

**Staff Meeting Bulletin
Hospitals of the » » »
University of Minnesota**



Polling Patient Opinion

STAFF MEETING BULLETIN
HOSPITALS OF THE . . .
UNIVERSITY OF MINNESOTA

Volume XIX

Friday, December 5, 1947

Number 9

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Published for the General Staff Meeting each week
during the school year, October to June, inclusive.

I.

UNIVERSITY OF MINNESOTA MEDICAL SCHOOL
CALENDAR OF EVENTS

December 8 - December 13, 1947

No. 180Monday, December 8

- 9:00 - 9:50 Roentgenology-Medicine Conference; L. G. Rigler, C. J. Watson and Staff; Todd Amphitheater, U.H.
- 9:00 - 10:50 Obstetrics and Gynecology Conference; J. L. McKelvey and Staff; Interns' Quarters, U.H.
- 9:15 - Fracture Rounds; A. A. Zierold and Staff; Ward A: Minneapolis General Hospital.
- 10:00 - 12:00 Neurology Ward Rounds; A. B. Baker and Staff; Station 50, U.H.
- 11:00 - 11:50 Physical Medicine Conference; Common Shoulder Disabilities; Donald J. Erickson; E-101, U.H.
- 11:00 - 11:50 Roentgenology-Medicine Conference; Staff; Veterans' Hospital.
- 11:00 - 12:00 Cancer Clinic; K. Stenstrom and D. State; Eustis Amphitheater, U.H.
- 12:00 - 12:50 Physiology Seminar; Further Investigations on the Motor Cortex; Ernst Gellhorn; 214 M.H.
- 12:15 - 1:20 Pediatrics Seminar; Eneuresis; Roberta Follansbee; 6th Floor Seminar Room, U.H.
- 12:15 - 1:20 Obstetrics and Gynecology Journal Club; M-435, U.H.
- 12:30 - 1:20 Pathology Seminar; Subject to be Announced; Wendell Hall; 104 I.A.
- 12:30 - 1:50 Surgery Grand Rounds; A. A. Zierold, Clarence Dennis and Staff; Minneapolis General Hospital.
- 4:00 - 5:00 School of Public Health Seminar; Radiologic Findings of the Minneapolis Chest Survey; Frank J. Hill and William S. Roemmich; 113 MeS.
- 8:00 P.M. Clinical Research Club; Eustis Amphitheater, University Hospitals; Charles Williams (Medicine), W. G. Kubicek (Physiology), Business Meeting.

Tuesday, December 9

- 8:30 - 10:20 Surgery Seminar; Lyle Hay; Small Conference Room, Bldg. I., Veterans' Hospital.
- 9:00 - 9:50 Roentgenology-Pediatrics Conference; L. G. Rigler, I. McQuarrie and Staff; Eustis Amphitheater, U.H.

- 10:30 - 11:50 Surgical Pathological Conference; Lyle Hay and Nathaniel Lufkin; Veterans' Hospital.
- 12:30 - 1:20 Pathology Conference; Autopsies; Pathology Staff; 102 I.A.
- 2:00 - 2:50 Dermatology and Syphilology Conference; H. E. Michelson and Staff; Bldg. III, Veterans' Hospital.
- 3:15 - 4:20 Gynecology Chart Conference; J. L. McKelvey and Staff; Station 54, U.H.
- 3:30 - 4:20 Clinical Pathological Conference; Staff; Veterans' Hospital.
- 4:00 - 5:30 Surgery-Physiology Conference; O. H. Wangensteen and M. L. Visscher; Eustis Amphitheater, U.H.
- 5:00 - 5:50 Roentgenology Diagnosis Conference; Oscar Lipschultz and Staff of the General Hospital; M-515, U.H.

Wednesday, December 10

- 8:00 - 8:50 Surgery Journal Club; O. H. Wangensteen and Staff; M-515, U.H.
- 8:30 - 12:00 Neurology Rehabilitation and Case Conference; A. B. Baker and Joe R. Brown; Veterans' Hospital.
- 11:00 - 11:50 Pathology-Medicine-Surgery Conference; Generalized Peritonitis Due to Perforated Duodenal Ulcer; E. T. Bell, O. H. Wangensteen, C. J. Watson and Staff; Todd Amphitheater, U.H.
- 4:00 - 5:00 Infectious Disease Routes; Todd Amphitheater, General Hospital, Veterans' Hospital.

Thursday, December 11

- 8:15 - 9:00 Roentgenology-Surgical-Pathology Conference; Walter Walker and H. M. Stauffer; M-515, U.H.
- 8:30 - 10:20 Surgery Grand Rounds; Lyle Hay and Staff; Veterans' Hospital.
- 9:00 - 9:50 Medicine Case Presentation; C. J. Watson and Staff; Todd Amphitheater, U.H.
- 10:00 - 11:50 Medicine Ward Rounds; C. J. Watson and Staff; E-221, U.H.
- 10:30 - 11:50 Surgery-Radiology Conference; Daniel Fink and Lyle Hay; Veterans' Hospital.
- 11:00 - 12:00 Cancer Clinic; K. Stenstrom and D. State; Eustis Amphitheater, U.H.
- 12:00 - 12:50 Physiological Chemistry Seminar; Utilization of D-Amino Acids by Man; William Cohen; 214 M.H.
- 1:00 - 1:50 Fracture Conference; A. A. Zierold and Staff; Minneapolis General Hospital.

- 1:30 - 3:00 Pediatric Psychiatric Rounds; Reynold Jensen; 6th Floor West Wing, U.H.
- 4:30 - 5:20 Ophthalmology Ward Rounds; Erling W. Hansen and Staff; E-534, U.H.
- 5:00 - 5:50 Roentgenology Seminar; Report of the Radiological Society of North America; M-515, U.H.
- 7:00 - 8:00 Urology-Roentgenology Conference; H. M. Stauffer and George Eaves; M-515, U.H.

