SOLLEDER, Marian Kinnaird, 1926—
FACTORS INFLUENCING THE USE OF THE UNIVERSITY HEALTH SERVICE BY STUDENTS AT THE OHIO STATE UNIVERSITY.

The Ohio State University, Ph.D., 1961
Health Sciences, general

University Microfilms, Inc., Ann Arbor, Michigan
FACTORS INFLUENCING THE USE OF THE UNIVERSITY HEALTH SERVICE BY STUDENTS AT THE OHIO STATE UNIVERSITY

DISSERTATION

Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy in the Graduate School of The Ohio State University

By

Marian Kinnaird Solleeder, A.B., M.A.

* * * * * *

The Ohio State University
1961

Approved by

[Signature]

Advisor

Department of Physical Education
DEDICATION

To my Mother
ACKNOWLEDGMENTS

The writer would like to express her appreciation to the following persons:

Dr. Elena M. Sliepcevich, under whose guidance this study was carried out, for her helpful suggestions concerning this study, her continued interest in it, and her belief in the importance of doing one's best.

Dr. Delbert Oberteuffer, under whose direction this study was completed, for his valuable suggestions concerning the content and organization of the manuscript.

Dr. Margaret A. Mordy for her thoughtful reading of the manuscript and her interest and understanding during the writer's graduate study.

Dr. Alfred C. Clarke for his suggestions concerning the construction of the questionnaire used in this study.

Paul S. Fancher, M.D. for his suggestion of the research problem, his interest in its progress, and the cooperation of the staff of the University Health Service.

Colleagues and friends for their interest and innumerable kindnesses.

Her Father for his understanding.
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CHAPTER I

INTRODUCTION

Many different types of college health services may be found in institutions of higher education in our country. Some offer a wide range of medical services and have numerous physicians representing many medical specialties to care for students. Others have only the part-time services of a community physician and are able to offer little beyond the care of minor illnesses.

Each health service, however, in its own way and within the limits of its own resources, tries to meet the health needs of the student population. In doing this it may provide physical examinations, care for emergency illnesses and accidents, counsel students in regard to physical defects and health problems, provide hospitalization for students, provide psychiatric services, and cooperate with other campus personnel concerning matters pertinent to student health.

Student understanding, cooperation, and participation are needed if the college health service is to make its maximum contribution to student and university life.
This study is concerned with the student and his relationship with the college health service at The Ohio State University.

Statement of the Problem

The University Health Service

The University Health Service, directed by Paul S. Fancher, M.D., is an important member of the student personnel service group at The Ohio State University. All students registered at the University are eligible to use its services and facilities, and when determined on the basis of a five-day week and a three quarter academic year, an average of 290 students a day do receive care there. Students pay for this as a part of their general University fee. Medical care is furnished at no additional cost, and common medicines are furnished free of charge. Except for the health examinations given to University Service Department employees, the University Health Service serves students only.

The objectives of the University Health Service are--

1. To protect, maintain and improve the health of students by
   a. Follow-up studies of entrance examination.  
      (Examination performed by the family physician.)
   b. Early diagnosis and control of communicable disease, in cooperation with other health agencies.
   c. Emphasis on individual and group preventive medicine.
d. Individual health guidance and education through personal conferences.
e. Providing medical, surgical, and psychiatric care on an out-patient basis.
f. Liaison with family physician, other physicians and health agencies.

2. To furnish special health examinations for certain groups and individuals, i.e., food handlers, special parking permits, pre-employment physicals, for Service Department group only, senior physicals, special student assignments as nurses and advanced physical education.

3. To serve as the primary coordinating agency through centralized health records with University Personnel officials and other departments in individual student health appraisal and health problems which involve the initiation, maintenance, discontinuance, or improvement of students' University relationships.

4. To participate in student hospitalization in the sense of cooperating in the administration of The Ohio State Student Hospitalization and Surgical Insurance Plan, or other student subsidized hospital or health insurance plan.

5. To conduct research as related to student and university health problems and needs.¹

In order to carry out its objectives the Health Service has a staff of four full-time and twenty-nine part-time physicians (men and women), and a clinical psychologist. A number of medical specialties are represented. In addition, nurses, X-ray technicians, a physical therapist, and other personnel staff a facility consisting of doctors' offices, minor surgery rooms, a laboratory, X-ray equipment,

¹University Health Service, Ohio State University, a Report from the University Health Service, April, 1961, pp. 1-2.
a physical therapy department, a drug dispensary, and others.²

Students needing hospitalization are usually referred to The Ohio State University Hospital, where most of the Health Service physicians have staff privileges.³ Hospitalization is at student expense unless the student carries the student hospitalization and medical insurance policy available through the University, on a voluntary basis, for five dollars a quarter, or other hospitalization policies to help defray expenses.

The University Health Service, located in the Student Services Building, near the present dormitory area, is extremely convenient for students living on the campus. Most students who live in University area rooming houses or sororities and fraternities are within a fifteen-minute walk of the Service. Although not centrally located in terms of the buildings in which classes are held, the Health Service can be reached from most areas of the main campus within twelve to fifteen minutes' walking time. Additional student medical facilities are in the University's future building plans.⁴

²Ibid., p. 2.
³Ibid., p. 3.
⁴Interview with Paul S. Fancher, M.D., Director, University Health Service, The Ohio State University, August 15, 1961.
Student use of the University Health Service

It was noted by Dr. Paul S. Fancher, Director, that during the four-quarter academic year 1959-1960, only 30 per cent of the student population used the services available at the University Health Service. If it were known that only 30 per cent of the student population had health problems requiring medical supervision, this might be a gratifying and reassuring figure, but without this knowledge the figure raises many questions in the minds of those interested in and responsible for student health services.

Two recent studies, one in 1953 and one in 1958, indicate that The Ohio State University is not the only college or university in the United States where the college health service does not serve a majority of the student body. However, in approximately 70 per cent of the colleges and universities surveyed, a majority of the students used the facilities of the health service. In addition, it was

5Norman S. Moore and John Summerskill, Health Services in American Colleges and Universities (Ithaca, New York: Cornell University, 1954).
7Ibid., p. 7.
discovered that the average number of visits made to the college health service per student per year was between three and four. At The Ohio State University the average for 1959-1960 was between one and two visits per student.

A consideration of the various aspects of this problem revealed it to be one which would have more than one answer. There seemed to be a need to attempt to find the answers to a variety of questions, such as the following: Are students well informed about the University Health Service? Where do students obtain their information about the University Health Service? Do students' families have medical or surgical insurance of any type? What reports do students hear about services at the University Health Service?

**Purpose of the Study**

The purpose of this study, therefore, is to investigate some of the factors involved in the use of the University Health Service by students at The Ohio State University.

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**Pertinent Questions**

This study will attempt to answer the following questions in relation to the use of services and facilities of The Ohio State University Health Service:

1. What percentage of the student population uses the services and facilities of the University Health Service?

2. What is the average number of visits per student made to the University Health Service during a college year?

3. Is class rank a factor in the number of University Health Service visits reported by students?

4. Is college of enrollment a factor in student use of the University Health Service?

5. Is sex a factor in the number of visits a student makes to the University Health Service?

6. Does marital status have any effect upon the number of visits a student makes to the University Health Service?

7. Does the distance of a student's home town from Columbus affect the number of his visits to the University Health Service?
8. Is a student's local housing a factor in the number of his visits to the University Health Service?

9. Is there any relationship between a student's score on the Ohio State Psychological Examination and the number of his visits to the University Health Service?

10. Is a large part of the student body in need of medical care which it does not receive?

11. Is there a difference in the extent of illness reported by members of different class ranks?

12. Is college of enrollment a factor in the number of illnesses a student reports?

13. Is sex a factor in the number of illnesses reported by students?

14. Does marital status have any effect upon the number of student illnesses?

15. Where do students receive most of their information about the University Health Service and its services?

16. What do students know about the University Health Service and its facilities and services?

17. What are some of the reasons that enter into a student's decision to seek help from the University Health Service in case of illness?
18. Does the Health Service's location affect its patronage?

19. Is there any relationship between student use of the University Health Service and coverage by student hospitalization and medical insurance?

20. Are the students who use the services of the University Health Service satisfied with their experiences? Why?

21. Do students believe their experiences at the University Health Service are as complete and personal as they might be at home?

22. What reports do students hear about the services provided at the University Health Service?

23. Can these reports be verified by student experiences?

24. How can the services of the University Health Service be improved?

25. Do the majority of the students have a family physician at home?

26. What type of medical and/or surgical insurance do students have?

27. Do students' families carry medical and/or surgical insurance?
28. What do students' families want them to do concerning medical care if they should become ill while at the University?

29. Do students follow their families' preferences concerning medical care?

30. What different sources of medical care do students use?

31. How frequently do students listen to or watch medical or health programs on the radio or television?

32. Do religious beliefs have any effect on student use of medical services?

33. To what extent do student beliefs about the value of regular medical examinations correspond to their practices?

34. To what extent do student beliefs about the value of regular dental care correspond to their practices?

35. What do students believe about the reliability of sources of medical care for various health problems and disease conditions?

The University Setting

The Ohio State University is located in Columbus, Ohio, the state capital and the third largest city in the state, with a population of approximately 470,000. Within
a radius of approximately twelve to fifteen miles (Columbus and Franklin County area) live another 200,000 persons, many of whom are employed in Columbus or its suburbs. 10

The University itself, a land-grant institution, is ninety years old. Like most of the colleges and universities in the country, it is growing rapidly, in terms of student population and buildings, with the latter not always keeping pace with the former. University enrollment varies from quarter to quarter, and ranged from approximately 20,000 to 23,000 during the 1959-1960 college year. These figures include a part-time student enrollment of from two to three thousand per quarter. During the four quarters of 1959-1960 approximately 29,000 individual students were enrolled. As might be expected, about 26,000 were from Ohio, and in the course of a year about 30 to 35 per cent of the student population will be found to live within the Columbus and Franklin County area. The remainder of the 1959-1960 enrollment was made up of about three thousand non-Ohio residents, six hundred of whom were foreign students. 11

10Columbus Area Chamber of Commerce, "Facts About Columbus, Ohio," A Report by the Department of Business Statistics (Columbus: The Chamber of Commerce, April, 1961). (Mimeographed.)

At the present time the University is composed of a Graduate School and ten Colleges: Agriculture and Home Economics, Arts and Sciences, Commerce and Administration, Dentistry, Education, Engineering, Law, Medicine, Pharmacy, and Veterinary Medicine. The largest student enrollment is in the College of Arts and Sciences, with the College of Education and the Graduate School enrolling the next largest groups. 12

Among the students enrolled in the University in 1959-1960 there were about two and one-half times as many men as women, and approximately 30 per cent of the men and 17 per cent of the women were married. 13

The housing of students at The Ohio State University is a problem of considerable magnitude. During the Winter Quarter of 1960 a survey of the local housing of full-time out-of-town students was conducted by the Offices of the Dean of Men and Dean of Women. It was revealed that University residence halls housed approximately 60 per cent of the women students and 20 per cent of the men. Fraternity and sorority houses accommodated 13 per cent of the men and

\[12\] Ibid., pp. 51, 53, 55.
\[13\] Ibid., pp. 75-76.
13 per cent of the women. Sixty-two per cent of the men and
23 per cent of the women lived in apartments, rooming houses, or houses they were renting or buying. The remaining stu-
dents, about 6 per cent, lived in trailers, University family (student) housing, or miscellaneous types of
housing.

The capacity of The Ohio State University dormito-
ries, as related to total student enrollment, is approximately
20 per cent. This is a figure which is surpassed by all of
the Big Ten universities except one. Additional University residence halls are under construction now, and additional University family housing has become available since the housing survey was made.

The student personnel program at the University
began as early as 1912, with the appointment of a Dean of
Women. A Student Medical Service was established in 1915. Since 1908 it had operated as a part of the Physical

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14 Offices of the Dean of Men and Dean of Women, "Housing Survey, The Ohio State University, Winter Quarter, 1960" (a Report on Student Housing, June 4, 1960), p. 8. (Mimeographed.)

15 "Big Ten Residence Halls, Facility and Operation Sta-
tistics" (compiled from Annual Surveys Started in 1953). (Mimeographed.)
Education Department. A Dean of Men was appointed in 1927, and later, an employment service, a counseling and testing center, and numerous other services appeared. At the present time the University Health Service is one of a multitude of University maintained offices and agencies which assist in all aspects of student personnel work.  

16 Interview with Paul S. Fancher, M.D., Director, University Health Service, The Ohio State University, August 15, 1961.

17 Publications for Faculty Information: The Student Personnel Program and Services (Columbus: The Ohio State University, November, 1959).
CHAPTER II

REVIEW OF RELATED LITERATURE

It has been over one hundred years since President Stearns of Amherst College expressed his interest in the health of college students. His concern, in 1856, for the "breaking down of the health of the students, especially in the spring of the year,"¹ was an important milestone in the field of college health.

During the earlier part of the nineteenth century various physical exercise programs had begun to appear in the schools and colleges of the United States. Gymnastic programs and gymnasia became popular. Later, as sports programs and athletics developed in colleges, the need for medical supervision of the participants was recognized. Diehl and Shepard state:

These health activities, however, were usually connected with athletic programs more directly than with the college administration. The

college itself apparently continued to believe that physical training in the gymnasium fulfilled all health obligations it owed its students.²

Progress in college health programs was slow indeed, and in at least several instances a major epidemic or catastrophe, such as the death of a student, was required before the college administration seemed willing to undertake the development of a program for student health.

Although Harvard College required attendance at lectures on the "means of preserving health" in the second decade of the nineteenth century,³ it was at Amherst College in the latter 1850's that a broad program of student health first made its appearance. The earliest comprehensive student health program was organized at the University of California about 1900, following an investigation of the reasons for class absences. By 1907 this program had developed to include dispensary and infirmary care of ill students, medical examinations, and hygiene instruction.⁴ A program of this type was the exception, rather than the rule, at this time.


During the latter years of the nineteenth century and the early twentieth century, much research work in the area of disease control had begun to yield beneficial results. This increased knowledge about communicable diseases and their prevention sparked the development of college faculty groups concerned with improving campus sanitary conditions, developing vaccination programs, and other measures for the health protection of the student group. Health programs other than those centered around gymnasia began to receive some attention.

From this interest in the college as a community with public health problems grew an interest in the college student as an individual with personal health problems. Many institutions accepted what they considered their moral obligation to supervise student health on the premise that students were far from home, away from parental advice, and living on limited budgets which might restrict their use of private medical services.

It would be wrong, however, to conclude that the complete motivation for college and university student health

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programs had come solely from the institutions themselves. Of no small importance were the emerging nation-wide trends related to an increasing interest in the individual student and his potential, and the belief that the college offering health services was in an advantageous position to enroll students. In addition, and of major significance, were the draft statistics of World War I which pointed up the poor health condition of the young men of our country and caused a boom in the movement for health conservation.  

Although the public enthusiasm causing the boom for health conservation shortly turned to inertia, public health and health service groups moved forward during the period between the two World Wars, and again, as a result of rejections of men under the Selective Service Act, received more public interest.

University and college health services have continued to grow in number and in the diversity of services offered. It is interesting to note that as early as 1921, Sundwall was

7Ibid.
expressing what might still be voiced as the underlying philosophy of many student health services:

These curative or treatment phases of medicine, however, are not the chief concerns of the students' health service. Its aim is to help each student entering the university to possess a healthy, vigorous, active, and harmoniously developed body and to keep it at its best. It stands for positive health. It desires to be a most potent factor in reducing to the very minimum that prodigious annual economic and academic loss in our universities due to lassitude, indisposition, illness, and frequent epidemics among students. Therefore it is as much concerned with the physical welfare of the sound student as it is with that of the ill or the subnormal. The promotion of health and the prevention of disease are its watchwords.9

Today colleges and universities have expanded their concept of the student health service to consider health and health protection in the context of the World Health Organization's definition of health which calls for "a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity."10 This has led to a still broader framework for student health services which recognizes the values of coordinating the student

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health service program with other student personnel programs on the campus. This is well expressed by Lindsay, who states:

The college and university health service has gone far in achieving the purpose of the health service—the prevention and treatment of acute illnesses. The second obligation, more important than often realized, is to help students reach their optimum level of physical and emotional health and development. This goal is best attained by a cooperative relationship between all those persons who share with the medical advisor the responsibility for the health and welfare of students.11

Throughout the years there has been a number of surveys of student health programs in colleges and universities. The early ones, by Forsythe12 in 1914 and by Mock13 in 1917, both gave consideration to the need to provide for the health care of college students. Forsythe also surveyed hygiene instruction, fees charged for medical services, and infirmary arrangements, while Mock concentrated entirely on aspects of health care of the students. Among Mock's discoveries was

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the fact that only ten of his forty-five college respondents provided physical examinations for their students, and only three had any system for caring for the ill.  

During the 1920 to 1930 decade the surveys were all focused on the institution's responsibility for the care of student health and how it was being met. All of the surveys indicated a growing interest in student health service work, and a growing realization of the importance of the work on a college campus. Surveys by Edmunds and Nichols, both in 1921, seemed to indicate an increase of definite student health service organizations, although it should be noted that the scope of the organizations' work varied, as did the scope of those surveyed by Chenoweth in 1926 and Storey in 1927. The survey of land-grant colleges made by the

14 Ibid., p. 463.
18 Thomas A. Storey, M.D., The Status of Hygiene Programs in Institutions of Higher Education in the United States (Stanford University, California: Stanford University Press, 1927).
United States Office of Education\textsuperscript{19} in 1930 and Mitchell's survey of thirty-six colleges in New York State\textsuperscript{20} would seem to support Storey's conclusion that of the institutions surveyed, "...only a few have established student health services that contain all the elements that now appear to be essential to completeness."\textsuperscript{21}

In 1932 Griswold and Spicer, representing the Committee on the Costs of Medical Care, surveyed six institutions of various sizes and types of financial support. They discovered that a wide variety of types of medical care was being offered by all of these institutions, and that there was considerable variation in its cost to the student and to the institution providing it.\textsuperscript{22}


\textsuperscript{21}Storey, op. cit., p. 67.

