precaution alone we were able during the past year to identify and exclude from classes one case of open pulmonary tuberculosis; two cases of smallpox; one case of diphtheria; one case of scarlet fever; numerous cases of acute follicular tonsillitis, etc.

POLICIES

The policies which are followed by the Students' Health Service have been formulated to provide for the students the best possible health supervision; to make available to them adequate dental care; to teach them to seek medical care whenever such care is advisable; and to interfere as little as possible with the private practice of physicians in the vicinity of the university. The prevention of diseases, the correction of defects, and the practical health education of the student body, are the paramount aims of the service. To make possible the accomplishment of these aims, however, a certain amount of general and specialized treatment of disease is necessary. Students must have confidence in the institution and learn that it has a service to render them; otherwise they will not seek its advice at the time most important for the prevention of disease.

Upon the completion of his physical examination, each student is instructed as to any defects or abnormalities which are discovered and advised to seek the necessary medical or dental care. Each year, as a result of this advice, many students go to practicing physicians for further examinations or for treatment. Others who are working their way through school or who live away from the Twin Cities return to the Health Service for further care. During the school year students who visit the Health Service dispensary are examined and advised as to their conditions. If they live in the Twin Cities and need further care, they are advised to return to their homes and call their family physicians. If a student needs an operation, other than an emergency, and can afford to do so, he is advised to go to a private hospital and call a private physician. Students with prolonged illnesses who are admitted to the infirmary are
transferred to their homes or to a private hospital as soon as their conditions permit. By observing these policies it has been possible to gain the confidence and support of the student body without infringing upon the physicians in private practice.

**Hospital Days, Main Campus, per 1000 Dispensary Visits.**

![Hospital Days Graph]

**Maintenance**

As part of his tuition each student pays a health fee of two dollars per quarter, six dollars for the school year. From these fees sufficient funds accrue to pay the salaries of the staff, exclusive of dentists, and to cover most of the basic supplies and equipment. Students who receive services that entail extra expense to the institution are expected to pay on a cost basis for such services; for example, a charge for board and laundry of two dollars per day after two days is made to students confined to the infirmary; drugs are dispensed on a cost basis; x-rays are charged at cost and an operating room fee of ten dollars is charged for a major operation and one of five dollars for a minor operation. These charges are made to all students who receive such services, but a special provision makes it possible for the dean of student affairs to cancel the bills of especially deserving and needy students.

The dental department is required to be entirely self-supporting. To do this the charges for dental work are adjusted so that they will just cover salaries, materials, supplies, and depreciation on equipment.

**Accomplishments**

It is frequently difficult to affirm with certainty that a particular form of treatment was responsible for a patient's recovery or that a certain preventive measure brought about the decline of an epidemic. Similarly in such work as the Health Service is carrying on it is difficult to measure accomplishments accurately. Before the establishment of the Health Service there was no accounting made of time lost because of illness nor was any record kept of even the serious illnesses among the student body, so nothing is at hand with which to compare present figures. A rough general comparison, however, can be made of the five years during which the Health Service has been in operation by comparing the following charts.

These charts show a progressive increase in the use which students are making of the dispensary and a corresponding decrease in the percentage of these who are sick enough to be sent to the infirmary. The decrease in the ratio of hospital days to dispensary patients is also significant.

Such figures as these can show definite accomplishments but they cannot tell the whole story.
The number of boys and girls who, except for the protection afforded, would have contracted communicable diseases, the amount of invalidism prevented by discovering chronic diseases in their incipience, and the lives saved by prompt medical surgical treatment will never be known and cannot be estimated. But even if we could have all of these accomplishments carefully itemized and tabulated we would still not have reached a sum total of the results of the work. One of the most important phases of the work would still have been overlooked. That is the educational phase. Certainly practical health education is one of the greatest opportunities of the service and one which is constantly emphasized. These thousands of students, most of whom have never before had a physical examination, are shown the value and the importance of periodic physical examinations and are taught to appreciate and to seek medical service whenever they become ill. They are vaccinated against smallpox and given Schick tests and they learn the value of these preventive measures as they would never learn them from formal instruction. The results which will accrue from such phases of the work one can never measure but every observer is convinced that they will be even greater and more far-reaching than the immediate and more tangible accomplishments.