Friday, December 12

- 8:30 - 10:00 Neurology Grand Rounds; A. B. Baker and Staff; Station 50, U.H.
- 9:00 - 10:30 Pediatric Grand Rounds; I. McQuarrie and Staff; Eustis Amphi., U.H.
- 9:00 - 9:50 Medicine Grand Rounds; C. J. Watson and Staff; Todd Amphi., U.H.
- 10:00 - 11:50 Medicine Ward Rounds; C. J. Watson and Staff; E-221, U.H.
- 10:30 - 11:20 Medicine Grand Rounds; Staff; Veterans' Hospital.
- 10:30 - 11:50 Otolaryngology Case Studies; L. R. Boies and Staff; Out-Patient Department, U.H.
- 11:00 - 12:00 Surgery-Pediatric Conference; C. Dennis, A. V. Stoesser and Staffs; Minneapolis General Hospital.
- 11:30 - 12:50 University of Minnesota Hospitals General Staff Meeting; Heart Disease in Pregnancy; John S. Gillam; New Powell Hall Amphitheater.
- 1:00 - 1:50 Dermatology and Syphilology; Presentation of Selected Cases of the Week; H. E. Michelson and Staff; W-312, U.H.
- 1:00 - 2:50 Neurosurgery Roentgenology Conference; W. T. Peyton, Harold O. Peterson and Staff; Todd Amphitheater, U.H.
- 3:00 - 3:50 Surgery Literature Conference; Clarence Dennis and Staff; Minneapolis General Hospital.
- 4:00 - 5:00 Pediatric-Surgery Conference; I. McQuarrie and O. H. Wangensteen and Staffs; 6th Floor, Child Psychiatry Clinic, U.H.

Saturday, December 13

- 7:45 - 8:50 Orthopedics Conference; Wallace H. Cole and Staff; Station 21, U.H.
- 8:00 - 9:30 Psychiatry and Neurology Grand Rounds; Staff; Veterans' Hospital.
- 9:00 - 9:50 Surgery-Roentgenology Conference; O. H. Wangensteen, L. G. Rigler, and Staff; Todd Amphitheater, U.H.
- 9:00 - 9:50 Medicine Case Presentation; C. J. Watson and Staff; M-515, U.H.
- 10:00 - 11:50 Medicine Ward Rounds; C. J. Watson and Staff; M-515, U.H.
- 10:00 - 12:50 Obstetrics and Gynecology Grand Rounds; J. L. McKelvey and Staff; Station 44, U.H.

II. QUESTIONNAIRE OF HOSPITAL PATIENTS OPINIONS

Margaret Randall

Introduction

Health Workers are becoming aware of the fact that many health programs and services have not been as successful as far as the general public is concerned as they could have been. There are several reasons for this lack of success, but one that many workers are coming to realize as being very important is that in giving certain services and in planning and carrying out health programs the attitudes, opinions and reactions of the public have not been adequately considered, as a result people have neither participated in surveys, nor helped to finance hospitals and other health facilities to the extent that is needed for a sound health program in this country. In addition patients have been annoyed and dissatisfied with their experiences in hospitals and in doctors offices, because the people who worked there did not know and seemingly did not care what the patients desires and opinions were.

Some patients have been able to meet the situation in good humor yet will facetiously speak about the nurse who awakened them to administer a sleeping tablet, the doctor who said it would not hurt, then stuck a needle a mile long in their arms; the hospital where they were awakened at six o'clock to have their hands washed for breakfast that was served at eight. Many more patients become irritable or raise a row when their wishes are so disregarded.

Too large a proportion of the health workers are inclined to say that the patient just cannot understand and let it go at that; whereas we might well accomplish more toward achieving complete participation in public health program if we were sensitive to patients' wishes and know more about their opinions so that we could make their experiences in clinics and in hospitals as free from disagreeable affects as possible.

However, securing patients' opinions is not as easy as it sounds.

Purpose of This Study

In this paper I should like to explore some of the problems involved in securing patients' opinions and to report the results of a pilot study of patients' attitudes obtained from questionnaires sent to 400 patients discharged from four hospitals in Minneapolis and St. Paul, Minnesota.

The main aims of the pilot study were 1) to explore the possibilities of this method of approach to solving some of the problems of hospital and nursing service administration, 2) to determine from a sample study the extent of patients' complaints, and 3) to gather pertinent information relevant to the future use of the questionnaire as a regular hospital policy.

Values of Patients Opinions

One of the first considerations in setting out to secure patients' opinions is to determine the values to the nursing service director and to the hospital administrators of patients' opinions as expressed in questionnaires. In the hospital field we cannot determine to any great extent the values of such information from our past experience, because not much has been done about securing formal expressions of patients' opinions. A few hospitals have used this method from time to time. In some cases very brief questionnaires which have not been carefully phrased have been used. The attitude among hospital administrators seems to vary from scoffing rejection to an enthusiastic acceptance of patients' opinions as being of real value^{100, 103}. Some hospital administrators after having tried various methods of securing patients' opinions are still undecided as to the real value of such information⁹⁵.

Consumer Opinion Polls in Business

In the field of business we find that

some outstanding firms have spent large sums of money setting up elaborate, attractive pamphlets for consumers to record their likes and dislikes. The General Motors Corporation and the General Electric Company have both found that the consumer's reactions are of value in selecting designs for new products, in trying out and evaluating manufactured articles. American Airlines provides forms for its passengers to record their satisfactions and dissatisfactions with the company's services and have found the opinions valuable but often difficult to interpret. The Statler Hotels also have spent considerable sums of money on attractive pamphlets for securing information from the hotel guests as a part of the public relations programs. The fact that such firms continue to spend large sums of money for such an enterprise certainly indicates that they consider the information valuable.