\textsuperscript{22}Don M. Griswold and Hazel I. Spicer, \textit{University Student Health Services: A Study of Organization, Services Rendered, and Costs in Cornell University, Yale University, the University of Michigan, the University of Minnesota, the University of California, and Oregon State Agricultural College}. Publication Number 19 of The Committee on the Costs of Medical Care (Chicago: University of Chicago Press, 1932). Abstracted in \textit{Surveys of Organized Medical Services}, Abstracts of Publications 17-21, 1932, pp. 23-36.
Until the middle 1930's, all of the college health program survey groups had used relatively small samples. In 1936, however, the American Medical Association's Bureau of Medical Economics surveyed approximately three hundred colleges, and in 1939 Diehl and Shepard in their investigation for the American Youth Commission surveyed approximately six hundred and fifty institutions. The former survey noted a lack of fundamental principles that could be used in providing medical care for the college population. Diehl and Shepard tried to improve this situation by formulating a large number of suggestions, based on the results of their study, for the organization and development of college student health service work. In addition, they surveyed the health status of 5,000 students admitted to colleges in the fall of 1935.

In preparing for the Third National Conference on Health in Colleges, the Conference's Planning Committee, in 1945-1946, conducted a survey similar to Diehl and Shepard's

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(which was described previously). In the ten years since the Diehl and Shepard survey, the Committee noted that college health programs had expanded greatly, particularly in the area of health service. More provisions had been made for medical examinations and for more adequate medical care of students. In addition, more health instruction was reported by the colleges. Other areas of the college health programs were also surveyed, in order to have the information to use as a guide during the later Conference.  

The 1950's brought still more investigations, and the American Medical Association's Second Survey of University and College Health Services appeared to be one of the few to note the role of the student health service in influencing the student's concept of good medical care. Young, in studying the programs at forty teachers' colleges, found many shortcomings, but noted that each institution would have to develop a plan for its own program; no general plan would

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meet the needs of all. Still more recently, Moore and Summerskill in 1953 and the American College Health Association and the Continental Casualty Company in 1958 indicated that student health services have still not developed as completely as might be desired, since 50 per cent of the colleges responding indicated that they provide care for minor illnesses only.

In both of these latest surveys concerned with various aspects of the student health service program, the average number of visits to the health service per student per year was found to be between three and four, and in approximately 70 per cent of the institutions responding, it was estimated that a majority of their students used the medical care program. Other information gained from the two surveys concerned the services, facilities, and personnel available in student health service programs.

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31Ibid., p. 7.
32Ibid.
This emphasis, noted in the two last surveys, to give much consideration to the extent of services, facilities, and personnel available in various student health service programs, was discovered to be a common approach in the various surveys of health service programs. Little attention seemed to be given to the extent of use and/or non-use of the programs being surveyed. In no instance was any investigation made of student reasons for their use or non-use of the available services, except for notation of the specific illness bringing a student to the health service.

It is somewhat surprising that this aspect of the use of student health services has not been investigated by one of the large-scale surveys. Neither has there apparently been any investigation of this subject by any individual student health service. Before starting this study, the investigator wrote to the Directors of nineteen university health services and the Chairman of the Research Committee of the American College Health Association (see Appendixes A, B, C). Most of these persons are active in the work of the American College Health Association and are in positions to know research in this field. This exploratory investigation yielded the information that a few informal studies of the differences in extent of health service use by the sexes, by
foreign students, by members of different class ranks, and by dormitory and private home students have been carried out in some institutions. No research concerning student opinions about health and health care at the student health service appears to have been conducted.

The American College Health Association, closely involved in the two large surveys of college health programs conducted during the 1950's, has been for many years an important force in the college health movement. This organization was founded as the American Student Health Association in 1920, and through its annual meetings, sections, and committees has continually worked for higher standards in the broad field of college health. Two of the areas in which the A.C.H.A. has long been interested are the mental health of college students and the educational aspects of the entire college health program. On individual campuses these have been accorded varying degrees of interest through the years, but the interest of the A.C.H.A. in them has remained firm.

33Letter from Harry E. Zion, M.D., Director, Student Health Service, Washington State University, Pullman, Washington, October 12, 1960.
34Letter from Donald S. MacKinnon, M.D., Director, Student Health Service, University of California, Los Angeles, California, October 13, 1960.
As further indication of its sincere interest in college health, the A.C.H.A. has, since 1931, joined with a number of other organizations to sponsor four national conferences on health in colleges. Each of these has stressed the responsibility of the college or university for the health care of its students, and has also studied other aspects of the program, such as health instruction, environmental sanitation, and physical education. In later years the conferences have considered research in the field of college health, and have pointed out the need as well as the problems involved in conducting research in this area.

Thirty years ago, when the first National Conference on College Health (then called College Hygiene) was held, the National Tuberculosis Association gave major financial support and assumed numerous other responsibilities in connection with it. This was, perhaps, an indication of the interests and the realization by various organizations of the importance of cooperative efforts in solving health problems. More than twenty years later, in 1954, the theme of the fourth conference, "Teamwork in Meeting the Health Needs of College Students," indicated that this was a problem still worthy of consideration on the national level.  

This Conference, sponsored by forty-six professional, voluntary, and commercial agencies and organizations, gave consideration to many different aspects of college and university life as they related to college health, seeking to develop more fully the teamwork and cooperation that had been valued for such a long time.

Since Amherst's President Stearns in 1856 first expressed his concern for the health of college students, much progress has been seen in the entire college health field. That there are still many more milestones upon which to set one's sights cannot be denied.
CHAPTER III

PROCEDURE

During the 1959-1960 academic year the Director of the University Health Service noted that only 30 per cent of the student population visited the University Health Service. This study was developed to investigate some of the factors involved in the use of the Health Service by students at The Ohio State University.

Definition and Identification of Terms

For the purpose of this study the following definitions are used:

Sample I: Sample I refers to the group of students whose characteristics and use of the University Health Service were investigated by a study of various University records, in Part I of the study.

Sample II: Sample II refers to an anonymous group of students whose characteristics, practices, and opinions in relation to medical care and the University Health Service were investigated by means of a questionnaire in Part II of the study.
**Graduate student:** Any student who was enrolled in the College of Law, the College of Dentistry, the Graduate School, the fifth or sixth year of any curriculum, or the third or fourth year in the College of Pharmacy, Optometry, or Veterinary Medicine is considered a graduate student.

**Treatment:** A student who received medical care or consultation from a University Health Service physician, nurse, or other staff member is considered to have received treatment from the University Health Service.

"**User**" of University Health Service facilities: A student who received treatment from a University Health Service physician, nurse, or other staff member at least once during the 1959-1960 college year, exclusive of any treatment received as a part of the University Orientation Program for new students, is considered a "user" of University Health Service facilities.

"**Non-user**" of University Health Service facilities: A student who received no treatment at the University Health Service during the 1959-1960 college year, except for treatment received as a part of the University Orientation Program for new students, is considered a "non-user" of University Health Service facilities.
A Health Service "visit": Each time a student received treatment from a University Health Service physician, nurse, or other staff member, a notation was made on the student's medical record. This notation indicates a "visit" to the University Health Service.

Student hospitalization insurance policy: Student hospitalization and medical insurance protection with the Continental Casualty Company is available to students, on a voluntary basis, for five dollars per quarter. The benefits include hospital expenses, ambulance services, Salk, influenza, and penicillin shots, surgeon's fees, and other specified medical expenses up to certain maximum amounts designated by the policy.

Columbus and Franklin County resident: Columbus, the capital city of Ohio, and seat of Franklin County is located approximately in the center of the County. Due to this fact, The Ohio State University is also rather centrally located, and most residents of the Columbus and Franklin County area will be no more than twelve to fifteen miles from the University campus.

University Committee on Health Education: This advisory Committee is composed of 33 representatives from 26 areas of the University, such as civil engineering, social
administration, pharmacy, and others, which are interested in health education. The Committee sponsors workshops and courses, and, in general, attempts to facilitate coordination of the University's resources for health education.¹

Part I

Part I of this study consisted of the selection of a sample of the student population at The Ohio State University for the 1959-1960 college year and a study of some selected characteristics of these persons in relation to their use of the facilities and services of the University Health Service.

In determining the size of this sample group, it was recommended by statistical authorities² at The Ohio State University that serious consideration be given to the number of cases that could be dealt with satisfactorily by the investigator, rather than decide arbitrarily on a certain percentage of the student population or a certain number.

Following the collection of data on a pilot group of about

¹The Ohio State University, Department of Physical Education, "Health Education 645, Organizational Relationships in School Health Education, Unit II" (Columbus: The Department, 1959), p. 4. (Mimeographed.)

²Statistical procedures were recommended and carried out under the direction of Dr. D. Ransom Whitney, Director, and Mrs. John Kinzer, Statistician, Statistics Laboratory, Department of Mathematics, The Ohio State University.
fifty cases, it was estimated by the investigator that a total sample of approximately nine hundred could be handled satisfactorily.

Selection of Sample 1 Members

The decision was made to sample the students in strata according to class rank for two reasons. In a college setting, class rank is a commonly used designation. In addition, there appeared to be evidence from University Health Service records that students make most use of the Health Service when they are freshman, and less use of it as their college careers progress.

To aid in the drawing of sample groups and the verification of enrollment, Mr. Kenneth R. Varner, Registrar, The Ohio State University, provided the investigator with complete alphabetical lists of students enrolled at The Ohio State University during Winter and Spring Quarters 1960. Since the list for Autumn Quarter 1959 was not available, the University Directory for 1959-1960 was used to verify student enrollment during that quarter.

It is known that many students who enroll at The Ohio State University in an Autumn Quarter withdraw before the end of the following Spring Quarter. Consequently, the list of
students registered during the Spring Quarter of 1960 was used in drawing the sample, since it was estimated that this group would be more stable in terms of continuity of enrollment than a group registered for any other quarter.

The Annual Report of the Registrar and University Examiner, 1959-1960 provided information concerning the enrollment in each class rank during the Spring Quarter 1960. Based on these enrollment figures, it was estimated that approximately one-third of the total group of 900 should come from the freshman rank. By selecting every sixteenth freshman, and, following that, every sixteenth student in each of the other class ranks, the desired number was obtained.

These names were then checked on the Winter Quarter 1960 list of students and in the University Directory 1959-1960 to verify enrollment during the other two quarters of the college year. Any student whose name was not found on both Registrar's lists and also in the University Directory was eliminated from the sample group.
Collection of the Data

In order to gain additional information about each sample member, the investigator was granted permission by Mrs. Christine Y. Conaway, Dean of Women, The Ohio State University, and Mr. Mylin H. Ross, Dean of Men, The Ohio State University, to use records available in their offices. Records in the University Counseling and Testing Center were also made available and from October 16, 1960 to June 9, 1961, the investigator had an appointment as a Research Assistant at the University Health Service in order to have access to confidential medical records.

For each sample member, the following information was collected:

**College of enrollment.**—This was determined by use of information on the Registrar's Spring Quarter 1960 list of enrolled students.

**Sex.**—If this was not apparent from the student's name, it was determined by referring to information on the student's medical examination record at the University Health Service.

**Marital status, home town, type of local housing.**—This information was located by referring to Spring Quarter
1960 registration cards which were available for almost all students in the entire sample in the offices of the Dean of Women and Dean of Men.

The Spring Quarter cards were selected for use because they were the only ones available from the Dean of Men, and it was believed that the information used should refer to the same quarter for both men and women in the sample groups.

In some instances the student registration cards were not available. In these cases, reference was made to cards for the previous quarter (if available), to other records in the office of the Dean of Women, or to the student's medical record at the University Health Service. If the desired information on housing or home town, for instance, could not be obtained with a reasonable degree of accuracy, the information was omitted. This occurred in a relatively small number of cases.

Following the determination of the student's home town, this town was located on an Ohio Official Highway Map for 1959-1960 and assigned a zone number, depending upon its distance from Columbus (see Appendix D). There were numerous instances in which a city or town was divided by a zone line. Since it was not feasible to try to determine the exact
section of the city in which a student lived, the city was zoned according to the location of its center on the map.

**Ohio State Psychological Examination score.**—This information was obtained from records at the University Counseling and Testing Center. Because transfer students and graduate students usually do not take the O.S.P.E., there were a number of subjects for whom these scores were missing. In the graduate rank this was particularly noticeable, since approximately 65 per cent of the group did not have an O.S.P.E. score available. In all instances of this sort, the subject was retained if the other desired data concerning him could be obtained.

**University Health Service visits, 1959-1960.**—Each sample member's medical record was located by the investigator at the University Health Service, and a notation made of the number of visits made to the Health Service during the 1959-1960 college year. If a student's record could not be located, the student was eliminated from the sample.

In the course of collecting information about the sample members it was occasionally discovered that a student had withdrawn from the University in the middle of a quarter or had been off the campus for a quarter doing student teaching or field work in some distant city. When information of
this sort were available, indicating that a student had not actually been on the Columbus campus during a particular quarter, in spite of being officially enrolled, this student was eliminated from the sample group. This was done because under such circumstances it would be extremely unlikely that the student would use the facilities of the University Health Service.

After all available data had been collected, and necessary eliminations made, 948 students remained in Sample I.

Preparation of the Data for Tabulation

In order to preserve the anonymity of each sample member, a number was assigned to each name, and all data were recorded, according to a previously determined code system, on special tabulation sheets, in preparation for I.B.M. processing.

Part II

In the second part of this study, by means of a questionnaire survey, an attempt was made to discover some of the factors determining student use or non-use of the facilities and services of the University Health Service. In
addition, it was hoped to obtain some information about student opinions relative to medical care, student knowledge of the importance of medical care for a variety of health conditions, and student knowledge and opinions concerning the University Health Service at The Ohio State University.

It was hoped that from three hundred and fifty to four hundred questionnaires would be available for analysis. This number was believed to be large enough to yield some of the desired information and small enough that the information obtained from a number of free response items could be handled satisfactorily. It was realized that quantity was being sacrificed in favor of quality, but quality seemed to be the more important factor in this instance, and complete analysis of the free response items necessitated a moderate number of questionnaires.

Construction of the Questionnaire

Questions raised during conferences with Paul S. Fancher, M.D., Director, University Health Service, health education class experiences of the investigator and other health education instructors in the Department of Physical Education, information and ideas gained through exploration
of related literature, and one published questionnaire —
all contributed to the construction of questionnaire items.

As the questionnaire was being developed, assistance
was received from a professor of health education, the in­
vestigator's adviser, and a professor of sociology and
anthropology who was on the investigator's doctoral committee.
Any aspects of the questionnaire which had definite medical
implications were verified with the Director of the Uni­
versity Health Service, a special consultant to the investi­
gator's committee. The first draft of the questionnaire was
reviewed critically by the adviser and all members of the
committee.

In order to determine the clarity of the question­
aire it was distributed to a group of approximately thirty­
five students, all of whom were enrolled in physical educa­
tion classes conducted by the Department of Physical Edu­
cation, Women's Division, The Ohio State University. It was
found that no major revisions of any sort were necessary,
and after some minor editing the questionnaire was ready for
distribution.

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3 Margaret L. Leonard and Clark W. Horton, An Inventory
of Points of View Related to Health, California State Depart­
ment of Education, (Sacramento: The Department, 1949), pp. 7­
8. (Mimeographed.)
Distribution and Collection of the Questionnaires

It was decided that an attempt would be made to reach approximately 75 per cent of the total number in each stratum in Sample I. This would be a total of 711 persons. The investigator estimated that a return of 50 per cent of the questionnaires might be expected. If so, the desired number of approximately three hundred and fifty would then be obtained.

To aid in this aspect of the study, the investigator now called upon a number of professors and other persons in a representative group of University departments, requesting that they distribute the questionnaire through some of their classes (see Appendix E). In many instances the professors were selected because they were members of the University Committee on Health Education, and it was hoped that this would result in a greater percentage of returns. Some were known personally by the investigator, while others were suggested by colleagues. Without exception, all were most helpful and cooperative. Class time for the completion of the questionnaire was not requested.

A definite attempt was made to have the questionnaires distributed in representative academic areas, in order
to have numerous colleges of the University in the sample. This was achieved quite successfully, as sixteen different departments or colleges were represented by the cooperating professors.

The other distribution problem, that of a proportionate representation according to class rank, was not so easily determined, in spite of the fact that this was given consideration before a professor was asked for his assistance. In the initial conversation with each professor, an attempt was made to determine the approximate distribution, by class rank, in the college class with which the professor planned to use the questionnaires. In this way it was hoped that an appropriate distribution of returns, by strata, would be achieved.

With each group of questionnaires a letter was enclosed to the cooperating professor, stating the approximate date when and where the questionnaires would be collected, a request that the return of the questionnaires be encouraged, an expression of the investigator's appreciation of the professor's help, and the investigator's phone number. A separate memorandum concerning the questionnaire to be read to the students was also included. Briefly outlined were the qualifications to be fulfilled by the student in order
to be eligible to complete the questionnaire and a brief explanation about the questionnaire itself (see Appendixes F, G).

A week or ten days later, on the previously designated date, the investigator collected the questionnaires or made arrangements with the professor for the return of the completed questionnaires and any blank ones which had not been distributed. It was discovered that 81 per cent of the questionnaires originally distributed to the professors had actually been distributed to students. Of this number, 60 per cent was returned, completed, to the investigator, and 57 per cent (394 questionnaires) was usable.

Following the collection of the questionnaires, a letter of appreciation was sent to all those persons who assisted in this aspect of the study (see Appendix H).

Preparation of the Questionnaires for Tabulation

Approximately fifty questionnaires were read by the investigator before categories were established for the purpose of tabulating all free response items (see Appendix I).

To prepare the questionnaires for I.B.M. tabulation, a coding plan was developed, with the assistance of Dr. D. Ransom Whitney, Director of the Statistics Laboratory,
Limitations of the Study

The members of the sample groups used in this investigation all have the following qualifications:

1. Enrollment at The Ohio State University during the 1959-1960 college year, which is defined as consisting of the following quarters: Autumn 1959, Winter 1960, and Spring 1960.

2. Attendance in classes on the Columbus campus of The Ohio State University.

3. Enrollment in a college or professional school other than the College of Medicine (exclusive of the School of Nursing).

4. Classification as a freshman, sophomore, junior, senior, or graduate student during the 1959-1960 college year. This is referred to as the student's class rank.

Students at the branch colleges, medical students, and "special" and "irregular" students did not qualify and therefore were omitted from both sample groups. Students in the branch colleges and those in the College of Medicine
(exclusive of the School of Nursing) do not use the facilities and services of the University Health Service. Since "special" and "irregular" students are not given a class rank, they could not be sampled in strata by class. Their total number in the University was not considered sufficient to warrant an additional stratum.

It will be noted that the definition of "1959-1960 college year" does not include a summer quarter. At The Ohio State University, as at many other institutions, the summer quarter is similar to regular quarters in length of time and in many other pertinent aspects. However, the average summer school student on university and college campuses differs markedly from the average student in attendance during the rest of the year in terms of age, maturity, and experiential background. For this reason it was decided to eliminate the summer quarter from the "college year" as it is used in this study.

In the original planning of this study it was decided that the second sample group used would not be a follow-up of the first sample, and that no attempt would be made to match the members of the two sample groups. The advantages of matching groups or a follow-up survey were fully recognized. The problems involved in trying to reach nine hundred
students, approximately one-third of whom would have graduated or withdrawn from school, however, presented an almost insurmountable obstacle. In addition, it was believed that a much more honest response would be received from the questionnaire respondents if they felt absolutely certain that they were unknown to the investigator.

Treatment of the Data

The chi-square test and contingency tables were used to determine the significance of any difference which might exist between the users and non-users of the University Health Service in relation to a number of selected factors. In addition, the significance of any difference which might exist between the sexes, class ranks, or other groupings in relation to selected factors was determined by the same procedure.

The equation for chi-square is \( \chi^2 = \sum \frac{(f_o - f_e)^2}{f_e} \).

Each chi-square was read at the .05 and .01 levels to determine the probability of significance.

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In a number of instances, the frequency of responses to a particular item in a question was so small that it was combined with another similar item before the chi-square test was applied. This happened most frequently in the questionnaire questions concerning numbers of visits made to physicians or to the University Health Service. All responses indicating five or more visits were combined into one category unless the distribution of the responses made another type of combination more appropriate.

There were a number of items in the questionnaire used with Sample II where a determination of total group response was desired. In some of these items the chi-square was not significant or was not computed, due to small numbers of responses or a judgment that another type of analysis would be more meaningful. In order to study total group responses, percentage values were computed, and this data is presented in Chapter V.
CHAPTER IV

RESULTS OF THE CHI-SQUARE TESTS

The results of the application of the chi-square test to the data from Sample I and Sample II concerning selected factors and the number of visits to the University Health Service are shown in Table 1.

<table>
<thead>
<tr>
<th>Item</th>
<th>Sample I</th>
<th>Sample II</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Chi-Square d.f.</td>
<td>Chi-Square d.f.</td>
</tr>
<tr>
<td>Class rank</td>
<td>62.40 12 .01</td>
<td>26.34 12 .01</td>
</tr>
<tr>
<td>College</td>
<td>82.66 21 .01</td>
<td>28.98 18 .05</td>
</tr>
<tr>
<td>Sex</td>
<td>9.86 3 .05</td>
<td>10.68 3 .05</td>
</tr>
<tr>
<td>Marital status</td>
<td>52.12 3 .01</td>
<td>6.46 3 .05</td>
</tr>
<tr>
<td>Home town</td>
<td>90.58 9 .01</td>
<td>23.33 9 .01</td>
</tr>
<tr>
<td>Columbus housing</td>
<td>113.19 15 .01</td>
<td>25.09 15 .05</td>
</tr>
<tr>
<td>O.S.P.E. class</td>
<td>10.77 12 --</td>
<td>-- --</td>
</tr>
</tbody>
</table>

It is observed that each of the first six items was significant at the .05 or .01 per cent level in relation to Sample I data concerning number of visits to the Health Service, while only five of these same items were significant in
relation to Sample II data. There was no significant difference in the number of Health Service visits made by married and single students in Sample II.

Shown in Table 2 are the results of the application of the chi-square test to additional data from the questionnaire which was used with Sample II. In two of the six questionnaire items where the responses were analyzed in relation to the sex of the respondents a significant difference between the sexes was noted.

Significant differences between the responses of the class ranks were noted in two of the three items where the chi-square test was applied to the data.

In the lower portion of Table 2 can be noted the significance of the difference made by a number of selected factors in relation to the number of illnesses reported by students.

The chi-square test was applied to the responses of the users and non-users in Sample II in 47 questionnaire items or parts of items, as indicated by the questionnaire item number on Table 3. In 9 of these items the difference between the responses of users and non-users was significant at the .01 per cent level, and in 2 items the difference was significant at the .05 per cent level. In 23.4 per cent
TABLE 2

CHI-SQUARE SCORE DATA FOR SELECTED FACTORS AS RELATED TO SEX, CLASS RANK, AND NUMBER OF ILLNESSES OF RESPONDENTS

<table>
<thead>
<tr>
<th>Questionnaire Item</th>
<th>Chi-square</th>
<th>d.f.</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>7.16</td>
<td>3</td>
<td>.16</td>
</tr>
<tr>
<td>38</td>
<td>29.13</td>
<td>4</td>
<td>.01</td>
</tr>
<tr>
<td>39</td>
<td>2.54</td>
<td>3</td>
<td>.54</td>
</tr>
<tr>
<td>40</td>
<td>0.83</td>
<td>3</td>
<td>.83</td>
</tr>
<tr>
<td>41</td>
<td>10.68</td>
<td>3</td>
<td>.05</td>
</tr>
<tr>
<td>42</td>
<td>4.30</td>
<td>3</td>
<td>.30</td>
</tr>
<tr>
<td><strong>Class Rank</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>19.07</td>
<td>4</td>
<td>.01</td>
</tr>
<tr>
<td>22</td>
<td>6.53</td>
<td>4</td>
<td>.53</td>
</tr>
<tr>
<td>41</td>
<td>26.34</td>
<td>12</td>
<td>.01</td>
</tr>
<tr>
<td><strong>Number of Illnesses</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>21.90</td>
<td>9</td>
<td>.05</td>
</tr>
<tr>
<td>2</td>
<td>33.86</td>
<td>18</td>
<td>.05</td>
</tr>
<tr>
<td>3</td>
<td>10.67</td>
<td>3</td>
<td>.05</td>
</tr>
<tr>
<td>4</td>
<td>7.41</td>
<td>3</td>
<td>.41</td>
</tr>
</tbody>
</table>
TABLE 3

CHI-SQUARE SCORE DATA FOR USERS AND NON-USERS OF THE UNIVERSITY HEALTH SERVICE IN SAMPLE II

<table>
<thead>
<tr>
<th>Questionnaire Item</th>
<th>Chi-square</th>
<th>d.f.</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>4.55</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>0.35</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>3.29</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>2.95</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>4.42</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>1.82</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>2.23</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>1.97</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>1.60</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>2.95</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>0.29</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>1.97</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>2.89</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>0.03</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>24.84</td>
<td>1</td>
<td>.01</td>
</tr>
<tr>
<td>22</td>
<td>4.53</td>
<td>1</td>
<td>.05</td>
</tr>
<tr>
<td>23</td>
<td>0.58</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>1.97</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>2.63</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>0.05</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>0.23</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>28 (1)</td>
<td>14.57</td>
<td>1</td>
<td>.01</td>
</tr>
<tr>
<td>(2)</td>
<td>11.73</td>
<td>1</td>
<td>.01</td>
</tr>
<tr>
<td>(3)</td>
<td>0.36</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>(4)</td>
<td>5.89</td>
<td>1</td>
<td>.05</td>
</tr>
<tr>
<td>(5)</td>
<td>0.03</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>(6)</td>
<td>1.95</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>0.50</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>1.79</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>8.76</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>33 (1)</td>
<td>3.59</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>(2)</td>
<td>1.44</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>(3)</td>
<td>2.73</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>(4)</td>
<td>15.73</td>
<td>1</td>
<td>.01</td>
</tr>
</tbody>
</table>
of the items tested, therefore, a significant difference existed between the responses of the users and the non-users.

Two additional chi-squares were computed which do not appear to belong in any of the tables already presented. Users and non-users who stated that they made their own decisions concerning medical care were studied in relation to their responses concerning intentions to visit the University Health Service. The difference between the two groups was significant at the .01 per cent level. The chi-square value was 52.04, with three degrees of freedom.
In the second case, the chi-square test revealed a significant difference, at the .01 per cent level, in the number of visits to the University Health Service made by users of medical services who did and did not report having the student insurance policy. This chi-square value was 17.86, with three degrees of freedom.
CHAPTER V

DISCUSSION OF THE RESULTS

The results of this study appear most meaningful if they are divided into specific groupings for discussion. In this chapter will be found a discussion of the pertinent questions posed in the Introduction. In Chapter VI, Additional Results, will be found a discussion of (1) Ohio State University Health Service use compared with the Moore-Summerskill and American College Health Association surveys, (2) characteristics of the users and non-users of the University Health Service, and (3) selected characteristics of Sample II members.

The Questions Posed in the Introduction

The order of discussion of the questions is the same as that used in the Introduction where the questions were first presented. Following the statement of each question is a notation referring to the source of the data on which the results are based. Questionnaire numbers refer to the items on the questionnaire, a copy of which is in Appendix I.
Question 1

What percentage of the student population uses the services and facilities of the University Health Service? (Sample I and Sample II.)

During the 1959-1960 college year more than 50 percent of both sample groups used the services of the University Health Service. A slightly larger percentage of Sample I, 58.3 percent, visited the University Health Service, while 53.3 percent of Sample II members visited the Service.

Question 2

What is the average number of visits per student made to the University Health Service during a college year? (Sample I.)

In the course of the college year 1959-1960, the average number of visits made to the University Health Service was slightly more than two per student. Specifically, this was 2.2 visits, as determined by the data for Sample I.

In Sample II it was not possible to determine a precise average number of visits, due to the manner in which the visits were recorded by the respondents. An "estimated" average for the 389 students whose visits to the University Health Service ranged from none to no more than ten was
determined by using the midpoints of the intervals indicated by the students in Question 41. This average was 1.1 visits per student. A similarly determined average for Sample I yielded the figure 1.6, indicating the accuracy lost by eliminating those students who visited the Health Service more than ten times and by using the interval midpoints.

Sample I was more representative of The Ohio State University student population than Sample II. For this reason, in addition to the lack of exactness possible in Sample II, the figure of 2.2 visits per student was judged to be the more accurate one.

**Question 3**

Is class rank a factor in the number of University Health Service visits reported by students? (Sample I and Questionnaire 6, 41.)

Both sample groups yielded data which indicated a significant difference in the number of University Health Service visits made by members of different class ranks. In both Samples, freshmen made more visits than would be expected and graduate students made fewer visits. Although the pattern was slightly irregular, it appeared that each succeeding class rank made fewer Health Service visits than the rank preceding it.
Question 4

Is college of enrollment a factor in student use of the University Health Service? (Sample I and Questionnaire 2, 41.)

In both Sample I and Sample II there was a significant difference between college groups in the number of visits to the Health Service. Both Samples showed students in the Colleges of Engineering, Dentistry, Law, and the Graduate School making the fewest number of visits. The data from the two Samples were not similar concerning the college group which made most use of the University Health Service. The School of Nursing, represented in Sample I but not in Sample II, appears to be in first place, but with only 17 persons in the sample this could easily be misleading. The College of Arts and Sciences and a combined College of Commerce and College of Agriculture group are in the next two places. In Sample II however, students in the College of Home Economics appeared to make the most visits, with the College of Education in second place.

It is strongly suspected that these differences between colleges were, in some instances, really differences between the sexes which appeared here because of the sex distribution in the various colleges.
**Question 5**

Is sex a factor in the number of visits a student makes to the University Health Service? (Sample I and Questionnaire 3.)

The difference between the sexes in the numbers of their visits to the University Health Service was significant at the .05 per cent level in both Sample I and Sample II. Women students used the services of the Health Service more frequently than men did.

**Question 6**

Does marital status have any effect upon the number of visits a student makes to the University Health Service? (Sample I and Questionnaire 4.)

In relation to their use of the University Health Service, the difference between single and married students in Sample I was significant at the .01 per cent level, with single students visiting the Health Service more frequently than married students.

In Sample II, although the difference between the two groups was not significant, the data indicated the same pattern of visits as that observed in Sample I.
Question 7

Does the distance of a student's home town from Columbus affect the number of his visits to the University Health Service? (Sample I and Questionnaire 5, 41.)

According to the data from both Samples, the distance of a student's home town from Columbus was a significant factor in the number of his visits to the University Health Service. Students residing in Zone 1, Columbus and Franklin County, made fewer visits to the Health Service than any other group, as reported by the data from both Samples. Beyond this, the Samples did not agree on all points. In Sample I the students in Zone 3 made the most Health Service visits, while Sample II students from Zone 2 appeared to visit most frequently. More residents than would be expected, in both of these Zones, in both Sample groups, made one or two Health Service visits, while more Zone 4 residents than would be expected made three or more visits to the University Health Service. There is no explanation for the difference between the Samples in the Zone whose residents made the most visits.

Question 8

Is a student's local housing a factor in the number of his visits to the University Health Service? (Sample I and Questionnaire 6, 41.)
In both Sample I and Sample II the chi-square indicated that local housing was a significant factor in relation to the extent of use of the University Health Service. Residents of dormitories and fraternities and sororities visited the Health Service more than residents of other types of housing, and students living at home and in apartments visited the Health Service less than other students.

Question 9
Is there any relationship between a student's score on the Ohio State Psychological Examination and the number of his visits to the University Health Service? (Sample I.)

Sample I members were the only ones for whom O.S.P.E. data were available, and as was noted previously, many scores were non-existent. Computation of the chi-square using the O.S.P.E. classes, rather than the scores, indicated that the class was not a significant factor in the number of Health Service visits made by Sample I members. No additional computations with the O.S.P.E. scores were believed necessary.

Question 10
Is a large part of the student body in need of medical care which it does not receive? (Questionnaire 37, 38, 48.)
When Sample II was viewed in relation to illnesses reported, the difference between users and non-users was significant at the .01 per cent level, with more users than non-users reporting illnesses. One or more illnesses were reported by 85.2 per cent of the total group, while 76.8 per cent reported one or more medical visits. It was apparent, therefore, that some student illnesses were not receiving medical attention.

This failure to receive medical attention for illnesses was not due to the actions of the user group, for there were nine individuals in the group who had no illnesses, but no individuals who reported no medical visits. This does not imply, however, that all students in this group received all the medical care required by their illnesses.

The non-users, however, presented a different picture. One or more illnesses were reported by 73.2 per cent of this group, but only 60.4 per cent of this "ill" group reported making any medical visits. It appeared certain that in this group there were individuals who did not receive the necessary medical care for some of their illnesses.

In an attempt to develop a more adequate understanding of the medical care status of the ill non-user, the responses of these persons to Question 48 on the questionnaire
were studied. Although this was a free response question, only thirteen ill non-users gave more than one response to it. In an attempt to get as complete a picture as possible of their medical care status, only the response indicating the type of care received was included in the tabulations. Unfortunately, 20 of the 134 ill non-users failed to respond to this question, and others did not reply as specifically as was desired. Shown in Table 4, Column 1, are the responses made by the ill non-users whose replies to Question 38 on the questionnaire indicated that they had received medical care.

Nine of the respondents, a total of 14.3 per cent, believed that their illnesses did not warrant care at the University Health Service, although they apparently received care elsewhere. Three of these individuals reported having colds. The use of a medical resource of some sort was mentioned specifically by 52.3 per cent of the respondents, while another 27.0 per cent mentioned that they had a family physician. Since these respondents used medical care, it seemed likely that it was the family physician who was visited, making a total of 79.3 per cent whose medical care can be determined precisely. The remaining respondents mentioned nothing about their health status or medical care.
TABLE 4

REASONS WHY ILL STUDENTS DID NOT SEEK MEDICAL CARE AT THE UNIVERSITY HEALTH SERVICE

<table>
<thead>
<tr>
<th>Reason</th>
<th>Received Medical Care (1)</th>
<th>Did not Receive Medical Care (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Respondents</td>
<td>Respondents</td>
</tr>
<tr>
<td></td>
<td>No.</td>
<td>Per Cent</td>
</tr>
<tr>
<td>Condition did not warrant care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not serious enough</td>
<td>8   (3)*</td>
<td>12.7</td>
</tr>
<tr>
<td>&quot;No need&quot;</td>
<td>1   (3)*</td>
<td>1.6</td>
</tr>
<tr>
<td>Not ill</td>
<td>0   (3)*</td>
<td>0.0</td>
</tr>
<tr>
<td>Have a family physician</td>
<td>17</td>
<td>27.0</td>
</tr>
<tr>
<td>Used other medical resource</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family physician</td>
<td>22</td>
<td>34.9</td>
</tr>
<tr>
<td>Local physician</td>
<td>6</td>
<td>9.5</td>
</tr>
<tr>
<td>Dormitory nurse</td>
<td>5</td>
<td>7.9</td>
</tr>
<tr>
<td>Critical of University Health Service</td>
<td>1   (2)*</td>
<td>1.6</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>3   (2)*</td>
<td>4.8</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Second responses not included in tabulations.

The responses of the ill non-users, who, in Question 38 of the questionnaire reported no medical care, are shown in Column 2 of Table 4. Although it had previously been
determined that these individuals had reported illnesses
during the 1959-1960 college year, ten respondents stated
"not ill" as a reason for not visiting the University Health
Service during that time. If it can be assumed that this was
meant to imply "not ill enough," or "illness not serious
enough," these respondents can be grouped with 35 others who
made similar judgments, making a total of 88.3 per cent of
the ill non-users who did not believe their illnesses were
severe enough for medical care. Included in this group were
14 students who gave the additional information that their
illnesses were colds, plus one reported case of poison ivy.

Two students reported having a family physician, but
apparently did not visit him, and the rest of the respondents,
four in number, were critical of the University Health Service
or made miscellaneous comments.

In summary, 84.2 per cent of the students in Sample
II who reported illnesses received some medical attention.
Of the students who were ill and received no medical atten-
tion, it was reported by 29.4 per cent of the responding
group that their illnesses consisted of colds and poison ivy.
There still remain 36 ill non-users who did not indicate the
nature of their illnesses (and 2 non-respondents), although 30
did state that their illnesses were not serious and that no
care was needed.
If it can be agreed upon that colds and poison ivy are illnesses for which medical care is not needed, there are only 38 students whose illnesses might be questioned concerning severity. The students thought that they were minor. This is 11.3 per cent of the ill student population. Although certainly worthy of note, it does not appear unduly large.

It must be understood that no judgment was made regarding the amount of medical care received by any student in relation to the number of illnesses he reported. The main focus of this question was upon the health status of the non-user, and the ill non-user in particular. It is recognized that there were undoubtedly other unattended illnesses in the portion of the student population which received some medical care.

Question 11

Is there a difference in the extent of illness reported by members of different class ranks? (Questionnaire 1, 37.)

In studying the class ranks in relation to the extent of illness, the difference between the groups was significant at the .05 per cent level. Graduate students and juniors appeared to have fewer illnesses than the other class ranks, while seniors, sophomores, and freshmen all had more illnesses.
**Question 12**

Is college of enrollment a factor in the number of illnesses a student has? (Questionnaire 2, 37.)

This chi-square indicated that there was a difference between students enrolled in various colleges in terms of the number of illnesses reported. It was noted, however, that those respondents in the colleges that customarily enrolled a large proportion of **male** students reported more instances of "no illness" than would be anticipated, while in the colleges where many women were enrolled the reverse situation was found.