Opinion Polls in Education

Opinion polls have been used in the field of education in many ways. The most comparable situation to the patient-opinion poll would be the rating of instructors by students. Detchen²³ reports a variety of opinions on the values of such ratings bringing out the point that there is considerable disagreement from one college to another as to the teacher traits that students consider desirable and that there is a tendency to rate the instructor too high for fear that the ratings will be used as a club by the deans. McDonough⁵¹ indicates that students' opinions tend to give more credit for good teaching rather than giving all credit for faculty research and writings. Remmers⁶⁰ who has done considerable work in this field indicates that although students should not be the sole judges of their instructors and that their opinions alone should not be used for promoting instructors, that such opinions are still of value in that they are of assistance to the student-teacher relationship. Root⁶⁴ found a decrease in adverse criticism after a year's interval between ratings of instructors which he took as evidence of improvement of the

instructors' performance. These last two points are certainly relevant to the patient-nurse relationship.

Values of Patients Opinions

The value of opinion-polls for hospital patients has some points comparable to the fields of business and education. It is obvious, for instance, that in all three fields the recipient's opinions must be evaluated by the professional personnel be they market experts, engineers, or members of allied medical groups, however that does not mean that the attitude of "Mother knows best" often assumed by many doctors and nurses towards patients' opinions and reactions is conducive to good public relations. Patients are not always right but they often do know what they want and when their wishes conflict with their real needs the professional person should not disregard these opinions but should recognize that it is then the responsibility of the trained person to understand the patients' wishes so that he or she can explain better why they cannot have what they want and thus secure cooperation from the patients. Most patients realize that they are not competent to judge medical and hospital therapeutic care, but they become impatient when we disregard all of their wishes and ideas. Their progress toward recovery can even be delayed by rules and procedures they do not understand and by personnel who are indifferent to their hopes, fears and wishes.

Another factor of this problem is that many people lose their previous feelings of dissatisfaction and annoyance if they feel that the hospital is interested enough in them to find out what their opinion is rather than giving the impression that no one cares whether they are satisfied or not. As Hamblin⁵² brings out, the opportunity to get one's gripes off his chest helps to decrease feelings of irritation. This is certainly a real value.

Another aspect of the value of securing consumers' reactions takes into ac-

count the fact that people may be willing to pay more for service if they feel that their view points and complaints are being considered. Houser²⁷ reports a very significant incident in a city in which the gas rates were in the lowest 25% of the gas rates in this country but which had electricity rates that were in the highest 25%; the major difference between the service the two companies offered in that city was that the electric company showed great concern over consumers' complaints and opinions whereas the gas company did not. An attitude poll in that city showed that the consumers considered the gas rates too high and the electric rates reasonable. In this case the objective evidence was contrary to consumers' opinion, but nevertheless it was important to know what they thought for evidently they considered the services of the electric company worth the cost. This may be of considerable concern to a hospital administrator who may be forced in view of increased costs to raise the price of the hospital services. Also even though the objective evidence points to the contrary, the very fact that a person thinks otherwise may give clues to the fact that we may not have all the evidence, for example the patient may be judging the cleanliness of the room from getting dirt on his fingers when he grasps the frame of the bed in turning over, neither the housekeeper nor the hospital administrator may have noticed that dirt when they made rounds. In addition if a lack of information or a misunderstanding is the source of the difference between what the patient thinks and what actually exists, our knowledge of what that patient thinks gives the clue as to what information must be given to correct the opinion.

The question of the value of patients' opinions cannot be dismissed without taking into account the fact that often our patients are in a good position to make valuable suggestions for improving their care that the professional staff have not even considered. We have all noticed that when nurses and doctors become patients for a few days they often see things about the care of patients they never dreamed of before. Many a schedule has been changed by a physician

returning to his professional activities after a seige in the hospital following an appendectomy.

Another value of securing patients' opinions is that the staff of a hospital where the administration shows evidence of interest in patients to the extent of going to the expense of getting their reactions will be much more interested in patients themselves than though the administration's only demonstrated interest was whether the bill was being paid. Administrative attitudes are catching. A warning should be given here that the staff will not function to their best ability if they feel that their every move is going to be recorded by the patient, reviewed by the hospital superintendent, who will then put each employee "on the carpet." In other words an injudicious use of information gained from patients can destroy the values of the whole project of securing patients' opinions.

Opinion Determinants

The subject of patients' opinion cannot be considered further without mentioning some of the factors that determine people's opinions. An opinion is usually considered as the verbal expression of an attitude⁸⁰, however it is a well-known fact that the verbal expression may be a distortion of the real convictions, feelings or attitudes, sometimes an unconscious, occasionally a purposeful distortion. A complicating factor is that it is difficult if not impossible to measure that distortion. An opinion is usually determined more by the events or things that happen to a person than by words. Opinions are often the result of emotion rather than reason⁸⁹, they are determined by self-interest and do not remain aroused for long periods unless self-interest is involved¹⁷. Rather interestingly the work with public opinion polls has shown that the people from the lower socio-economic group are the least stable in their opinions, similarly the educational level of the individual is more important only where factual knowledge gives insight into implications of opinions¹⁷. Also the factor of "stereotypes" is important in

determining an attitude as well as in expressing an opinion. It has been pointed out that the public knows its own mind in general but not in detail, that a man may know what he has liked but not why⁵⁹ which poses some problems to the person who would like to secure a specific answer to a specific question in order to have some idea of the course of action. Fortunately, attitudes are subject to change⁸⁰ so that once we know the opinion or the attitude that is being expressed we can start measures necessary (either changing the situation or making adequate explanations) so that a previously disgruntled person can become a reasonably satisfied patient.