Students in the Colleges of Engineering, Pharmacy, Optometry, and Veterinary Medicine reported fewer illnesses than other college groups, while students in the Colleges of Education and Arts and Sciences reported more illnesses than others.

It is believed that this difference between college groups was, in reality, a sex difference which appeared because of the sex distribution of the enrollment in particular colleges. A similar effect was suspected in Question 4, where the relationship between college and number of Health Service visits was considered.
**Question 13**

Is sex a factor in the numbers of illnesses reported by students? (Questionnaire 3, 37.)

The difference between the sexes in the numbers of illnesses reported for the college year 1959-1960 was significant at the .05 per cent level. Women students reported more illnesses than did men students.

**Question 14**

Does marital status have any effect upon the number of student illnesses? (Questionnaire 4, 37.)

Marital status did not appear to make a significant difference in the number of illnesses which Sample II members reported.

**Question 15**

Where do students receive most of their information about the University Health Service and its services? (Questionnaire 32.)

The responses of the total group to this question are indicated in Table 5. It is noted that the University Orientation Program was responsible for providing 31.0 per cent of the group with its information about the University Health Service, and that University Bulletins provided another
<table>
<thead>
<tr>
<th>Source</th>
<th>Users No.</th>
<th>Per Cent</th>
<th>Non-Users No.</th>
<th>Per Cent</th>
<th>Total Group No.</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>University Orientation Program</td>
<td>56</td>
<td>29.3</td>
<td>54</td>
<td>32.9</td>
<td>110</td>
<td>31.0</td>
</tr>
<tr>
<td>University Bulletins</td>
<td>39</td>
<td>20.4</td>
<td>32</td>
<td>19.5</td>
<td>71</td>
<td>20.0</td>
</tr>
<tr>
<td>Roommate, friends</td>
<td>27</td>
<td>14.1</td>
<td>21</td>
<td>12.8</td>
<td>48</td>
<td>13.5</td>
</tr>
<tr>
<td>Health Service Staff</td>
<td>30</td>
<td>15.7</td>
<td>14</td>
<td>8.5</td>
<td>44</td>
<td>12.4</td>
</tr>
<tr>
<td>The Lantern</td>
<td>5</td>
<td>2.6</td>
<td>12</td>
<td>7.3</td>
<td>17</td>
<td>4.8</td>
</tr>
<tr>
<td>Personal experience</td>
<td>10</td>
<td>5.2</td>
<td>2</td>
<td>1.2</td>
<td>12</td>
<td>3.4</td>
</tr>
<tr>
<td>Dormitory counselors</td>
<td>7</td>
<td>3.7</td>
<td>1</td>
<td>0.6</td>
<td>8</td>
<td>2.3</td>
</tr>
<tr>
<td>Health Education 400</td>
<td>4</td>
<td>2.1</td>
<td>2</td>
<td>1.2</td>
<td>6</td>
<td>1.7</td>
</tr>
<tr>
<td>Health Education 609, 610</td>
<td>2</td>
<td>1.0</td>
<td>4</td>
<td>2.4</td>
<td>6</td>
<td>1.7</td>
</tr>
<tr>
<td>Other health courses</td>
<td>0</td>
<td>0.0</td>
<td>6</td>
<td>3.7</td>
<td>6</td>
<td>1.7</td>
</tr>
<tr>
<td>No source. (&quot;I don't know anything about it&quot;)</td>
<td>4</td>
<td>2.1</td>
<td>9</td>
<td>5.5</td>
<td>13</td>
<td>3.7</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>7</td>
<td>3.7</td>
<td>7</td>
<td>4.3</td>
<td>14</td>
<td>3.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>191</strong></td>
<td><strong>99.9</strong></td>
<td><strong>164</strong></td>
<td><strong>99.9</strong></td>
<td><strong>355</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
20.0 per cent of the group with most of its information. The University's daily paper, The Lantern, provided information for 4.8 per cent of the students (largely non-users), while the number of students who gained knowledge as a result of health courses appeared to be minimal.

In determining the difference between user and non-user responses, it was decided to eliminate two response categories from the chi-square computation. These two sources of information, "personal experience" and "Health Service staff," were indicated by many more users than non-users, as would be expected, and this unduly influenced the chi-square result. With these two categories eliminated, the difference between the user and non-user responses was not significant.

Question 16

What do students know about the University Health Service? (Questionnaire 32.)

This group of seven true items, to be checked by the respondents, indicated wide variation in the extent of knowledge that the students had about the University Health Service. Table 6 shows that only one item, the fact that any student may use the University Health Service, was recognized
<table>
<thead>
<tr>
<th>Item</th>
<th>Users</th>
<th>Non-Users</th>
<th>Total Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>Per Cent</td>
<td>No.</td>
</tr>
<tr>
<td>Any student may use the University Health Service</td>
<td>200</td>
<td>95.2</td>
<td>158</td>
</tr>
<tr>
<td>Polio inoculations are available at the Health Service</td>
<td>176</td>
<td>83.8</td>
<td>135</td>
</tr>
<tr>
<td>The Health Service is equipped to make X-ray exams</td>
<td>164</td>
<td>78.1</td>
<td>104</td>
</tr>
<tr>
<td>Some of the Health Service physicians are specialists</td>
<td>160</td>
<td>76.2</td>
<td>108</td>
</tr>
<tr>
<td>Appointments may be made by students needing regular care</td>
<td>164</td>
<td>78.1</td>
<td>92</td>
</tr>
<tr>
<td>Regular University fees cover costs of usual treatment</td>
<td>122</td>
<td>58.1</td>
<td>91</td>
</tr>
<tr>
<td>The majority of the physicians have private practices</td>
<td>107</td>
<td>51.0</td>
<td>81</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>210</td>
<td></td>
<td>175</td>
</tr>
</tbody>
</table>
as a true statement by over 90 per cent of the total group. Only 48.8 per cent of the group realized that most of the University Health Service physicians carry on private practices.

In three of the seven items, those concerning X-ray examinations, the making of appointments, and the availability of specialists, the chi-square test at the .01 per cent level indicated a significant difference between responses of the users and the non-users. In each instance, a larger number of users than might be expected indicated the correct answer to the item. Table 6 indicates the numbers and percentages of users and non-users responding correctly to each item.

**Question 17**

What are some of the reasons that enter into a student's decision to seek help from the University Health Service in case of illness? (Questionnaire 34, 35.)

In order to understand this question fully, it is necessary to view the one that preceded it on the questionnaire. This latter question, (Number 34), concerning the student's intent to "seek help from" the University Health Service in case of illness "next week," showed a
"definitely or probably yes" response from 64.9 per cent of the respondents and a 35.0 response in the "definitely or probably no" categories, as shown in Table 7.

TABLE 7
STUDENT INTENTIONS TO SEEK HELP FROM THE UNIVERSITY HEALTH SERVICE IN CASE OF ILLNESS

<table>
<thead>
<tr>
<th>Item</th>
<th>Users</th>
<th>Non-Users</th>
<th>Total Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>Per Cent</td>
<td>No.</td>
</tr>
<tr>
<td>Definitely yes</td>
<td>83</td>
<td>40.1</td>
<td>25</td>
</tr>
<tr>
<td>Probably yes</td>
<td>85</td>
<td>41.1</td>
<td>59</td>
</tr>
<tr>
<td>Probably no</td>
<td>26</td>
<td>12.6</td>
<td>63</td>
</tr>
<tr>
<td>Definitely no</td>
<td>13</td>
<td>6.3</td>
<td>34</td>
</tr>
</tbody>
</table>

| Total             | 207   | 100.1     | 181         | 100.0     | 388   | 99.9      |

The chi-square test did not indicate a significant difference between the sexes in response to this question, but the difference between the users and non-users was significant at the .01 per cent level. More users than would be expected indicated that they would definitely or probably seek help from the University Health Service.

In Table 8 are noted the reasons given by respondents who stated that they definitely or probably would seek help from the University Health Service in case of illness, and the percentages of respondents who gave each reason. It can
<table>
<thead>
<tr>
<th>Reason</th>
<th>Users</th>
<th></th>
<th>Non-Users</th>
<th></th>
<th>Total Group</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Responses</td>
<td>Per Cent of Respondents</td>
<td>No. of Responses</td>
<td>Per Cent of Respondents</td>
<td>No. of Responses</td>
<td>Per Cent of Respondents</td>
</tr>
<tr>
<td>Readily available, convenient</td>
<td>62</td>
<td>36.9</td>
<td>35</td>
<td>49.3</td>
<td>97</td>
<td>40.6</td>
</tr>
<tr>
<td>Good care, staff</td>
<td>59</td>
<td>35.1</td>
<td>15</td>
<td>21.1</td>
<td>74</td>
<td>31.0</td>
</tr>
<tr>
<td>Little or no cost</td>
<td>44</td>
<td>26.2</td>
<td>22</td>
<td>31.0</td>
<td>66</td>
<td>27.6</td>
</tr>
<tr>
<td>No private doctor in Columbus</td>
<td>27</td>
<td>16.1</td>
<td>14</td>
<td>19.7</td>
<td>41</td>
<td>17.2</td>
</tr>
<tr>
<td>Depends on severity</td>
<td>26</td>
<td>15.5</td>
<td>11</td>
<td>15.5</td>
<td>37</td>
<td>15.5</td>
</tr>
<tr>
<td>&quot;Insurance covers me&quot;</td>
<td>24</td>
<td>14.3</td>
<td>11</td>
<td>15.5</td>
<td>35</td>
<td>14.6</td>
</tr>
<tr>
<td>Previous inadequate treatment (but will</td>
<td>6</td>
<td>3.6</td>
<td>4</td>
<td>5.6</td>
<td>10</td>
<td>4.2</td>
</tr>
<tr>
<td>probably return)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entitled to it</td>
<td>6</td>
<td>3.6</td>
<td>2</td>
<td>2.8</td>
<td>8</td>
<td>3.3</td>
</tr>
<tr>
<td>Impersonal (but will probably return)</td>
<td>7</td>
<td>4.2</td>
<td>1</td>
<td>1.4</td>
<td>8</td>
<td>3.3</td>
</tr>
<tr>
<td>Always same treatment (but will probably</td>
<td>1</td>
<td>0.6</td>
<td>1</td>
<td>1.4</td>
<td>2</td>
<td>0.8</td>
</tr>
<tr>
<td>return)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reason</td>
<td>Users</td>
<td></td>
<td>Non-Users</td>
<td></td>
<td>Total Group</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>-------</td>
<td>------------------</td>
<td>-----------</td>
<td>------------------</td>
<td>-------------</td>
<td>------------------</td>
</tr>
<tr>
<td></td>
<td>No. of Responses</td>
<td>Per Cent of Respondents</td>
<td>No. of Responses</td>
<td>Per Cent of Respondents</td>
<td>No. of Responses</td>
<td>Per Cent of Respondents</td>
</tr>
<tr>
<td>Privacy lacking (but will probably return)</td>
<td>1</td>
<td>0.6</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>18</td>
<td>10.7</td>
<td>10</td>
<td>14.1</td>
<td>28</td>
<td>11.7</td>
</tr>
</tbody>
</table>

Number of respondents: 168 71 239
Number of responses: 281 126 407
be noted that the availability of the Health Service and the
good care provided appeared to be of importance to approxi-
mately the same numbers of users, while availability and
lack of cost were of most importance to the non-users. Some
of the respondents indicated that they definitely or probably
would visit the University Health Service, but they also
noted a negative reaction which in some instances appeared
to be based upon prior experience.

The largest percentage of students who would not
seek help from the University Health Service noted, as indi-
cated in Table 9, that this was because they would visit a
family physician or other medical resource. In this list,
too, can be noted a number of critical comments, some ex-
pressing more faith in the work of a private, family physi-
cian, and others mentioning criticism of the University
Health Service.

Three reasons appear on both tables. These reasons,
concerned with the severity of the health condition, the im-
personal nature of the service, and previous inadequate or
poor experiences, were mentioned by respondents who indi-
cated that they would, and also by respondents who indicated
that they would not seek help from the University Health
Service in case of illness "next week."
TABLE 9

REASONS WHY STUDENTS WILL NOT SEEK HELP FROM THE UNIVERSITY HEALTH SERVICE IN CASE OF ILLNESS

<table>
<thead>
<tr>
<th>Reason</th>
<th>Users</th>
<th>Non-Users</th>
<th>Total Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Responses</td>
<td>Per Cent of Respondents</td>
<td>No. of Responses</td>
</tr>
<tr>
<td>Go to family doctor or other resource</td>
<td>17</td>
<td>44.7</td>
<td>64</td>
</tr>
<tr>
<td>Previous inadequate treatment</td>
<td>10</td>
<td>26.3</td>
<td>10</td>
</tr>
<tr>
<td>Impersonal</td>
<td>9</td>
<td>23.7</td>
<td>7</td>
</tr>
<tr>
<td>Long waiting periods</td>
<td>5</td>
<td>13.2</td>
<td>9</td>
</tr>
<tr>
<td>Depends on severity</td>
<td>7</td>
<td>18.4</td>
<td>3</td>
</tr>
<tr>
<td>Private doctor better qualified</td>
<td>7</td>
<td>18.4</td>
<td>3</td>
</tr>
<tr>
<td>Family doctor has health history</td>
<td>5</td>
<td>13.2</td>
<td>5</td>
</tr>
<tr>
<td>&quot;Hear-say&quot;--bad reports</td>
<td>2</td>
<td>5.3</td>
<td>5</td>
</tr>
<tr>
<td>&quot;Red tape&quot;</td>
<td>0</td>
<td>0.0</td>
<td>5</td>
</tr>
<tr>
<td>No insurance</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
</tr>
<tr>
<td>Rudeness of staff</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>5</td>
<td>13.2</td>
<td>12</td>
</tr>
</tbody>
</table>

Number of respondents: 38
Number of responses: 67

Number of respondents: 90
Number of responses: 125

Number of respondents: 128
Number of responses: 192
Question 18

Does the Health Service's location affect its patronage? (Questionnaire 36.)

An analysis of the responses to this question, as shown in Table 10, indicated that to 57.0 per cent of the respondents, the location of the University Health Service had little to do with whether or not they would visit it. A sizeable group of respondents, however, 29.7 per cent, noted that the Health Service should be near dormitories or other living units.

The difference between users and non-users in their responses to this question was significant at the .01 per cent level. More users than might be expected indicated that the Health Service's location was a factor in their use of its services, and that it should be located near dormitories, class buildings, or have a "central" location of some sort. Considerably more non-users than might be anticipated indicated that location made no difference in their use of the Health Service.
TABLE 10
STUDENT OPINIONS CONCERNING THE EFFECT OF THE LOCATION OF THE HEALTH SERVICE ON ITS PATRONAGE

<table>
<thead>
<tr>
<th>Response</th>
<th>No. of Respondents</th>
<th>Per Cent of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>No, location doesn't matter very much</td>
<td>219</td>
<td>57.0</td>
</tr>
<tr>
<td>Yes, it should be near dorms or other living units</td>
<td>114</td>
<td>29.7</td>
</tr>
<tr>
<td>Yes, it should be near classroom buildings</td>
<td>30</td>
<td>7.8</td>
</tr>
<tr>
<td>It should have a &quot;central&quot; location</td>
<td>11</td>
<td>2.9</td>
</tr>
<tr>
<td>Nearby parking for students is a necessity</td>
<td>5</td>
<td>1.3</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>5</td>
<td>1.3</td>
</tr>
<tr>
<td>Total</td>
<td>384</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Question 19

Is there any relationship between student use of the University Health Service and coverage by student hospitalization and medical insurance? (Questionnaire 21, 41.)

Of the total sample of 394 persons, 302 indicated that they used medical services of some type during the 1959-1960 college year. When this group was studied concerning its enrollment in the student insurance program and its use of the University Health Service, it was discovered that the insured students made more visits than would be expected to the University Health Service. This difference was significant at the .01 per cent level.
It should be noted that on the questionnaire the student insurance question (Number 21) did not refer to 1959-1960, while the question concerning visits to the University Health Service (Number 41) did make this reference. This oversight makes a completely accurate interpretation of the data impossible.

**Question 20**

Are the students who use the services of the University Health Service satisfied with their experiences? Why? (Questionnaire 42, 43.)

This question, answered only by users of the University Health Service, revealed that 85.5 per cent of the respondents rated their experiences either definitely or generally satisfactory, while 14.4 per cent stated that their experiences were either definitely or generally unsatisfactory, as shown in Table 11.

**TABLE 11**

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>No. of Respondents</th>
<th>Per Cent of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitely satisfactory</td>
<td>61</td>
<td>29.3</td>
</tr>
<tr>
<td>Generally satisfactory</td>
<td>117</td>
<td>56.2</td>
</tr>
<tr>
<td>Generally unsatisfactory</td>
<td>21</td>
<td>10.1</td>
</tr>
<tr>
<td>Definitely unsatisfactory</td>
<td>9</td>
<td>4.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>208</strong></td>
<td><strong>99.9</strong></td>
</tr>
</tbody>
</table>
When specific reasons for satisfactory care were considered, in Table 12, it was noted that "good care," mentioned by 50.0 per cent of the respondents, surpassed all other reasons. The high quality of the personal relationships was cited by 14.9 per cent of the "satisfied" users, but the impersonal nature of the service was cited by 16.2 per cent of this same group. In spite of this and five other rather critical comments, these persons still considered their experiences definitely or generally satisfactory.

The major reason given for unsatisfactory experiences at the University Health Service was that of poor or incorrect treatment or diagnosis, reported by 75.9 per cent of the students who were dissatisfied with their care, as indicated in Table 12. This group also reported impersonal care and the need to seek non-Health Service assistance as two additional reasons for their dissatisfaction.

The chi-square test indicated no significant difference between the sexes in their evaluation of their experiences at the University Health Service.
### Table 12

**Reasons Given by Users of the University Health Service for the Satisfactory or Unsatisfactory Nature of Their Experiences**

<table>
<thead>
<tr>
<th>Reason</th>
<th>No. of Responses</th>
<th>Per Cent of Respondents</th>
<th>Definite or General Satisfaction</th>
<th>No. of Responses</th>
<th>Per Cent of Respondents</th>
<th>Definite or General Dissatisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good care</td>
<td>77</td>
<td>50.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good personal relationships</td>
<td>23</td>
<td>14.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competent staff</td>
<td>10</td>
<td>6.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inexpensive</td>
<td>5</td>
<td>3.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confidence in them</td>
<td>3</td>
<td>1.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long waiting period</td>
<td>28</td>
<td>18.2</td>
<td></td>
<td>4</td>
<td>13.8</td>
<td></td>
</tr>
<tr>
<td>Impersonal</td>
<td>25</td>
<td>16.2</td>
<td></td>
<td>6</td>
<td>20.7</td>
<td></td>
</tr>
<tr>
<td>Poor, incorrect treatment, diagnosis</td>
<td>25</td>
<td>16.2</td>
<td></td>
<td>22</td>
<td>75.9</td>
<td></td>
</tr>
<tr>
<td>Brevity of examinations</td>
<td>7</td>
<td>4.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incompetence</td>
<td>4</td>
<td>2.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Red tape&quot;</td>
<td>4</td>
<td>2.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Had to seek non-Health Service care later</td>
<td></td>
<td></td>
<td></td>
<td>6</td>
<td>20.7</td>
<td></td>
</tr>
<tr>
<td>Rudeness of staff</td>
<td>2</td>
<td>6.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>10</td>
<td>6.5</td>
<td></td>
<td>3</td>
<td>10.3</td>
<td></td>
</tr>
</tbody>
</table>

Number of respondents: 154
Number of responses: 221
Question 21

Do students believe their experiences at the University Health Service are as complete and personal as they might be at home? (Questionnaire 44, 51.)

All students in the sample group who had ever been to the University Health Service for treatment or consultation were asked to answer this question concerning a comparison of their home medical care and that received at the University Health Service.

As noted in Table 13, medical care at home was thought to be more personal and more complete by a large percentage of the respondents.

TABLE 13

STUDENT BELIEFS CONCERNING MEDICAL CARE AT THE UNIVERSITY HEALTH SERVICE AND AT HOME

<table>
<thead>
<tr>
<th>Item</th>
<th>No. of Responses</th>
<th>Per Cent of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>More personal at home</td>
<td>166</td>
<td>57.2</td>
</tr>
<tr>
<td>More complete at home</td>
<td>111</td>
<td>38.3</td>
</tr>
<tr>
<td>Probably about the same both places</td>
<td>95</td>
<td>32.8</td>
</tr>
<tr>
<td>More complete here</td>
<td>18</td>
<td>6.2</td>
</tr>
<tr>
<td>More personal here</td>
<td>3</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Number of respondents: 290
Number of responses: 393
Question 22

What reports do students hear about the services provided at the University Health Service? (Questionnaire 45, 46, 52, 53.)

This question was asked of both users and non-users, and the data were tabulated separately. The chi-square test was not applied to the data, however, as there seemed to be no reason, in this instance, why the differences between the responses of the two groups should be ascertained. Respondents were asked to list good reports and bad reports separately.

It was unfortunate that so many respondents failed to answer these questions. Only 42.1 per cent of the total group listed any good reports, shown in Table 14, and only 56.1 per cent of the total group noted any bad reports, which are shown in Table 15. It is noted with interest but not surprise that the bad reports were more numerous than the good ones.

Heading both total group lists, mentioned by the largest number of respondents, was a report concerning the medical treatment received at the University Health Service. The majority of the other reports, whether noted as good or
### Table 14

**"GOOD REPORTS" CONCERNING THE SERVICES AT THE UNIVERSITY HEALTH SERVICE**

<table>
<thead>
<tr>
<th>Item</th>
<th>Users</th>
<th>Non-Users</th>
<th>Total Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Responses</td>
<td>Per Cent of Respondents</td>
<td>No. of Responses</td>
</tr>
<tr>
<td>Good treatment, diagnosis, staff, specialists</td>
<td>83</td>
<td>74.1</td>
<td>37</td>
</tr>
<tr>
<td>Inexpensive</td>
<td>24</td>
<td>21.4</td>
<td>13</td>
</tr>
<tr>
<td>Personable staff</td>
<td>26</td>
<td>23.2</td>
<td>10</td>
</tr>
<tr>
<td>Readily available, convenient</td>
<td>6</td>
<td>5.4</td>
<td>7</td>
</tr>
<tr>
<td>Excuses from class given</td>
<td>1</td>
<td>0.9</td>
<td>1</td>
</tr>
</tbody>
</table>

Number of respondents: 112, 54, 166
Number of responses: 140, 68, 208
TABLE 15
"BAD REPORTS" CONCERNING THE SERVICES AT THE UNIVERSITY HEALTH SERVICE

<table>
<thead>
<tr>
<th>Item</th>
<th>Users</th>
<th>Non-Users</th>
<th>Total Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor care, diagnosis, treatment, incompetence</td>
<td>77 (55.4%)</td>
<td>32 (39.0%)</td>
<td>109 (49.3%)</td>
</tr>
<tr>
<td>Long waiting periods</td>
<td>63 (45.3%)</td>
<td>43 (52.4%)</td>
<td>106 (48.0%)</td>
</tr>
<tr>
<td>Impersonal staff and care</td>
<td>50 (36.0%)</td>
<td>16 (19.5%)</td>
<td>66 (29.9%)</td>
</tr>
<tr>
<td>&quot;Same medicines given to everybody&quot;</td>
<td>15 (10.8%)</td>
<td>10 (12.2%)</td>
<td>25 (11.3%)</td>
</tr>
<tr>
<td>Discourtesy</td>
<td>6 (4.3%)</td>
<td>6 (7.3%)</td>
<td>12 (5.4%)</td>
</tr>
<tr>
<td>Inadequate facilities</td>
<td>6 (4.3%)</td>
<td>6 (7.3%)</td>
<td>12 (5.4%)</td>
</tr>
<tr>
<td>No continuity of treatment</td>
<td>3 (2.2%)</td>
<td>2 (2.4%)</td>
<td>5 (2.3%)</td>
</tr>
<tr>
<td>Too &quot;public&quot;</td>
<td>2 (1.4%)</td>
<td>1 (1.2%)</td>
<td>3 (1.4%)</td>
</tr>
<tr>
<td>Too few office hours</td>
<td>3 (2.2%)</td>
<td>0 (0.0%)</td>
<td>3 (1.4%)</td>
</tr>
</tbody>
</table>

Number of respondents: 139 82 221
Number of responses: 225 116 341
bad, were concerned with non-medical aspects of the services of the University Health Service.

**Question 23**

Can these reports be verified by student experiences? (Questionnaire 45, 46, 52, 53.)

All student health services are aware of the many rumors that circulate concerning the merits of their work. In an attempt to verify the good and bad reports noted in the previous question, respondents were asked to underline any of their reports that they had actually experienced. These data are shown on Tables 16 and 17.

User and non-user groups both followed this procedure, as some of the non-users had visited the University Health Service before or after the 1959-1960 college year, and could, therefore, respond in terms of their own experiences. Respondent percentages for users and non-users were determined separately, however, since most of the non-users had indicated that their experiences at the University Health Service had taken place two or three years previously. The relatively small numbers of non-users who verified either their good or bad reports makes one view their responses cautiously. More users, however, appeared able to draw upon first hand experiences for verification of their reports.
### TABLE 16

**USERS' AND NON-USERS' VERIFICATION OF "GOOD REPORTS" CONCERNING SERVICE AT THE UNIVERSITY HEALTH SERVICE**

<table>
<thead>
<tr>
<th>Item</th>
<th><strong>Users</strong></th>
<th></th>
<th><strong>Non-Users</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of</td>
<td>Per Cent of</td>
<td>No. of</td>
<td>Per Cent of</td>
</tr>
<tr>
<td></td>
<td>Responses</td>
<td>Respondents</td>
<td>Responses</td>
<td>Respondents</td>
</tr>
<tr>
<td>Good treatment, diagnosis, staff, specialists</td>
<td>42</td>
<td>37.5</td>
<td>8</td>
<td>14.8</td>
</tr>
<tr>
<td>Personable staff</td>
<td>19</td>
<td>17.0</td>
<td>4</td>
<td>7.4</td>
</tr>
<tr>
<td>Inexpensive</td>
<td>15</td>
<td>13.4</td>
<td>5</td>
<td>9.3</td>
</tr>
<tr>
<td>Readily available, convenient</td>
<td>4</td>
<td>3.6</td>
<td>3</td>
<td>5.6</td>
</tr>
</tbody>
</table>

Number of respondents: 112, 54
Number of responses: 80, 20

A comparison of the users' good reports and experiences concerning treatment, diagnosis, and staff indicates that while 74.1 per cent of the respondents mentioned hearing this report, only 37.5 per cent verified it as a result of personal experience. Other good reports and experiences differ less markedly when similar comparisons are made.

When users' bad reports are considered, in Table 17, it is noted that while 55.4 per cent of the respondents reported hearing about poor care, diagnosis, or incompetence, just 17.3 per cent noted it as personal experience. This
TABLE 17

USERS' AND NON-USERS' VERIFICATION OF "BAD REPORTS" CONCERNING SERVICE AT THE UNIVERSITY HEALTH SERVICE

<table>
<thead>
<tr>
<th>Item</th>
<th>Users</th>
<th></th>
<th></th>
<th>Non-Users</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Long waiting periods</td>
<td>32</td>
<td>23.0</td>
<td>11</td>
<td>13.4</td>
<td></td>
</tr>
<tr>
<td>Impersonal staff and care</td>
<td>25</td>
<td>18.0</td>
<td>5</td>
<td>6.1</td>
<td></td>
</tr>
<tr>
<td>Poor care, diagnosis, treatment, incompetence</td>
<td>24</td>
<td>17.3</td>
<td>5</td>
<td>6.1</td>
<td></td>
</tr>
<tr>
<td>Discourtesy</td>
<td>4</td>
<td>2.9</td>
<td>1</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>&quot;Same medicines given to everybody&quot;</td>
<td>2</td>
<td>1.4</td>
<td>0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Inadequate facilities</td>
<td>1</td>
<td>0.7</td>
<td>0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>No continuity of treatment</td>
<td>1</td>
<td>0.7</td>
<td>0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Too &quot;public&quot;</td>
<td>1</td>
<td>0.7</td>
<td>0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Too few office hours</td>
<td>1</td>
<td>0.7</td>
<td>0</td>
<td>0.0</td>
<td></td>
</tr>
</tbody>
</table>

Number of respondents: 139 82
Number of responses: 91 22
is a figure worthy of note, however, as are the other experiences concerning long waiting periods and impersonal care.

**Question 24**

How can the services of the University Health Service be improved? (Questionnaire 47, 54.)

Observation of total group responses to this question, presented in Table 18, reveals that 49.0 per cent of the respondents suggested more personal staff-student relationships as a way to improve the services of the University Health Service. Several other responses referred to various aspects of the treatment received at the University Health Service, but the majority of the suggestions referred to administrative or organizational matters, rather than to improvements in medical practices. This is illustrated by the percentage of respondents who mentioned the size of the facilities, hours of availability, the waiting period, parking facilities, arrangements for the care of "minor ills," and publicity about specialists' hours. It is important, however, not to overlook the suggestion concerning more thorough treatment and examinations which was made by 28.4 per cent of the respondents.
### TABLE 18

**SUGGESTIONS FOR IMPROVEMENT OF THE SERVICES OF THE UNIVERSITY HEALTH SERVICE**

<table>
<thead>
<tr>
<th>Suggestion</th>
<th>No. of Responses</th>
<th>Per Cent of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop more personal staff-student relationships</td>
<td>50</td>
<td>49.0</td>
</tr>
<tr>
<td>Increase the size of facilities</td>
<td>39</td>
<td>38.2</td>
</tr>
<tr>
<td>Shorten the waiting period</td>
<td>31</td>
<td>30.4</td>
</tr>
<tr>
<td>Be more thorough in examinations and treatment</td>
<td>29</td>
<td>28.4</td>
</tr>
<tr>
<td>Get more competent staff</td>
<td>22</td>
<td>21.6</td>
</tr>
<tr>
<td>Increase hours of availability</td>
<td>7</td>
<td>6.9</td>
</tr>
<tr>
<td>Provide more parking space for students</td>
<td>4</td>
<td>3.9</td>
</tr>
<tr>
<td>Provide more efficient service for &quot;minor&quot; ills (colds, etc.)</td>
<td>3</td>
<td>2.9</td>
</tr>
<tr>
<td>Publicize specialists' hours</td>
<td>2</td>
<td>2.0</td>
</tr>
<tr>
<td>Provide for more privacy</td>
<td>2</td>
<td>2.0</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>30</td>
<td>29.4</td>
</tr>
</tbody>
</table>

Number of respondents: 102  
Number of responses: 219  

**Question 25**

Do the majority of the students have a family physician at home? (Questionnaire 29.)

Questionnaire data revealed that a great majority, 89.5 per cent, of the respondents had family physicians in or near their home towns. There was no significant difference between users' and non-users' responses to this question.
Question 26

What type of medical and/or surgical insurance do students have? (Questionnaire 21, 22.)

The hospitalization insurance policy available to University students on a voluntary basis was subscribed to by 67.9 per cent of the surveyed group. Other medical and/or surgical insurance plans were subscribed to by 55.5 per cent of the group. Some students, therefore, were protected by two policies, and others might not be protected at all.

The differences between user and non-user groups were significant in regard to both types of insurance policies. The chi-square test indicated that more users and fewer non-users than would be expected had the student insurance policy, while fewer users and more non-users than would be expected had a non-University sponsored policy.

When viewed in terms of class rank, it was noted that there was no significant difference between the classes in their protection by non-University insurance, but there was a significant difference between the class ranks in terms of their participation in the University insurance program. Considerably more freshmen and sophomores than would be expected carried the policy, while more upperclass students than would be expected did not have the University sponsored
policy. This difference was significant at the .01 per cent level.

**Question 27**

Do students' families carry medical and/or surgical insurance? (Questionnaire 23.)

Medical and/or surgical insurance was carried by 86.6 per cent of the families of the students responding to the questionnaire. There was no significant difference between responses of the users and the non-users.

**Question 28**

What do students' families want them to do concerning medical care if they should become ill while at the University? (Questionnaire 28.)

A majority of the survey group, 67.5 per cent, as shown in Table 19, indicated that their families had given them the opportunity to make decisions of this sort by themselves. The University Health Service was suggested as a source of medical care by 34.3 per cent of student families, while 18.9 per cent preferred to have their student-children use the services of the family physician in case of illness. Many questionnaire respondents indicated more than one family preference.
TABLE 19

FAMILY PREFERENCES CONCERNING STUDENT MEDICAL CARE

<table>
<thead>
<tr>
<th>Family Preference</th>
<th>No. of Responses</th>
<th>Per Cent of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>They allow me to make my own decisions</td>
<td>264</td>
<td>67.5</td>
</tr>
<tr>
<td>Visit the University Health Service</td>
<td>134</td>
<td>34.3</td>
</tr>
<tr>
<td>Visit the family physician</td>
<td>74</td>
<td>18.9</td>
</tr>
<tr>
<td>No comment from family</td>
<td>72</td>
<td>18.4</td>
</tr>
<tr>
<td>Talk it over with family first</td>
<td>27</td>
<td>6.9</td>
</tr>
<tr>
<td>Do not visit University Health Service</td>
<td>7</td>
<td>1.8</td>
</tr>
<tr>
<td>Call local (non-family) physician</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>Depends on severity of condition</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>17</td>
<td>4.3</td>
</tr>
</tbody>
</table>

Number of respondents: 391
Number of responses: 599

The chi-square test was applied to the responses given by the users and non-users to parts 1, 2, 3, 4, and 6 of Question 28 on the questionnaire. Significant differences between user and non-user responses were found in part 1, where more non-users than would be expected stated that their families wanted them to visit the family physician, in part 2, where more users than would be expected stated that their families wanted them to visit the University Health Service, and in part 4, where more users than would
be anticipated stated that they made decisions like this themselves.

**Question 29**

Do students follow their families' preferences concerning medical care? (Questionnaire 34, 39, 41.)

As was noted in Table 19, when students' families expressed preferences concerning a specific source of medical care in case of illness, either the University Health Service or the family physician was named in the majority of instances.

In order to determine the way in which these two preferences were followed, only those respondents who used medical care during the 1959-1960 college year were considered. As indicated in Table 20, those students whose families wanted them to visit the University Health Service in case of illness followed family preferences and visited the Health Service one or two times in 61.1 per cent of the cases, while 20.4 per cent of the respondents visited the Health Service three or more times. Family requests were not followed in 18.5 per cent of the cases.

Sixty-one respondents who used medical care indicated that their families preferred that they visit the family
TABLE 20

FAMILY PREFERENCES FOLLOWED BY STUDENTS USING MEDICAL CARE

<table>
<thead>
<tr>
<th>Family Preference for Medical Care</th>
<th>University Health Service</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Family Physician</td>
</tr>
<tr>
<td>No. of Visits</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>7</td>
</tr>
<tr>
<td>One or two</td>
<td>37</td>
</tr>
<tr>
<td>Three or more</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>61</td>
</tr>
</tbody>
</table>

physician in case of illness. In 11.5 per cent of the cases, the student did not follow family preferences. In 60.6 per cent of the cases he visited the family physician one or two times, and 27.9 per cent of the students visited the family physician three or more times.

As indicated by the data, therefore, those students whose families wanted them to visit the University Health Service and those whose families wanted them to visit the family physician in case of illness did follow family preferences in the majority of instances when medical care was used.

When all of the students whose families wanted them to go to the University Health Service were questioned
concerning their intentions to do so if they should become ill "next week," only 9.8 per cent indicated that they definitely or probably would not do so, as shown in Table 21.

**TABLE 21**

**EXPRESSED INTENTIONS CONCERNING USE OF THE UNIVERSITY HEALTH SERVICE BY STUDENTS WHOSE FAMILIES WANT THEM TO VISIT THE UNIVERSITY HEALTH SERVICE**

<table>
<thead>
<tr>
<th>Response</th>
<th>No. of Respondents</th>
<th>Per Cent of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitely yes</td>
<td>56</td>
<td>42.4</td>
</tr>
<tr>
<td>Probably yes</td>
<td>63</td>
<td>47.7</td>
</tr>
<tr>
<td>Probably no</td>
<td>9</td>
<td>6.8</td>
</tr>
<tr>
<td>Definitely no</td>
<td>4</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>132</strong></td>
<td><strong>99.9</strong></td>
</tr>
</tbody>
</table>

The largest group of respondents to the question concerning family preferences indicated that they made their own decisions concerning medical care. When asked if they would visit the University Health Service in case of illness "next week," 72.8 per cent indicated that they probably or definitely would do so, according to the data in Table 22.