A point sometimes not adequately considered is that people must have knowledge and convictions in order to express an opinion⁴¹. A person who has recently had the experience of being in the hospital does not know all the factors about patient care, nevertheless he does have convictions about what happened to him. However, there is a tendency on the part of the patient and even the hospital administrator to generalize from a few specific instances which must be guarded against by an adequate sampling of opinions.

Another factor as far as patients' opinions determinants is concerned is that the disease condition itself may color the patient's opinions. Oftentimes a patient who has been told that he will have to give up smoking, drinking and highly seasoned food will be more irritable and hard to please than one who has been told that the lesion on his lip is not a cancer. This has been well brought out for such conditions as tuberculosis, cancer, heart conditions and crippling³. It has not been possible to follow this point through in this study, however it should prove to be a very interesting side-light in our whole psychosomatic approach to patient care.

The Interview Method of Securing Patients Opinions

In gathering information about patients' opinions one may utilize several methods.

First of all the nurses and doctors taking care of the patients can determine by the patients' comments, requests, and manner of speaking some of the opinions that person really has. This information must be passed on to the proper person so that remedial measures can be instituted. The head nurse of the ward by making careful patient rounds several times a day can keep up with patients' attitudes and determine what administrative or supervisory measures are necessary to create favorable ones. These methods of securing opinions must always be employed so that changes can be made while the patient is still in the hospital and his recovery facilitated. An interview could be arranged after the patient goes home but would not be as useful as the interview given while the patient is still in the hospital.

There are problems connected with the interview method in either situation. First of all, if there is a difference in status between the respondent and the interviewer there will be distortion of opinions¹⁷, some patients feel they would not dare to be critical in the face-to-face situation of anything the doctor or nurse said or did. Other people may refuse to be interviewed; however, one author²⁶ finds an average of less than 10 per cent refusing to be interviewed in public opinion polling and that even on most intimate subjects the vast majority of people show little reluctance to speak their minds if they are interrogated skillfully. Cantril finds that 14 per cent of the people approached refuse to answer questions¹⁷.

This brings up another problem and that is of securing qualified interviewers. In some studies it has been reported that there is a marked difference between the results secured by an interviewer and those secured by a secret ballot. This has cast some doubt on the interview method¹⁷. However, the National Opinion Research Council and the American Institute of Public Opinion report interview reliability correlation coefficients of

from .63 to .91 with different interviewers and .79 to .97. with the same interviewer¹⁷.

The question of interviewer bias has bothered both the above polling organizations, however the directors of these programs conclude that with many interviewers the tendency toward biased answers tends to cancel out. This gives a clue to the proper approach to this method of securing opinions from patients either while they are still in the hospital or after they have gone home; namely, that it would be wise to secure the services of a regular polling agency to interview patients after they go home and to have several people reporting their observations whenever a problem arises about a patient's opinion while he is still in the hospital. The expense of hiring trained interviewers is of course a major disadvantage as far as this method is concerned.

On the other hand there are values in the interview method of securing a person's opinion, you can select the people from whom you will secure opinions so that except for the problem of refusal to answer questions it is relatively simple to secure a representative sampling of opinions. In addition you secure an immediate answer to the question which is always desirable if sources of dissatisfaction are to be investigated. Furthermore, it is possible to be fairly sure that the respondent understands the question when you are asking it face to face and also to understand the answer so that it can be properly recorded. Unfortunately, it is in this process of interpretation that the bias of the interviewer becomes prominent.

Questionnaires

A second method of securing opinions from people is by the questionnaire method, which consists of a list of questions which the respondent is asked to answer, being guided only by the accompanying instructions³⁴. The questionnaire can be given to a patient before he leaves the hospital and he can either turn it in just as he is leaving, in which case a regular box should be provided for that

purpose; or it can be mailed in after the patient has gone home. A second method for using the questionnaire technique is to send the questionnaire to the patient after he has gone home and ask that it be filled out and mailed in. In either method of using the questionnaire we find that many people are more willing to answer a question on paper than in the face-to-face situation, the bias of the interviewer can be controlled to a larger degree by a thorough scrutiny of the questions, the questionnaire takes less time than an interview, it is less expensive and if well set up can be fairly easy to tabulate.

Validity of Questionnaires

There are however many problems to consider in using questionnaires. The one that psychologists have argued most about is the question of validity--the extent to which this method actually measures the person's real opinion. No one in his or her right mind would consider the questionnaire method of measuring opinions to be in the same category as more precise scientific measuring instruments. We have a problem common to many psychological investigations that of not having a zero point or equal units on our measuring scale. It has been well pointed out that "consensus of human opinion is more variable and difficult to ascertain than a standard which is a law of inanimate nature, but that if facts of a unique nature known only to specific individuals are desired, then an oral or written questionnaire addressed to the persons knowing these facts is the only method of approach"⁴²:pp 34-35. It is a rather interesting commentary that the most difficult thing to measure must be measured by the least precise instrument.

One method for validating the questionnaire is to correlate the results obtained in that method with objective behavior⁷⁹, but of course one could argue that neither the expressed opinions nor the behavior are always indicative of an individual's real attitude.

In the study to be reported it was felt that if the letter which accompanied the questionnaire stated frankly that we realized the situation in hospitals today was not desirable and that we needed the help of patients to know where to start to make improvements that the respondents would be less hesitant to make critical comments. Other than that we assumed that what the patient wrote on his questionnaire was his true opinion of the subject.