Although not indications of the following of family preferences, the last two analyses appeared to be declarations of intent, and, as such, were of interest here.
TABLE 22

EXPRESSED INTENTIONS CONCERNING USE OF THE UNIVERSITY HEALTH SERVICE BY STUDENTS WHO MAKE THEIR OWN DECISIONS CONCERNING MEDICAL CARE

<table>
<thead>
<tr>
<th>Response</th>
<th>No. of Respondents</th>
<th>Per Cent of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitely yes</td>
<td>81</td>
<td>31.0</td>
</tr>
<tr>
<td>Probably yes</td>
<td>109</td>
<td>41.8</td>
</tr>
<tr>
<td>Probably no</td>
<td>50</td>
<td>19.2</td>
</tr>
<tr>
<td>Definitely no</td>
<td>21</td>
<td>8.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>261</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Question 30

What different sources of medical care do students use? (Questionnaire 38, 39, 40, 41.)

A total of 302 students, 76.6 per cent of the total group, indicated that they used some medical care during the 1959-1960 college year. As shown in Table 23, the largest percentage of this group, 69.5 per cent, visited the University Health Service, while the family physician was visited by 57.3 per cent of the respondents. Three hundred and two respondents made a total of 435 replies, thereby indicating the use of more than one source of medical care by some students during the 1959-1960 college year.
### TABLE 23

**SOURCES OF MEDICAL CARE USED BY STUDENTS**

<table>
<thead>
<tr>
<th>Source of Medical Care</th>
<th>No. of Responses</th>
<th>Per Cent Receiving Medical Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>University Health Service</td>
<td>210</td>
<td>69.5</td>
</tr>
<tr>
<td>Family physician</td>
<td>173</td>
<td>57.3</td>
</tr>
<tr>
<td>Local, non-campus physician (not family physician)</td>
<td>52</td>
<td>17.2</td>
</tr>
</tbody>
</table>

Number of Respondents: 302  
Number of Responses: 435

Users and non-users did not differ significantly in the number of their visits to local (non-family) physicians or to family physicians. Many users, therefore, are visiting these sources in addition to their visits to the University Health Service.

It was also noted that the difference between the sexes in their use of medical services was significant at the .01 per cent level, with females making considerably more physician visits than males. When visits to the family physician were considered specifically, the difference between the sexes was not significant.
Question 31

How frequently do students listen to or watch medical or health programs on the radio or television?

(Questionnaire 30.)

As indicated in Table 24, it was reported by a total of 78.7 per cent of the respondents that they listened to health or medical programs on the radio or television no more frequently than several times per year. Only 10.1 per cent of the respondents noted listening as frequently as once every week or two.

TABLE 24

FREQUENCY OF LISTENING TO HEALTH OR MEDICAL PROGRAMS ON THE RADIO OR TELEVISION

<table>
<thead>
<tr>
<th>Frequency</th>
<th>No. of Respondents</th>
<th>Per Cent of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almost never</td>
<td>187</td>
<td>48.4</td>
</tr>
<tr>
<td>Several times per year</td>
<td>117</td>
<td>30.3</td>
</tr>
<tr>
<td>Once every month or two</td>
<td>43</td>
<td>11.1</td>
</tr>
<tr>
<td>Once every week or two</td>
<td>39</td>
<td>10.1</td>
</tr>
<tr>
<td>Total</td>
<td>386</td>
<td>99.9</td>
</tr>
</tbody>
</table>
Question 32

Do religious beliefs have any effect on student use of medical services? (Questionnaire 31.)

The questionnaire sample revealed that only four students stated that their religious beliefs influenced their use of medical services. This is 1.0 per cent of the sample. It was noted that one of these persons was a user of Health Service facilities and three were non-users. It appears that the religion factor was not an important one in determining the medical services used by the students in the questionnaire sample group.

Question 33

To what extent do students' beliefs about the value of regular medical examinations correspond to their practices? (Questionnaire 24, 25.)

According to the replies of the respondents, 89.3 per cent indicated that they believed in the value of an annual medical examination for college-age persons. When asked how frequently they had such an examination, 35.7 per cent of those who believed in its value indicated that they had such an examination annually. (Only one student who did not believe the examination valuable reported that he had an examination annually.)
There were no significant differences between the users and the non-users in their responses concerning the value of the annual examination or in the carrying out of their beliefs.

When the total group was studied concerning the frequency of thorough medical examinations, it was noted, as indicated in Table 25, that 37.1 per cent of the respondents indicated that they had thorough medical examinations only when required for special programs (such as admission to college). An additional 33.4 per cent reported that they had examinations annually.

**TABLE 25**

**FREQUENCY OF THOROUGH MEDICAL EXAMINATIONS**

<table>
<thead>
<tr>
<th>Frequency</th>
<th>No. of Respondents</th>
<th>Per Cent of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only when required for special programs</td>
<td>141</td>
<td>37.1</td>
</tr>
<tr>
<td>About once a year</td>
<td>127</td>
<td>33.4</td>
</tr>
<tr>
<td>Once every three or four years</td>
<td>64</td>
<td>16.8</td>
</tr>
<tr>
<td>&quot;Only when I'm sick&quot;</td>
<td>33</td>
<td>8.7</td>
</tr>
<tr>
<td>Every two or three years</td>
<td>6</td>
<td>1.6</td>
</tr>
<tr>
<td>When military authorities specify</td>
<td>3</td>
<td>0.8</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>6</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>380</td>
<td>100.0</td>
</tr>
</tbody>
</table>
In summary, therefore, approximately 35 per cent of the students who indicated a belief in the value of an annual medical examination have an examination of this type themselves. This number is approximately 33.0 per cent of the total group responding to the question. Of the students who did not indicate a belief in the value of an annual medical examination, 97.4 per cent stated that they did not have an examination that frequently.

**Question 34**

To what extent do students' beliefs about the value of regular dental care correspond to their practices?

(Questionnaire 26, 27.)

A belief in the value of a dental check-up approximately every six months was subscribed to by 91.6 per cent of the questionnaire respondents, and 59.6 per cent of this group stated that they did see a dentist that frequently. Thirty-three respondents stated that they did not believe in the value of frequent dental check-ups. Each one of these carried out his belief; not one indicated that he visited a dentist any more often than once a year.

Users and non-users did not differ significantly in their responses to these questions.
An investigation of the dental care habits of the total respondent group, as indicated in Table 26, revealed that 54.9 per cent of this group visits a dentist approximately every six months, and another 26.4 per cent visits a dentist about once a year.

**TABLE 26**

**FREQUENCY OF DENTAL EXAMINATIONS**

<table>
<thead>
<tr>
<th>Frequency</th>
<th>No. of Respondents</th>
<th>Per Cent. of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every six months or so</td>
<td>214</td>
<td>54.9</td>
</tr>
<tr>
<td>About once a year</td>
<td>103</td>
<td>26.4</td>
</tr>
<tr>
<td>Mainly when dental troubles occur</td>
<td>40</td>
<td>10.3</td>
</tr>
<tr>
<td>Once every two or three years</td>
<td>22</td>
<td>5.6</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>11</td>
<td>2.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>390</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

In summary, therefore, approximately 60.0 per cent of the students who indicated a belief in the value of dental check-ups every six months have this type of care. This is approximately 55.0 per cent of the total group responding to this question. Students who do not believe such frequent dental check-ups are valuable do not have this type of care themselves.
Question 35

What do students believe about the reliability of sources of medical care for various health problems and disease conditions? (Questionnaire 7 - 20.)

Sample II members were asked to indicate their decisions concerning the type of treatment, if any, which they would seek for each of fourteen different health conditions. This question was developed with the assistance of a medical consultant, and it was believed that a physician should be consulted in each of the conditions listed. Table 27 indicates that the symptom of reddish colored urine would alert 94.9 per cent of the students to the need for medical care, while the inability to sleep or worry and depression would be considered worthy of medical attention by only 15.5 and 15.3 per cent, respectively.

It was noted that only four of the fourteen conditions were thought to need medical care by more than 50 per cent of the respondents.

There were no significant differences in the responses of the users and the non-users to any of these questions.
TABLE 27

STUDENT ACTION CONCERNING TREATMENT OF SELECTED HEALTH CONDITIONS

<table>
<thead>
<tr>
<th>Health Condition</th>
<th>Total Respondents</th>
<th>No Treatment</th>
<th>Non-medical Aid</th>
<th>Go to Physician</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No.</td>
<td>Per Cent</td>
<td>No.</td>
</tr>
<tr>
<td>Reddish color urine</td>
<td>394</td>
<td>11</td>
<td>2.8</td>
<td>9</td>
</tr>
<tr>
<td>Dizzy spells</td>
<td>394</td>
<td>11</td>
<td>2.8</td>
<td>14</td>
</tr>
<tr>
<td>Exposure to venereal disease</td>
<td>389</td>
<td>13</td>
<td>3.3</td>
<td>21</td>
</tr>
<tr>
<td>Growth of mole</td>
<td>392</td>
<td>28</td>
<td>7.1</td>
<td>21</td>
</tr>
<tr>
<td>Hearing problem</td>
<td>392</td>
<td>165</td>
<td>42.1</td>
<td>35</td>
</tr>
<tr>
<td>Persistent cough</td>
<td>392</td>
<td>99</td>
<td>25.3</td>
<td>135</td>
</tr>
<tr>
<td>Frequent headaches</td>
<td>391</td>
<td>107</td>
<td>27.4</td>
<td>138</td>
</tr>
<tr>
<td>Gain in weight</td>
<td>391</td>
<td>133</td>
<td>34.0</td>
<td>116</td>
</tr>
<tr>
<td>Extreme thirst</td>
<td>394</td>
<td>221</td>
<td>56.1</td>
<td>32</td>
</tr>
<tr>
<td>Pimples and blackheads</td>
<td>391</td>
<td>76</td>
<td>19.4</td>
<td>185</td>
</tr>
<tr>
<td>No energy</td>
<td>392</td>
<td>197</td>
<td>50.3</td>
<td>68</td>
</tr>
<tr>
<td>Cracks between toes</td>
<td>393</td>
<td>42</td>
<td>10.7</td>
<td>246</td>
</tr>
<tr>
<td>Inability to sleep</td>
<td>393</td>
<td>268</td>
<td>68.2</td>
<td>64</td>
</tr>
<tr>
<td>Worried and depressed</td>
<td>392</td>
<td>245</td>
<td>62.5</td>
<td>87</td>
</tr>
</tbody>
</table>
CHAPTER VI

ADDITIONAL RESULTS

Ohio State University Health Service Use Compared with the Moore-Summerskill and American College Health Association Surveys

It was mentioned previously that the reports of two recent studies indicated that approximately 70 per cent of the colleges and universities responding noted that a majority of their students visited the student health service during a college year. In addition, the average number of visits per student enrolled was between three and four.¹,²

On the basis of figures available at the University Health Service at The Ohio State University it was determined that during 1959-1960 only 30 per cent of the student body visited the University Health Service and the average number of visits per student enrolled was between one and two.³

¹ Moore and Summerskill, op. cit., pp. 42, 45-57.
² American College Health Association and Continental Casualty Company, op. cit., p. 7.
It was revealed by the data in this investigation that the average number of visits by Ohio State University students and the proportion of the student population using the Health Service were still below the figures quoted in the aforementioned reports. This investigation, however, has yielded some information which enables one to view the local situation with more understanding.

The members of both sample groups used in this study were characterized by continuous, three quarter enrollment at The Ohio State University during 1959-1960. Over 50 per cent of both of these groups visited the University Health Service during the year being studied. When the Health Service determined the percentage of the student population using its services, every student enrolled during the entire four quarter year was included. Only 30 per cent of that group visited the University Health Service. Although the part time evening school student or the full time student who drops out after one quarter of attendance are both enrolled at The Ohio State University, it seems likely that in most cases their use of the Health Service would be minimal, if at all. These persons, if registered for only one or two quarters of the 1959-1960 college year, were not included in the sample groups. It is believed that these part time
students and those who are not continuous in their enrollment were responsible for the discrepancy between the Health Service figures and those from this study concerning the percentage of the student population visiting the University Health Service.

The average number of Health Service visits per student in Sample I was 2.2, only slightly higher than the figure determined by the Health Service when the entire student population was considered, and still less than the average of three to four visits per student as determined by the surveys noted previously.

A partial explanation of this may be provided by the data from Sample II. Slightly more than one-third of the members of both Sample I and Sample II lived in Columbus and Franklin County. Of these persons in Sample II who used medical care, approximately one-third visited their family doctors and also the University Health Service. When all the users in Sample II were considered, 50.0 per cent visited the family physician in addition to visiting the University Health Service. This use of multiple sources of medical care was noted earlier, in a discussion of Question 30. It is not known whether similar situations existed in colleges and universities responding to the Moore-Summerskill and
A.C.H.A. surveys. It does seem, however, that this additional information makes the small average number of visits to the University Health Service by Ohio State University students more understandable.

It is difficult to interpret college health service use figures unless one knows the services available to students and other details about the institution itself. It might seem logical, for example, to expect that an institution similar to The Ohio State University in size and urban location would report use figures comparable to those noted at the University Health Service. Of all the institutions in the "Big Ten," the University of Minnesota is the one which is most similar to The Ohio State University. Located in a large urban area and a land-grant institution, its enrollment is approximately comparable to Ohio State University's. About half of Minnesota's enrollment lives in the Minneapolis-St. Paul area, giving Minnesota a higher percentage of home residents than that at Ohio State.

During the years from 1955 to 1960 the percentage of voluntary users of the University of Minnesota Health Service

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ranged from 81.7 to more than 99.0 per cent of the enrollment. When one considers the extensive services offered these figures seem understandable. Dental care, eye examinations, a diet table, and periodic medical examinations at student request are available. Some of these are available at The Ohio State University too, but none are provided by the University Health Service.

Minnesota's high use percentage is still interesting to contemplate. It serves to emphasize the investigator's belief that each institution must study the use of its own health service, rather than compare itself with another apparently similar institution or with survey statistics.

Characteristics of the Users and Non-Users of the University Health Service

In the course of this investigation, consideration was given to the determination of selected characteristics distinguishing users and non-users of the University Health Service.

There appeared to be only two such characteristics that might be considered major. The non-users reported significantly fewer illnesses than the users. It is recognized

5Ibid.
6University Health Service, University of Minnesota, Your Health Service.


that there are numerous problems involved when one asks a person how much illness he has had in the past year. The more health-conscious person may consider himself ill more frequently than the less health-conscious one. The person who believes himself to be in good health may not note a condition which would be noted by a person who considers himself sickly. Any person may forget how much illness he has had, and may estimate it incorrectly. With these and other considerations recognized, it can still be noted that approximately 27 per cent of the non-users reported no illnesses during the 1959-1960 college year. According to the non-users' judgments, the majority of their illnesses were minor, and colds appeared to predominate.

The second characteristic distinguishing users and non-users, undoubtedly in part a result of the first, was that almost half of the non-user group reported no physician visits or medical care during the year being studied. It was noted also that there was no significant difference between users and non-users in regard to visits to the family physician. Since the family physician was consulted by

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users in addition to their University Health Service consultations, this appeared to emphasize still further the difference in the total amount of medical care used by each group. These factors appeared to explain most clearly the basic differences between users and non-users of the University Health Service. These analyses provided a better understanding of the health and medical care status of the non-users. The details of this have been discussed in Question 10, but on the basis of the data from Sample II it appeared that the health of the non-user was not in jeopardy, due to neglect of medical care.

Rumors about good and bad experiences at the University Health Service were prevalent among both user and non-user groups. Non-users, however, seemed less able to support their reports, either good or bad, with personal experiences. In spite of this, significantly more non-users indicated that they definitely or probably would not visit the University Health Service in case of illness "next week." It is not known whether the non-users had any greater belief than the users in the "bad" reports that were heard. Without very much experience to either support or refute them, the "bad" reports might assume more prominence,
and non-users' future decisions concerning visits to the Health Service could be influenced.

While significantly more users than non-users reported that they made their own decisions concerning the source of their medical care, it appeared that the families of both users and non-users were influential in the students' decisions. Users' families favored the use of the University Health Service; non-users' families preferred the use of the family physician. If the Health Service were to become better known to the parents of students, more students might be encouraged to visit it in case of illness. The University Health Service does not need more patients. It is interested, however, in seeing students who are in need of its services.

Significant differences were noted, too, in certain aspects of information concerning the University Health Service known by users and non-users. It appeared, however, that this was due in part to the users' greater opportunities for learning about the Health Service while visiting it. A more effective means of transmitting information about the University Health Service to all students should be developed.
The significant difference between users' and non-users' preferences concerning Health Service location needs to be viewed carefully. Although more users than would be expected said that Health Service location was a factor in their use of it, and it should be near dormitories, a slightly larger percentage of the users joined the greatest number of the non-users in stating that location had no effect on their use of the University Health Service. It appeared, therefore, that to both users and non-users location was relatively unimportant, although a sizeable group of users did state a preference for a location near the dormitories. The latter preference is easily understood, as many users lived in dormitories, but the lack of importance given to location by many users is less understandable. It may signify their intent to use the Health Service regardless of its location, because of other factors, such as the lack of cost or the quality of the service received. The large number of non-users noting this response may be indicating their lack of interest in visiting the University Health Service, irrespective of the convenience or inconvenience of its location.

The final significant difference noted between user and non-user groups was concerned with medical insurance.
It was noted that significantly more users had the University policy and significantly more non-users had other types of medical insurance. This suggests, again, as in the previous discussion, that certain non-users take care of all medical matters privately. Many users, however, are apparently relying on the various University provisions for health and medical care of students.

Because of the categorical nature of the descriptive data concerning the sample members, it is not possible to describe an average user and non-user in precise terms. It can be stated, however, on the basis of Sample I data, that in the user group the greatest percentage of the students were women, unmarried, in the College of Arts and Sciences, freshmen, living in dormitories or fraternities and sororities, and residents of a city within 60 to 120 miles of Columbus.

By way of contrast, the greatest percentage of the non-users were men, married, in the Colleges of Dentistry, Law, or the Graduate School, living at home in the Columbus and Franklin County area.

These data would appear to yield some implications to be considered as the University increases its enrollment. Any increase in the student population will increase the
patient load at the University Health Service. Increased enrollments at the freshman level, however, and an increasing number of dormitories, particularly for women, might be expected to add markedly to the patient load. An increasing number of graduate students, most of whom are men, will cause a less noticeable increase in patient load at the University Health Service.

In summary, therefore, it appeared that the users and non-users of the University Health Service were characterized by relatively few differences other than those of a personal, descriptive nature. The essential differences between the two groups appeared to be in the amount of illness experienced and in the amount of medical care used.

Selected Characteristics of Sample II Members

It is not totally unexpected to note that 89.5 per cent of the students in Sample II reported that they had family physicians, that 81.3 per cent reported that they went to the dentist at least once a year, and that 86.6 per cent of their families had medical and/or surgical insurance.