Reliability of Questionnaires

The question of the reliability of the questionnaire--the accuracy of the results of this measuring device--also becomes a problem, for if people gave different answers each time they filled out the form, how are we to know which is their real opinion. This is a problem that in the field of attitudes and opinions is considerably complicated by the fact that people do change their opinions and the time interval between two checkings of the form may include some experiences that actually changed a person's mind which would lower the reliability score, even though in this case it would not be due to an unreliable measuring scale. The reliability of questionnaires has been determined by having the respondent re-check the form at a later time, by using alternate forms, by comparing the answers to two questions that ask for the same information, or by using the Spearman-Brown Split-half formula. As one might expect we find that reliability coefficients for the questionnaire method have been reported as high as .93 with the Spearman-Brown Split-half formula by Corey²⁰. Guthrie³¹ found a correlation coefficient of .89 on re-ratings of teachers at a one month interval. McNemar reports that "reliability coefficients computed by the form vs. form method for a variety of attitudes are usually between .70 and .90 with typical values in the low .80's" 53:p. 301 and to continue that for the general attitude scales "dozens of reliability coefficients reported tend to have a median value of about .70 with values ranging down to .70 " An attempt was made to approach the problem of reliability by

asking many questions and by approaching similar problems from different angles, for example: question #1 asks "Was the schedule of the hospital so arranged that you could generally get enough rest? (consider the time you were awakened; put to bed, and the arrangement of the day's activities)" and question #13 asks "Were you awakened too early in the morning?" In a tabulation of the answers to these two questions for a random sample of 25 patients the degree of consistency as measured by the tetrachoric correlation coefficient was .60. Inasmuch as one of the questions is more inclusive than the other, this is not a real test of the reliability of this questionnaire.

Sampling Problems of Questionnaire Returns

One of the major problems of using the questionnaire method is that of securing a representative sampling of opinions. In other words are the people who fill out the forms and send them in typical of the whole group or is there a major difference between the respondents and the non-respondents? Blankenship reports that consumer opinion returns do not commonly exceed 15 per cent of the total group and that the first returns are usually from those of higher interest levels than later ones⁹.

Topps conducted an experiment to determine how many follow-up letters were necessary to secure a 100 per cent return on a questionnaire sent to professors and administrative officers of colleges and found that six follow-up letters were needed. The questionnaire itself produced a 52.6 per cent reply and produced the same conclusions as came from the entire group; however the total return did increase the list of practical suggestions⁸³. In another study of returns⁸⁵ he found that the response was better if the follow-up letters were mailed so that the respondent received them at the end of the week. The "pulling power" of various letters was compared and the second follow-up letter which contained a story about people who

were supposed to bring wine to put into a wine cask for a celebration--but each one thinking he could get by poured in water instead--brought the highest response. Stanton⁷⁶ found a significant difference between a group of teachers who did not respond until a follow-up card was sent and those who responded to the questionnaire itself. Shuttleworth⁷² put a 25¢ coin in some of the questionnaires and found that 51 per cent of those receiving the coin replied, whereas only 19 per cent of those not receiving a coin responded. A detailed analysis of the returns showed no significant differences in the types of answers. Reus⁶² had knowledge of the background of the entire group of former students to whom he sent questionnaires from consulting the registrar's records, and found that the respondents were a) superior on intelligence test scores, b) had been in school longer, c) came from rural areas, d) had different family backgrounds (more highly educated parents), and e) had participated more in school activities. He concluded that there is a tendency for bias in questionnaire returns unless there is a substantial return. Pace⁵⁸ found that the early returns came from the professional groups, from people who were in the same types of jobs as their University specialization, from men in a high economic status and women of cultural status, from people who were satisfied with their jobs. Unimportant factors were sex, age and year of entrance to college. The non-returns were heavily weighted with students who left college before completing nine quarters of work. Toops⁸⁵ gives the following suggestions for securing adequate returns, 1) topic should be of interest to the respondent, 2) send to people who will feel a personal obligation to answer, 3) employ a vigorous follow-up, 4) use good question writing technique, 5) circulate in those sections where replying is a custom--interestingly enough there is a regional difference, 6) make the questionnaire easy to answer, 7) use sensible questions, 8) apply incidental pressures, 9) send early in school year (he was referring largely to educational questionnaires, however many of the points are generally applicable), and 10) don't worry about the length of the questionnaire.

The National Educational Research Division's Analysis of Questionnaires⁵⁶ indicates that if a reply of more than 50 per cent is secured the factor of selection of the sample is exaggerated. In this study it was decided to send two follow-up letters in an attempt to secure an 80 per cent return.

Waiver of Signature

A related problem is that of waiving the signature. It is a question as to how much this would influence not only the validity of the opinions but also the percentage of returns. Corey²⁰ in a study of attitudes on cheating matched the signed and unsigned forms from the same students by pin pricks discernible only when held to the light and found a correlation of $.85 \pm .02$ and concluded that the invalidating effects of requiring a signature may have been exaggerated. However Olson⁵⁷ found that students filling out the Woodworth-Personal Data Sheet will report significantly more symptoms when they do not need to sign than when they do. The difference was 5.2 P.E. 1.04. Maller⁴⁹ concluded that the unsigned situation was more favorable for securing natural responses.

In the study to be reported the patient was permitted to exercise choice in signing the questionnaires. It was found that 75 per cent of the total group did sign, but that 82 per cent of the patients from the private hospitals signed their forms, whereas 68 per cent of those from the tax-supported hospitals signed. Twelve of the fifteen dissatisfied patients did sign the questionnaire.