These are some of the characteristics which one might hope to find in a population where family income, educational level, and social status are, in many cases, above
average. Koos, in studying *The Health of Regionville*, found employment of a family physician and dentist, the possession of health insurance, the use of a dentist, and many other factors related to social class membership. The higher social classes made greater use of the services. 8 The United States Public Health Service, in studying the possession of health insurance, noted that the percentage increased with an increase in income. 9 In Sample II over 80 per cent of the group had been to a dentist within the past year. The National Health Survey reported that about two-thirds of the population had not been to a dentist in the past year. These figures would seem to indicate that both users and non-users in Sample II are part of a privileged group in terms of their acquaintance with some aspects of health and medical care services.


The high percentage of use or possession of such services as those noted appeared in contrast to the very small number of students who listened to health or medical programs on the radio or television and to the relatively few students whose responses indicated an awareness of the importance of medical care for a number of selected health conditions. It is not known whether the respondents recognized the potentially serious conditions noted in questions 7 through 20 on the questionnaire. If their responses in terms of treatment are taken as an indication of their recognition of the serious nature of a condition, one would be forced to conclude that ignorance was extremely prevalent. If the potentially serious nature of the health conditions was recognized, the students' intended actions were, in many instances, dangerous and indicative of apathy. The role of the health educator is a critical one as he tries to teach basic information concerning health problems and attempts to develop in his students the positive attitudes that will encourage them to use their knowledge.

It was noted previously that the number of illnesses reported by persons is influenced by a variety of factors in addition to knowledge of health conditions, which this study did not attempt to consider. It was found that the greater
prevalence of illness among the women in Sample II was typical of the national pattern of illness. On the national scene it appears possible that men, as breadwinners, too busy to be ill, ignore some illnesses that women might report. This factor would not appear to be important in the college population. Men and women students are equally busy. It is possible, however, that this might be a factor when class rank and illness are considered. In Sample II 24.0 per cent of the graduate students reported no illnesses, while only 8.2 per cent of the freshmen indicated a similar state of health. It would be erroneous to conclude that graduate students are busy and freshmen are not, but it does seem possible that the increased pressures of graduate work and the motivation of the graduate student might encourage him to pay less attention to some illnesses. Are the freshmen more cognizant of health problems than the graduate student? Are women more health conscious than men? This study did not try to answer these questions. The health educator might consider them as he encourages his students

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to develop a sound understanding of the meaning of health in their lives.

It appeared clear that there was a breakdown between beliefs and practices in two areas of health care where this relationship was investigated. Approximately 90 per cent of the students indicated a belief in the value of an annual medical examination for college age persons and a belief in the value of a dental check-up every six months. The percentage of respondents who noted that they had such examinations or check-ups was 33.4 per cent for the medical examination and 54.9 per cent for the dental check-up. Here, apparently, was the expression of the belief that such care is a good idea—"but not for me." This, too, is a responsibility for the health educator. The individual needs to believe in the value of health protection for all—including himself—and needs motivation to act in a positive manner where such protection is concerned.

According to the replies of Sample II members, the college years are apparently a time when many students are being encouraged by their families to take the responsibility for making decisions about the selection and use of medical care. In response to Question 28 on the questionnaire, 67.5 per cent of the respondents indicated that they
made their own decisions concerning medical care. This is an encouraging report, for the students should be accepting responsibility of this type, but they need education and guidance in the selection of services. How does a person locate a well-qualified physician? What do the different specialists do? Who are the non-medical persons working in the health field? These are only a few of the questions that students need to understand if they are to choose health and medical care wisely. The health educator has opportunities and responsibilities as he teaches in this area.

Although Sample II respondents indicated that they had numerous contacts with health and medical personnel, it appeared that their experiences in health education and their interests and understandings in the health field could be strengthened. The health educator's role is an important one as he attempts to educate and motivate these persons toward a satisfying, useful, and healthful life.
CHAPTER VII

SUMMARY OF FINDINGS AND RECOMMENDATIONS

The purpose of this study was to investigate some of the factors influencing the use of the University Health Service by students at The Ohio State University. As a result of this investigation, the following findings are noted:

1. Class rank, sex, the distance of a student's hometown from Columbus, and a student's local housing appeared to influence the number of his visits to the University Health Service.

2. College of enrollment, marital status, and Ohio State Psychological Examination class score did not appear to influence the number of visits made by a student to the University Health Service.

3. The greatest percentage of the users of the University Health Service were freshmen, in the College of Arts and Sciences, women, unmarried, living in dormitories or fraternities and sororities, and residents of a city within 60 to 120 miles of Columbus.
4. The greatest percentage of the non-users of the University Health Service were in the Graduate School, the College of Law, or the College of Dentistry, men, married, living at home in the Columbus and Franklin County area.

5. During the 1959-1960 college year the University Health Service at The Ohio State University was visited by slightly more than half of the students in the sample groups.

6. The average number of visits made per student to the University Health Service during the 1959-1960 college year was between two and three.

7. Students who did not visit the University Health Service reported fewer illnesses and fewer total numbers of medical visits than students who did visit the Health Service.

8. A majority of those students who did not visit the University Health Service when ill used other sources of medical care.

9. Those students who reported illnesses but no medical care believed, in the majority of cases, that their illnesses were minor.

10. Class rank and sex appeared to be factors influencing the amount of illness reported by students.

11. Marital status and college of enrollment did not appear to influence the amount of illness reported by students.
12. A large majority of the students who visited the University Health Service were satisfied with its services, and noted the good care received there as the primary reason for their satisfaction.

13. Its availability, the good care provided, and the little or no cost involved were the main factors influencing students to visit the University Health Service when ill.

14. Instances of poor care and the impersonal nature of the services provided were the major negative criticisms of the University Health Service.

15. A majority of the reports heard by students concerning service at the University Health Service were not verified by the personal experiences of sample members.

16. Although a large majority of the students believed in regular medical and dental care, had family physicians, received dental check-ups at least once a year, and had families that had medical and/or surgical insurance, many students did not appear to recognize the necessity for medical care for a number of specific health conditions.

17. Students' information concerning the services and personnel of the University Health Service appeared quite limited.
18. Students' families appeared influential in their student-children's choices of medical care, although a majority of the students noted that they made their own decisions concerning the sources of their medical care.

Recommendations for the University Health Service

It is to the credit of the University Health Service and its Director, Dr. Paul S. Fancher, that permission was granted for all aspects of this study. It was suspected, before the study was started, that the University Health Service, like other such services, might be the subject of student criticism. Unfavorable comments were likely to predominate, for a college health service is one of several areas of the college community which seems to receive at least its share of negative criticism. Irrespective of the direction of the criticism, however, it was hoped that the study would lead to the development of some suggestions for the University Health Service to consider as it tries to serve the students at The Ohio State University as effectively as possible.

It should be noted, first, that student opinions about the University Health Service appeared numerous and varied. Of those who used its services during the 1959-1960
college year, 85.5 per cent stated that they were definitely or generally satisfied with their experiences, and 81.2 per cent of the user group stated that they would go to the Health Service in case of illness "next week." Fifty per cent of the respondents who were satisfied with their experiences mentioned that the good care received was a reason for their satisfaction, and the competency of the staff and confidence of the students in the Health Service were also mentioned by some of the respondents.

Many "good reports" and "bad reports" about the Health Service were noted by respondents. A number of the comments concerned the medical care provided and the competence of the staff. It was noted with interest, however, that when the respondents were asked to verify these and other reports, on the basis of personal experiences, a greater percentage of "good reports" seemed to be based upon actual student experiences, while more of the "bad reports" appeared to be in the rumor category.

Any organization is pleased to hear about its successes, its satisfied clients. It would be expected, however, that an organization serving as many students as the University Health Service does would receive some negative criticism. One of the most commonly mentioned complaints about
the Health Service was the problem of impersonal care. That this was not agreed upon universally was indicated by the fact that good and bad experiences, in terms of personal relationships, were reported by approximately the same percentage of respondents. The fact that this particular item, from the negative viewpoint, appeared in some way in response to so many questions, however, does seem to indicate that it is worthy of consideration. Whether the ill student is seeking the more personal relationship which he may have experienced with his family physician, or whether he looks upon the Health Service as one place, on a large campus, that should be interested in him as an individual, is uncertain. The fact remains that many students apparently felt that they were treated as numbers, rather than as persons, and that the staff was not interested in their welfare, when they visited the University Health Service.

The quality of the care provided at the Health Service was also criticized. Although half of the respondents who were satisfied with their experiences mentioned that good care or treatment was a reason for their satisfaction, this was not a universal belief. Accusations of incorrect diagnoses, unsatisfactory, ineffective treatment, incomplete examinations, and incompetent medical personnel were frequently
made. This type of comment appeared in response to many different questions on the questionnaire. There is a question concerning the ability of a student to judge such things accurately. The fact that numerous students believe that they are true, however, and that about 18 per cent of the users noting bad reports noted that they had experienced such things, makes one realize that this is an area of concern to many of the students in Sample II. Its overall effect on a university campus is more important than can be measured.

University Health Service personnel should recognize, therefore, that students need, want, and appreciate the most thorough and most personal medical attention that it is possible to give them.

Another common student criticism concerned the long waiting period at the Health Service. This is a problem with which the Health Service staff has been working, and improvements have been made. Rumors concerning the long waiting time still persist, however, and seem to be supported by sufficient evidence to require still further consideration by the Health Service staff. The student who stops for care during a free hour between classes or during his lunch hour is unhappy if he cannot be cared for during this time.
There are apparently sufficient instances of this type to keep the rumor prevalent, and support it.

A complaint that is undoubtedly related to the previously mentioned one concerned the inadequate size of the facilities and staff at the University Health Service. Since the facility problem is one which the Health Service staff itself recognizes, it was encouraging to note that some students also realized that the present facility is rapidly becoming inadequate for the number of persons served.

Both of these situations could be alleviated if more adequate budgetary provisions were made. Since the University is increasing in size and in number of dormitory residents, University administrative personnel should make provisions now for the larger staff and larger University Health Service which is needed.

The greatest number of Health Service problem areas cited by students might be categorized as problems of an administrative nature, rather than a medical one. Frequently, and at times with considerable emotion, students expressed themselves concerning the Health Service's limited hours of availability, the Service's need to have a more efficient plan for caring for minor ills, the inability to find parking places when visiting the Service, and lack of adequate
publicity about specialists' hours. Some of these complaints cannot be justified in any way. A Health Service that is open from 8:00 a.m. to 9:00 p.m. daily and until noon on Saturdays does not appear to have limited hours for the treatment of patients. Other problems may be due to misunderstandings. This serves to re-emphasize the need for improved communication with students, and suggests the importance of more adequate interpretation of the program and problems at the Health Service.

Consideration might be given, therefore, to the inclusion of a student committee or student representatives in certain aspects of the program at the Health Service, to assist in interpreting the program to students and in providing the Health Service with student suggestions.

A more effective means of communication with students and the campus as a whole might be suggested to provide correct information and to help eliminate misunderstandings about the University Health Service. The University Orientation Program was noted as being responsible for providing approximately one-third of the students with most of their information about the Health Service. This Program is brief and crowded, and the time available to give information to students during their visit to the Health Service is minimal.
A small number of students believed that it was necessary to have the student insurance policy in order to receive care at the Health Service. Others believed that the physicians at the Service were medical students. Students might be more inclined to visit the Service if they knew more about its services and the qualifications of its personnel.

It might also be advisable to provide students' families with specific information about the services available at the University Health Service. The importance of the role of the student's family in influencing his decisions concerning medical care cannot be overlooked. Questionnaire data revealed that approximately one-third of the students reported that their families wanted them to visit the Health Service in case of illness, and when members of this group used medical care, approximately 80 per cent did visit the Health Service.

It is recommended, therefore, that consideration be given to the development of a brochure to interpret the program of the University Health Service, describe its personnel, and give other pertinent information to students, their families, and campus personnel.

A publication of this type and the continued use of other media of communication on the campus, such as the
daily newspaper, to call attention to current health problems, should be of considerable value in promoting greater student understanding of the role of the University Health Service on the campus and in developing a greater awareness of today's health problems.

There was some evidence presented in this investigation that leads to the belief that a planned program of health education at the Health Service would be a worthwhile addition to the activities already being conducted there. At The Ohio State University all students are required to enroll in a one credit hour course, Health Education 400, offered by the Department of Physical Education. The course includes a study of the use of health and medical services while in college and in future years and attempts, also, to aid in the development of the students' ability to make wise judgments concerning his health and medical problems. The reinforcement of this teaching, through an educational program in which University Health Service staff members took an active and interested role, might be an important factor in student use of medical services now and in the future.
This investigation has indicated that a variety of factors affect student use of the Health Service at The Ohio State University. It is hoped that as a result of this study the University Health Service will be aided in its continuous efforts to meet the health needs of the University students.
APPENDIXES
APPENDIX A

STUDENT HEALTH SERVICE PERSONNEL CONTRIBUTING TO PRELIMINARY INVESTIGATION

Loyal W. Combs, M.D., Director
- Student Health Service
  Purdue University
  West Lafayette, Indiana

Edward J. Dvorak, Health Educator
- University Health Service
  University of Minnesota
  Minneapolis 14, Minn.

Dana L. Farnsworth, M.D., Director
- Student Health Service
  Harvard University
  Cambridge 38, Mass.

James M. Faulkner, M.D., Director
- Student Health Service
  Massachusetts Institute of Technology
  Cambridge 39, Mass.

James S. Feurig, M.D., Director
- Student Health Service
  Michigan State University
  East Lansing, Michigan

John H. Flinn, M.D., Director
- Student Health Service
  University of Wisconsin
  Madison, Wisconsin

Gordon Keppel, M.D., Director
- Student Health Service
  University of Delaware
  Newark, Delaware

Donald S. MacKinnon, M.D., Director
- Student Health Service
  University of California
  Los Angeles 24, Calif.

C. I. Miller, M.D., Director
- Student Health Service
  State University of Iowa
  Iowa City, Iowa
Norman S. Moore, M.D., Director - Student Health Service
   Cornell University
   Ithaca, New York

Melbourne Murphy, Asst. to Director - Student Health Service
   University of Michigan
   Ann Arbor, Michigan

E. Bryan Quarles, M.D., Director - Student Health Service
   Indiana University
   Bloomington, Indiana

F. O. Robertson, M.D., Director - Student Health Service
   San Diego State College
   San Diego, California

Irvin W. Sander, M.D., Director - Student Health Service
   Wayne State University
   Detroit, Michigan

Douglass S. Thompson, M.D., Chairman, American College Health
   Association Research Committee - University Health
   Service
   New York University
   New York 3, New York

Robert H. Vadheim, M.D., Director - Student Health Service
   University of Florida
   Gainesville, Florida

Orville S. Walters, M.D., Director - Health Services
   University of Illinois
   Urbana, Illinois

Leona B. Yeager, M.D., Director - Student Health Service
   Northwestern University
   Evanston, Illinois

Harry E. Zion, M.D., Director - Student Health Service
   Washington State University
   Pullman, Washington
APPENDIX B

LETTER SENT TO STUDENT HEALTH SERVICE DIRECTORS

October 8, 1960

Dear 

As a Ph.D. candidate in the Department of Physical Education, with a major interest in health education, I am doing research preliminary to the writing of a dissertation concerned with student use of the facilities of the University Health Service at The Ohio State University.

The purpose of this study is to determine if there is any relationship between the number of visits a student makes to the University Health Service during a given year and his sex, college, year, housing, marital status, and other selected factors. A sub-problem of the study will be designed to discover the health status and some of the characteristics of the student who makes no use of University Health Service facilities. We are also interested in exploring student attitudes toward the services of the University Health Service.

An investigation of the literature has revealed very little previous research in this area, and it appears that no research similar to this has been conducted in colleges or universities. However, it seems likely that some research in the general area of student use and/or non-use of student health service facilities has been conducted, but perhaps is unpublished.

This study is being conducted under the direction of Dr. Elena M. Sliepcevich, Professor of Health Education, The Ohio State University.

May I request your help in my attempt to locate related research? I am enclosing a postal card for your convenience in replying. I would appreciate hearing from you by October 21st. Thank you very much.

Very sincerely yours,

/S/ Miss Marian K. Solleder
Research in the area of student use of health service facilities has been conducted at this University.

No___
Yes___

A report of this research is available from_____

(Name and address of source)

This research was published in____________________

(Periodical or other source)

Other institutions that have conducted research in this field are____________________

Name____________________
Position____________________

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Zone 1: Columbus and Franklin County
Zone 2: Beyond Zone 1, but within a 60 mile radius of Columbus
Zone 3: Beyond Zone 2, and within a 120 mile radius of Columbus
Zone 4: Any location beyond Zone 3
APPENDIX E

PERSONS AT THE OHIO STATE UNIVERSITY WHO ASSISTED IN THE DISTRIBUTION AND COLLECTION OF QUESTIONNAIRES

Blohm, Doris - Graduate Assistant, Physical Education
Boone, Dr. E. Milton - Professor and Director, Electrical Engineering
Buchholzer, Wendy - Graduate Assistant, Romance Languages
Canter, David B. - President, Student Bar Association, College of Law
Cassidy, Dr. Viola M. - Professor, Psychology
Colwell, B. Joe - Asst. Instructor, Economics
Cushman, Dr. W. P. - Professor, Physical Education
Ellerbrock, Dr. - Assoc. Professor, School of Optometry
Vincent J.
Gazette, Peggy - Graduate Student, Physical Education
Gould, Dr. Wilbur A. - Professor, Horticulture
Hartman, Dr. Fred O. - Assoc. Professor, Horticulture and Forestry
Helfrich, Dr. Margaret- Asst. Professor, Sociology and Anthropology
Jones, Dr. David O. - Assoc. Professor, Veterinary Preventive Medicine
Kaplan, Robert - Asst. Professor and Fencing Coach, Physical Education
Nash, Dr. Charles D. Jr. - Asst. Professor, Mechanical Engineering
Peters, Dr. Herman J. - Professor, Education
Prudent, Dr. Inez - Professor, Home Economics
Rheins, Dr. Melvin S. - Professor, Bacteriology
Sliepcevich, Dr. Elena- Professor, Health Education
Smith, Dr. Donald C. - Asst. Professor, Psychology
Stinson, Dr. Karl W. - Professor, Mechanical Engineering
Treece, Dr. Anna Jean - Asst. Professor, Home Economics
Weirman, Shirley - Student, College of Dentistry
Winsborough, Dr. H. H.- Asst. Professor, Sociology and Anthropology
Wooten, Edna - Asst. Instructor, Anatomy

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APPENDIX F

FIRST LETTER SENT TO PERSONS ASSISTING IN QUESTIONNAIRE DISTRIBUTION AND COLLECTION

1760 Neil Avenue
Pomerene Hall
The Ohio State University
Columbus 10, Ohio
May , 1961

Dear __________:

Recently I spoke with you about my doctoral dissertation concerning health and medical services used by Ohio State University students. I appreciate your willingness to ask your classes for their cooperation in filling out my questionnaire.