Phrasing the Questions

One of the crucial problems of using the questionnaire method to secure information about patients' opinions is the actual form of the question itself. It is quite obvious that the questions must not be too involved, they must be easy to understand, therefore definitions must be given wherever necessary

and such relative terms as "much" or "little" should be avoided. They must not be ambiguous otherwise different interpretations will lead to recorded differences in opinion which may or may not be real. It is important that one avoid stereotype phrases which may influence the response, and imperative that the phraseology be free from bias or emotion. A very good suggestion is given by Blankenship⁹ for making the question specific by using positive phrasing and making the question psychologically concrete--for example, rather than asking a man how many razor blades he used last year, asking how often he changes his razor blade really concretizes the question for him. Blankenship⁸ emphasizes the importance of adapting the questions to the persons who will be answering them, and Cantril¹⁷ brings out the importance of considering the fact that the suggestibility of the wording of the question depends on whether the person's mental context is solidly structured. Rugg⁶⁹ reports an interesting experiment in question wording. Twenty-one per cent of the respondents said that the United States "should allow" speeches against democracy, whereas 39 per cent said that the United States "should not forbid" speeches against democracy.

Form of the Question

Another factor of this problem is the form of the question. There are many possibilities such as the open question, the dichotomous question, the multiple choice or check list type of question, and the series of questions on a continuum such as a rating scale or a graphic thermometer. In addition there are some questions for which an answer of "No Opinion" must be possible.

First of all the "open question" or free response question permits the patient to phrase his answer in his own words which may result in evasion by substituting a very generalized response, or in omitting important data particularly in answer to "why" questions¹⁶. Rugg and Cantril⁶⁸ found that 15 per cent of the free answer questions were answered by "no opinion". Roslow, Werefek and Corby⁶⁶

found that the free response question frequently elicits incorrect information. But probably the most obvious difficulty is that free responses result in such a wide variety of information that it becomes very difficult to analyze the material.

The dichotomous or "yes" or "no" question is often used as it is simple to tabulate, however it does have some weaknesses. Ghiselli²⁷ found fewer and less favorable responses with this type of question. Heinsleman³⁴ reports that one of the biggest difficulties is that the respondent cannot qualify his answer. However, George Gallup is reported to defend this form strongly as he insists that it is the usual choice which man must make⁶⁸.

The multiple choice or check list type of question has become quite popular as it makes qualified answers possible and also is very easy to tabulate. Roper has been reported to prefer this form as he has secured better predictions on a four point scale⁶⁸. However it is necessary that all possible choices or alternatives be included. In addition it is wise not to put the possible choice in the same order--from good to bad or vice versa--as it tends to set up a habit of responding.

The major difference between the check list or multiple choice type of question and the rating scale or graphic thermometer is that the danger of assuming equal distances between the possible answers arises and the error or central tendency can become more pronounced with the latter method. This method is not recommended for attitude polling unless each response to be checked can be evaluated by agreement among a group of raters such as Thurstone used⁸⁰.

In all the above forms of questions the error of "halo" is present as most people tend to be general rather than specific in their opinions; however this source of error can be minimized by separating like questions so that the answer to one will not have as marked an effect on the mental-set for answering the next question.

The Use of a Questionnaire in Four Hospitals

Selection of Items

The first problem considered in this study was to determine what the subject matter of the question on the questionnaire should be. This problem was approached from two angles, first of all to secure information regarding the specific things about their hospital experience that annoyed patients the most, and secondly to determine those aspects of their hospital experience on which the patients were competent to give an opinion.

In order to secure information about sources of patients' annoyances fourteen patients in two hospitals, one a private hospital and one a tax supported hospital, were interviewed. Each patient was asked what he expected from the hospital, what he thought was most important from his standpoint, and what irritated him most during his hospital stay. These patients were convalescing or were patients suffering from a condition that required hospitalization although they were not too ill to be interviewed.

In order to be sure that no aspect of the problem was being omitted eighteen nurses, either graduates who had completed their student experience or students of the degree curriculum at the University of Minnesota School of Nursing who had completed all their hospital experience were asked to record in the order of importance those things that patients had complained about to them or that they (if they had ever been patients) found most disturbing. These comments were then tabulated according to their rank order and frequency. In all there were 69 different areas of comments, most of which however could be classified under the following headings: 1) the schedule of the hospital not being suitable for rest; 2) the hospital not being clean; 3) not being given information about home care; 4) no orientation to the hospital; 5) undesirable attitudes of the housekeeping personnel; 6) noise; 7) uncomfortable

surroundings; 8) poor lighting; 9) room unattractive; 10) disagreeable hospital odors; 11) food that was not liked, or unattractively served or not hot; 12) visiting regulations that were unsatisfactory; 13) doctors not answering questions, not giving satisfactory care, or not being considerate; 14) not enough supplies; 15) nurses not planning their work; 16) not enough nurses; 17) nurses not being interested, 18) nurses not being neat, skillful, prompt, thorough, or dependable, 19) nurses not giving a feeling of confidence; and 20) being disturbed by other patients.

First Form of Questionnaire

These categories were used in setting up the first questionnaire. The rating scale type of questionnaire was tried out for the first attempt, the idea being that it would be easier to score particularly if point values could be assigned to each step of the rating scale. After a study of this form and a reviewal of the work of Thurstone⁷⁹ and McNemar⁵² it was felt that it would be too difficult and time consuming to test the statements carefully enough to assign a numerical weighting for each point on the scale. In addition we questioned the use of quantitative analysis to that degree when a measuring device which has no zero point and also unequal units on the continuum is being used.

Revised Form of Questionnaire

The revised form of the questionnaire was in the form of "yes" or "no" checking boxes for all but four of the questions which included an additional "no opinion" box. This form was reviewed by the hospital administrators and nursing service directors in the four hospitals in which the questionnaire was to be used. At their request items regarding the cost of hospital care, possession of hospital insurance, preference of having one or

Figure #1

UNIVERSITY OF MINNESOTA
College of Science, Literature, and the Arts
Minneapolis 14

Department of Psychology

January 1947

Dear Patient:

We are interested in "taking stock" of our present situation and making some plans for the future. As you know, hospitals, like all other institutions, have had a difficult time during the war and post-war period. We have been short of nurses, doctors, maids, orderlies, and supplies, but now we want to start planning how we can meet the needs of our patients better in the days to come. We need your help.