According to our conversation, you thought that you could use (number) questionnaires with (class rank) students in your classes, so I am sending you approximately this number. I will be glad to provide more if you can use them.

It would be helpful if these questionnaires could be returned by May , and any assistance you could provide in encouraging their return would be greatly appreciated. I will plan to get the questionnaires (returned ones and any not distributed) from you within four or five days following the above date. If it will not be convenient for me to get them at the same location to which I have delivered them, would you call me at Cypress 3-2704?

In order to assure as great a degree of objectivity as possible, please do not tell the students anything in addition to what is contained in the enclosed statement which is to be read to them before distribution of the questionnaire.

Thank you very much for your willingness to help in this project.

Very sincerely yours,

/s/ Marian K. Solleder
Graduate Student and Instructor
Dept. of Physical Education
Division for Women
APPENDIX G

STATEMENT TO BE READ TO STUDENTS

Health and Medical Care Survey

TO THE INSTRUCTOR: Please read the following statement to students before distribution of the questionnaire concerning medical services. Thank you.

An attempt is being made to discover some information about health and medical services used by students at The Ohio State University.

The questionnaire which you are being asked to fill out is part of a graduate student's doctoral dissertation. You will not be asked to sign your name.

Information is desired from students who:

1. were enrolled in The Ohio State University, Columbus campus, last year, 1959-60.

2. were enrolled during the autumn, winter, and spring quarters of last year, 1959-60. (This means enrollment during all three quarters.)

If you do not meet both of these qualifications, please do not fill out a questionnaire.

Your sincere and thoughtful answers will be appreciated. Please return the questionnaire to your instructor when it is completed.

Thank you.
APPENDIX H

FINAL LETTER SENT TO PERSONS ASSISTING IN THE DISTRIBUTION AND COLLECTION OF QUESTIONNAIRES

1760 Neil Avenue
The Ohio State University
Columbus 10, Ohio

June 6, 1961

Dear ________:

I want to thank you for your assistance in the distribution and collection of my questionnaires concerning health and medical services used by Ohio State University students.

The time and effort which you gave to this project and the cooperation of your students in completing the questionnaires are greatly appreciated.

Very sincerely yours,

/s/ Marian K. Solleder
Graduate Student and Instructor
Dept. of Physical Education
Women's Division
APPENDIX I

QUESTIONNAIRE COMPLETED BY SAMPLE II MEMBERS

Health and Medical Care Survey  OSU:561:msk

An attempt is being made to discover some information about health and medical services used by students at The Ohio State University. Your name is not necessary on this questionnaire.

It is desired that only those students who were enrolled in the University, on the Columbus campus, all three quarters --autumn, winter, and spring--of last year, 1959-60, answer this questionnaire. If you do not fulfill this necessary qualification, do not complete this questionnaire, but return it to your instructor. Thank you.

This is part of a graduate student's doctoral dissertation. It is hoped that you will be willing to answer thoughtfully and as accurately as possible. Please answer the questions by yourself, without consulting other students. Thank you for your cooperation.

1. What was your classification during the spring quarter of last year (1960)?
   1. ___ freshman  5. ___ graduate student
   2. ___ sophomore  6. ___ Other. Please describe. _____
   3. ___ junior
   4. ___ senior

2. In what college or school were you enrolled during the spring quarter of last year (1960)?
   1. ___Agriculture  7. ___Home Economics
   2. ___Arts and Sciences  8. ___Nursing
   3. ___Commerce
   4. ___Dental Hygiene
   5. ___Education
   6. ___Engineering  9. ___Pharmacy, Optometry, Veterinary Medicine
   10. ___Graduate School, College of Law, College of Dentistry
   11. ___Other. Please describe.
3. What is your sex?
   1. ___ male
   2. ___ female

4. What was your marital status at the beginning of spring quarter 1960?
   1. ___ married
   2. ___ single

5. What was your home town at the beginning of spring quarter 1960?

   City  County  State

6. What was your Columbus residence at the beginning of spring quarter 1960?
   1. ___ at home
   2. ___ dormitory
   3. ___ fraternity or sorority
   4. ___ rooming house
   5. ___ with relatives
   6. ___ apartment
   7. ___ (Commuter, non-Cols. housing)  
   8. ___ (University affiliated housing)
   9. ___ (Trailer)
   10. ___ (Miscellaneous)

   In everyday living there are many health conditions about which we need to make decisions concerning the need for treatment. Some may clear up without any special medical care. Some need treatment. The question then becomes whether to consult a physician or to seek help from another source.

   Which one of the following WOULD YOU DO if you were in each of the situations described below? Mark your answers according to the following pattern:

   Use the number 1 if: you feel that the condition would probably take care of itself in a short time, and no special treatment or advice is necessary.

   ^All categories enclosed in parentheses were based on student responses and were added in order to tabulate free-response questions.
Use the number 2 if: you want to do something about the condition, and would ask your friends, the druggist, or your family for advice, or purchase some product advertised for the condition. You would not feel that it was necessary to go to a physician.

Use the number 3 if: you would, at the time, go to a physician about the condition.

7. ___ For a couple of weeks you have had a cough that bothers you quite a bit, but hasn't kept you from attending classes.

8. ___ You are having trouble with acne; have many blackheads and pimples on your face.

9. ___ You have a number of cracks and blisters between your toes.

10. __ You seem to be extremely thirsty much of the time.

11. ___ You have gained a good bit of weight during the past six months, and are definitely overweight. Otherwise, you feel fine.

12. ___ You have had a number of headaches recently. They aren't severe, but are annoying.

13. ___ You have had several dizzy spells or have fainted several times in the past few weeks.

14. ___ You think you have been exposed to a person who has venereal disease.

15. ___ Although you are tired when you go to bed, it takes a long time for you to go to sleep, and you are tired when you awaken in the morning.

16. ___ Usually you have plenty of energy, but for the past couple of months you have been "dragging" around.

17. ___ You have recently noticed that you have to ask your friends to repeat their remarks to you.
18. ___ You have been worried and depressed—about things in
general—for several months.

19. ___ You believe that a mole on your back has started to
increase in size.

20. ___ For the past month or so you have noticed that your
urine has had a reddish color.

MOST OF THE FOLLOWING QUESTIONS NEED ONLY ONE ANSWER. IF
MORE THAN ONE ANSWER IS DESIRED, THE QUESTION WILL STATE THIS
PLAINLY.

21. Do you carry the student hospitalization insurance
policy available through the University?

   1. ___ yes
   2. ___ no

22. Do you have any kind of medical and/or surgical insur­
ance not obtained through the University?

   1. ___ yes
   2. ___ no

23. Does your family carry medical and/or surgical insur­
ance of any kind?

   1. ___ yes
   2. ___ no

24. Do you believe that an annual medical examination for
college age persons is a good idea?

   1. ___ yes
   2. ___ no

25. How often do you have a thorough medical examination?

   1. ___ about once a year
   2. ___ once every three or four years
   3. ___ only when required for admission to college or
      other special programs
   4. ___ only when I'm sick
5. ___ (Every 2-3 years)
6. ___ (At military discretion)
7. ___ (Miscellaneous)

26. Do you believe a person should see a dentist every six months or so, regardless of whether he has an obvious need for dental care?
   1. ___ yes
   2. ___ no

27. How often do you visit your dentist for a check-up?
   1. ___ every six months or so
   2. ___ about once a year
   3. ___ once every two or three years
   4. ___ mainly when dental troubles occur
   5. ___ (At family's insistence, etc.)
   6. ___ (Miscellaneous)

28. How does your family feel about your medical care while you are a student at Ohio State? (Check as many answers as may apply to you.)
   1. ___ They want me to visit our family doctor when I am ill.
   2. ___ They want me to visit a doctor at the University Health Service when I am ill.
   3. ___ They want to talk with me before any decisions about medical care are made.
   4. ___ They let me make decisions like this by myself.
   5. ___ They do not want me to go to the University Health Service.
   6. ___ They have not said anything about this medical care situation.
   7. ___ (Call local (Columbus) physician.)
   8. ___ (Depends on severity - if serious go to family physician.)
   9. ___ (Miscellaneous.)

29. Do you and your family have a family physician in or near your home town?
   1. ___ yes
   2. ___ no
30. How often do you listen to or watch medical or health programs on radio or TV?

1. ___weekly
2. ___once every couple of weeks
3. ___once every month or two
4. ___several times per year
5. ___almost never
6. ___(Miscellaneous.)

31. Do your religious beliefs have any effect on your use of medical services?

1. ___yes
2. ___no

32. From which one of the following sources did you receive most of your information about the University Health Service and its facilities?

1. ___orientation programs on campus
2. ___roommate, other students, friends
3. ___dormitory counselors or town assistants
4. ___the Health Service staff
5. ___University bulletins or pamphlets
6. ___The Lantern
7. ___Health Education 400 TV lessons or discussions
8. ___Health Education 609 or 610
9. ___Other health courses
10. ___(Personal experience—using service)
11. ___(Don't know anything about it)
12. ___(Health and Physical Education major)
13. ___(Miscellaneous.)

33. Please indicate with a check (✓) the statement or statements in the following list that correctly describe the University Health Service.

1. ___Any student in the University may use the Health Service.
2. ___Regular University fees cover the expense of the usual treatments and examinations.
3. __Polio inoculations can be obtained at the Health Service.

4. __The Health Service is equipped to make X-ray examinations.

5. __Students who need regularly scheduled medical care may make appointments to see the same physician each time.

6. __The majority of the physicians at the Health Service carry on private practices in Columbus in addition to their work at the University Health Service.

7. __Some of the University Health Service physicians are specialists in the care and treatment of ear, nose and throat, skin, and other areas of medical care.

34. If you should need the services of a physician next week, would you seek help from the University Health Service?

1. __definitely yes
2. __probably yes
3. __probably no
4. __definitely no

35. What are some reasons that cause you to answer this way? (Please be as specific as possible.)

YES

(Readily available, convenient location)
(Little or no cost)
("Insurance covers me")
(Adequate staff and/or facilities)
(Good care, diagnosis, treatment)
(No private physician in Columbus)
("Entitled to it, so might as well use it")
("Unless it's serious")
(Previous inadequate or incorrect treatment, diagnosis)
(Always same treatment)
(Impersonality of service)
(Privacy lacking)
(Miscellaneous)

NO

(Go to own M.D. or other source)
(Inadequate or incorrect treatment, diagnosis)
/Private physician better qualified /
(Rudeness of staff)
(Impersonal)
(No privacy)
(No insurance, so not covered)
("Hearsay" about "bad" reports)
(Long waiting period)
(Red tape)
(Family physician has health history)
(Depends on seriousness)
(Miscellaneous)

36. As the University grows, it might become necessary to have additional University Health Service buildings. Does the location of a Health Service building have any effect on whether you visit it?

1. ___yes, it should be near the dorms or other living units
2. ___yes, it should be near classroom buildings
3. ___no, location really doesn't matter very much
4. ___(Need nearby parking facilities for students)
5. ___("Central" location)
6. ___(Miscellaneous.)

37. Approximately how many accidents or illnesses did you have during the last college year (autumn, winter, and spring quarters 1959-60)? (In spite of the fact that a cold or other illness may last two weeks, count it as one illness.)

1. ___none
2. ___1-2
3. ___3-4
4. ___5-6
5. ___7-8
6. ___9-10
7. ___more than 10
38. Approximately how many times did you visit a physician or receive medical care or consultation from any source during the last college year (autumn, winter, and spring quarters 1959-60)?

1. ___ none  
2. ___ 1-2  
3. ___ 3-4  
4. ___ 5-6  
5. ___ 7-8  
6. ___ 9-10  
7. ___ more than 10

IF YOU ANSWER "NONE" TO THIS QUESTION, OMIT QUESTIONS #39 to 47 and TURN DIRECTLY TO QUESTION 48 ON PAGE 9 TO COMPLETE THE QUESTIONNAIRE.

39. Approximately how many of these visits were to your private, family physician in or near your home town?

1. ___ none  
2. ___ 1-2  
3. ___ 3-4  
4. ___ 5-6  
5. ___ 7-8  
6. ___ 9-10  
7. ___ more than 10

40. Approximately how many of these visits (as indicated in question 38) were to a local, off-campus physician who is not your family physician?

1. ___ none  
2. ___ 1-2  
3. ___ 3-4  
4. ___ 5-6  
5. ___ 7-8  
6. ___ 9-10  
7. ___ more than 10

41. Approximately how many of these visits were to physicians or other personnel at the University Health Service?

1. ___ none  
2. ___ 1-2  
3. ___ 3-4  
4. ___ 5-6  
5. ___ 7-8  
6. ___ 9-10  
7. ___ more than 10

IF YOU ANSWER "NONE" TO THIS QUESTION, OMIT QUESTIONS #42-47 and TURN DIRECTLY TO QUESTION #48 ON PAGE 9 TO COMPLETE THE QUESTIONNAIRE.
42. How do you rate your experiences at the University Health Service?

1. ___definitely satisfactory  
2. ___generally satisfactory  
3. ___generally unsatisfactory  
4. ___definitely unsatisfactory  

43. What are some reasons that cause you to answer this way?  
(Please be as specific as possible.)

**Definitely Satisfactory**

(Inexpensive)  
(Confidence in them)  
(Good personal relationships)  
(Good care)  
(Competent staff)  

**Generally Satisfactory**

(Long waiting period)  
(Poor, inadequate, incomplete treatment, diagnosis)  
(Brevity of examinations)  
(Incompetence)  
(Impersonal)  
("Red tape")  
(Except for "major" illnesses)  
(Miscellaneous)  

**Definitely and Generally Unsatisfactory**

(Long waiting period)  
(Poor, incorrect, inadequate treatment, diagnosis)  
(Poor facilities)  
(Poor for major ills)  
(Had to seek outside medical aid)  
(Impersonal care)  
(Rudeness of staff)  
(Miscellaneous)
44. How do you believe your medical treatment from the University Health Service compares with the treatment you might have received from a physician at home? (Check as many as apply to you.)

1. ___ more complete here
2. ___ more personal here
3. ___ probably about the same both places
4. ___ more personal at home
5. ___ more complete at home
6. ___ (Miscellaneous.)

45. What good reports do you hear about the service provided at the University Health Service? Please list these and underline those which you, from firsthand experience, have found to be true.

(Inexpensive)
(Good facilities, treatment, diagnosis, staff)
(Readily available)
(Friendly staff—or other personal qualities)
(Good specialists)
(Excuses from class given)
(Miscellaneous)

46. What bad reports do you hear about the service provided at the University Health Service? Please list these and underline those which you, from firsthand experience, have found to be true.

(Long waiting period)
(Too "public")
(Discourtesy)
(Impersonal staff)
(Inadequate facilities)
(Poor care, diagnosis, treatment, incompetence, no help given)
("Same medicines given to all")
(Lack of continuity of treatment; seeing different M.D. for same condition)
(Too few office hours)
(Miscellaneous)
47. What recommendations would you make for improving the services of the University Health Service? (Please be as specific as possible and base your suggestions on your own experiences at the University Health Service.)

(More personal doctor-patient and nurse-patient relationships)
(Be more thorough in examinations, treatment, diagnosis)
(Get more competent staff)
(Increase size of facilities, staff)
(Provide more parking space)
(Provide for privacy)
(Increase hours of availability)
(Shorten waiting time; use appointment schedule, etc.)
(Publicize specialists' hours)
(Have a better plan for caring for minor ills, such as colds)
(Miscellaneous)

48. If you did not visit the University Health Service during the college year 1959-60, will you give the reason or reasons why this is so?

(Condition not serious enough to require medical care)
(Not ill)
(Visited family physician, prefer family physician)
(Visited local (non-family physician)
(Treated by dormitory nurse)
(General criticisms of health service-impersonal, too public, socialized medicine, etc.)
(Miscellaneous)
49. Has a staff member at the University Health Service ever treated your illnesses or given you any medical advice?

1. ___yes
2. ___no

50. If you answered "yes" to the previous question: Approximately how long ago did you receive this service?

1. ___this year
2. ___2 years ago
3. ___3 years ago
4. ___4 years ago
5. ___(Miscellaneous.)

51. If you answered "yes" to question 49: How do you believe your medical treatment or consultation from the University Health Service compares with the treatment you might have received from a physician at home? (Check as many as apply to you.)

1. ___more complete here
2. ___more personal here
3. ___probably about the same both places
4. ___more personal at home
5. ___more complete at home
6. ___(Miscellaneous.)

52. What good reports do you hear about the service provided at the University Health Service? Please list these and underline those which you, from firsthand experience, have found to be true.

(Inexpensive)
(Good facilities, treatment, diagnosis, staff)
(Readily available)
(Friendly staff or other personal qualities)
(Good specialists)
(Excuses from class given)
(Miscellaneous)
53. What bad reports do you hear about the service provided at the University Health Service? Please list these and underline those which you, from firsthand experience, have found to be true.

(Long waiting period)
(Too "public")
(Discourtesy)
(Impersonal staff)
(Inadequate facilities)
(Poor care, diagnosis, treatment, incompetence, no help given)
("Same medicines given to all")
(Lack of continuity of treatment; seeing different M.D. for same condition)
(Too few office hours)
(Miscellaneous)

54. Do you have any suggestions, based on your own experiences at the University Health Service, that would improve the services offered there?

(More personal doctor-patient and nurse-patient relationships)
(Be more thorough in examinations, treatment, diagnosis)
(Get more competent staff)
(Increase size of facilities, staff)
(Provide more parking space)
(Provide for privacy)
(Increase hours of availability)
(Shorten waiting time; use appointment schedule, etc.)
(Publicize specialists' hours)
(Have a better plan for caring for minor ills, such as colds)
(Miscellaneous)
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I, Marian Kinnaird Solleder, was born in Columbus, Ohio, March 18, 1926. My early education was received in the public schools of Flushing, New York, and my undergraduate preparation was at Oberlin College, from which I received the Bachelor of Arts degree in 1947. Following two years of teaching at Hiram College, I enrolled at the State University of Iowa to study for the Master of Arts degree, which I received in August, 1950. In the fall of 1956, following teaching at Wellesley College and Cornell University, I accepted a position as Assistant Instructor in the Department of Physical Education, Division for Women, The Ohio State University. The following year I became an Instructor in the Department and I have continued in this position while studying for the Doctor of Philosophy degree.