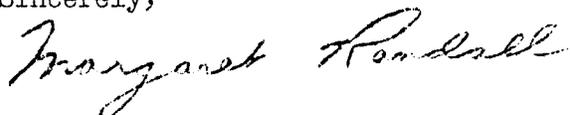
There are some things we may do, or on the other hand neglect to do, that may slow up your recovery or annoy you more than we realize -- only you can tell us what these particular things are. We have interviewed patients and hospital workers about this problem and from their ideas have developed the enclosed list of questions. If you will answer these questions, put them in the enclosed envelope, and mail them to us, your answers and suggestions will be a great help to us in making plans.

This questionnaire is the result of cooperation between your hospital and the University of Minnesota, Department of Psychology. This department will tabulate the results and turn them over to the hospital to help the various departments of the hospital. No department or person will "get in dutch" as a result of this study. The only identifying marks are on the envelopes, which will be checked with a list of patients to whom the questionnaires are sent before the questionnaire itself is opened, so no one will know which patient makes which suggestion (unless you wish to sign the questionnaire yourself), so please be frank.

If you are not able to answer these questions yourself, because you are too young or not well enough to do so, please tell your answers to a relative who can fill it out for you or help you fill it out.

Thank you very much for your interest and help.

Sincerely,



Margaret Randall
c/o Prof. D. G. Paterson
Department of Psychology
University of Minnesota
Minneapolis 14, Minnesota

Reactions to Hospital Service

You will notice that there is a "yes" or "no" space provided after each question. If you feel that the statement is GENERALLY TRUE MOST OF THE TIME, put a check mark in the SPACE marked "yes." If you believe that it is NOT TRUE MOST OF THE TIME, put a check in the space marked "no." There is a space for comments after each question for your suggestions.

Here is an example for you:

Did you feel that the coffee was hot enough when it reached you? Yes No

Comment:

It was cold on the Sunday morning breakfast trays, but fine the rest of the time.

HERE ARE YOUR QUESTIONS AND PLEASE BE FRANK

1. Was the schedule of the hospital so arranged that you could generally get enough rest? (Consider the time you were awakened, put to bed, and arrangement of the day's activities.)

Yes No

Comment:

2. Was the room usually kept clean?

Yes No

Comment:

3. Did the nurses give you good ideas about taking care of yourself after you went home?

Yes No

Comment:

4. Was the hospital schedule explained to you adequately (so that you knew what was coming and what would be expected of you)?

Yes No

Comment:

5. In light of present-day costs and the various services rendered do you consider that your hospital costs were reasonable?

Yes No

Comment:

6. Were the people who cleaned the floors and furniture of your room tactful (not talking too much, etc.)?

Yes No

Comment:

7. Was the hospital quiet enough so that you could rest when you wanted to rest?

Yes No

Comment:

8. Did the room seem comfortable to you?

Yes No

Comment:

9. Did you receive the kind of food you liked (if your diet permitted)? Yes No
Comment:

10. Did the interns and residents (the doctors in white uniforms) answer questions about your illness so that you could understand? Yes No
Comment:

11. Did the room seem attractive (colorful, cheerful, pleasant) to you? Yes No
Comment:

12. Was your food attractively served? Yes No
Comment:

13. Were you awakened too early in the morning? Yes No
Comment:

14. Did the lighting seem adequate for your needs? Yes No
Comment:

15. Was the food hot by the time it reached you? Yes No
Comment:

16. Were you disturbed by so-called "hospital smells"? Yes No
Comment:

17. Were the visiting regulations satisfactory? Yes No
Comment:

18. Did you have as much nursing care as you needed? Yes No
Comment:

19. Do you have hospital insurance (Blue Cross or other policies)? Yes No
Comment:

20. Was the attention of the intern or resident (the doctors in white uniforms) who gave you most of your care satisfactory? Yes No
Comment:

You may not have had the experience necessary to answer the following questions, if so please indicate "no opinion." If you have had the experience, please answer "Yes" or "No" as you have before.

21. Did there seem to be enough supplies and equipment? Yes No No Opinion
 Comment:

22. Did the nurses plan their work so that they did not have to stop what they were doing to get things they needed? Yes No No Opinion
 Comment:

23. If you did not have a special nurse would you have preferred to have one nurse rather than many assigned to give you most of your nursing care during a given day? Yes No No Opinion
 Comment:

24. If you had experience with some of the special departments of the hospital, did the services they gave seem satisfactory to you? Yes No No Opinion

Social Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Laboratory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
X-ray	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dentistry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Physical Therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Library	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

In the following questions, place a check mark by the statement that best answers the question.

25. Do you feel that the nurses were really interested in you as a person? _____

a. Most of the nurses seemed interested. _____

b. Only one nurse did not seem to care how I felt. _____

c. All of the nurses were very interested. _____

d. Most of the nurses did not seem to be really interested in me. _____

Comment: _____

26. Did the nurses seem to you to be neat in their appearance? _____

a. All of the nurses were neat at all times. _____

b. One or two nurses seemed somewhat careless about their appearance. _____

c. Most of the nurses were neat except that their hair was not well groomed. _____

d. Most of the nurses were not neat in their appearance. _____

e. Most of the nurses were neat. _____

Comment: _____

27. Do you feel that the nurses were skillful in taking care of you (not hurting you more than necessary)? _____

a. Some of the younger nurses were not very skillful. _____

b. One or two nurses seemed very clumsy. _____

c. All of the nurses seemed to do their procedures with skill. _____

d. Most of the nurses did not seem skillful to me. _____

e. Most of the nurses seemed skillful. _____

Comment: _____

28. Were the nurses prompt in doing things for you (answering your light signal, etc.)? _____
- a. I had to wait a long time most of the time I called for a nurse. _____
 - b. Someone came soon after I called but I still had to wait for what I wanted. _____
 - c. Most of the time the nurses took care of my requests promptly. _____
 - d. Usually I did not have to wait an unreasonable length of time. _____

Comment:

29. Did the nurses seem to you to be thorough? _____
- a. One or two nurses sometimes slipped up in giving good back rubs and baths. _____
 - b. Most of the nurses seemed to be as thorough as time permitted them to be. _____
 - c. The nurses gave very thorough care. _____
 - d. Most of the nurses did not give complete and thorough care. _____

Comment:

30. Did you have confidence in the nurses? _____
- a. Most of the nurses seemed to know what they were doing and gave me a feeling of confidence in their care. _____
 - b. One or two nurses were such that I did not have confidence in them. _____
 - c. I had complete confidence in the nurses who took care of me. _____
 - d. I did not have confidence in the nurses because:
 - They seemed too young. _____
 - They did not seem to know what to do. _____
 - They seemed careless. _____

Comment:

31. Do you feel that the nurses were dependable? _____
- a. Most of the nurses were dependable (brought me things I asked for, delivered messages, did what they said they would do.) _____
 - b. Most of the nurses seemed to want to be dependable but were prevented (by lack of time) from doing what they said they would do. _____
 - c. One or two nurses seldom did what I asked them to do. _____
 - d. Most of the nurses were reasonably dependable. _____

Comment:

32. Was the intern and resident (the doctors in white uniforms who gave you most of your care) considerate? _____
- a. The doctors seemed to understand how I felt. _____
 - b. One of the doctors seemed to have no idea about how I felt. _____
 - c. They seemed to be understanding but were in such a hurry I hated to bother them. _____

Comment:

33. Did you have special graduate nurses hired to take care of you at any time you were in the hospital? If so, did you have: Yes No
- a. One graduate nurse hired to take care of only me for eight hours of the day. _____
 - b. A graduate nurse took care of me and one other patient eight hours of the day. _____
 - c. Complete care (for full 24 hours) by special graduate nurses hired to take care of me. _____
 - d. Graduate nurses took care of me and one other patient for full 24 hours. _____
 - e. Special nurses for part of time I was in the hospital. _____

Comment:

34. Were there other patients in the room? If so did the noise from other patients in the room bother you? Yes No
- a. Noise from other patients kept me awake. _____
 - b. Worried about the condition of other patients. _____
 - c. Seldom disturbed by other patients in the room. _____
 - d. Enjoyed other patients in the room. _____

Comment:

35. In general do you feel that you had good hospital care? Yes No

36. Are you a man or woman? Man Woman

Note: Please return this expression of your opinion to Room 114, Department of Psychology, University of Minnesota, Minneapolis 14, Minnesota, in the enclosed self-addressed stamped envelope.

It is not necessary to sign this but you may if you wish.

Signature _____

Thank you very much for your cooperation.

many nurses, and the amount of special nursing service were added to the questionnaire. These items added information of value to the staff and also took into consideration their experience with "gripe letters."

This form was carefully reviewed from the standpoint of difficulty of answering and it was thought that some of the questions could be answered more easily by patients if they were given choices to check rather than being forced into a "yes" or "no" decision. Four patients who checked the form reported no difficulties, however the next revision set up nine of the questions in a choice form. In addition a question asking whether the patient was generally satisfied or dissatisfied with their hospital care was included for comparison purposes. This form, after tried out on three private and three ward patients, was printed as a contribution of the University of Minnesota Hospitals to this project.

Distribution of Questionnaires

The four hospitals selected for the study were the University of Minnesota Hospitals, the Minneapolis General Hospital (both tax supported), the St. Barnabas Hospital in Minneapolis, and the Charles T. Miller Hospital in St. Paul. A sample week in February was chosen and the questionnaires were mailed to the homes of the first 100 patients discharged that week in all except the Minneapolis General Hospital. In that hospital, the Administrator and the Director of the Nursing Service felt that we would secure a better response from the patients there, if the head nurses distributed the questionnaires and explained what was wanted. A letter of explanation and also a stamped return envelope accompanied all the questionnaires. This letter Figure #1 was signed by the Administrators for the private hospitals to avoid any possibilities of law suits, but for the other two hospitals the letter was signed by the student doing the project under the department of

psychology at the University of Minnesota. The mailed questionnaires were sent to arrive on a Friday as suggested by Toops⁸⁴.

Returns From Questionnaires

Ten days later the first follow-up letter was mailed (Figure #3) to the patients who had not returned their questionnaires, and ten days after that the second follow-up letter with a copy of the questionnaire and a stamped return envelope was mailed to the people who had not yet responded. (Figure #4) This check was made possible by numbering the return envelopes and by having a check list of names, addresses, and numbers. The check was made however before the envelope was opened to protect the patients' anonymity if they had not wished to sign the questionnaire.

The returns from the questionnaire, and from the first and second follow-up letters are listed in Table #1.

Tabulation of Questionnaires

The questionnaires were tabulated first by separating the patients who were generally satisfied from those who were dissatisfied. Inasmuch as the number of dissatisfied patients was very small (15 out of the 392 questionnaires sent out, 5.2 per cent of those who returned their questionnaires) no further tabulations were done for that group. Although 94.8% of the patients considered that in general they had good care, they did have some complaints, these complaints were tabulated for the 4 hospitals for the 16 questions that showed enough dissatisfied answers to warrant inclusion and also to show comparisons among the hospitals. See Table #2. The number of complaints for the remainder of the questions are all lower than the ones recorded in this table so are too low to be of significance.

Figure #3

UNIVERSITY OF MINNESOTA
College of Science, Literature, and the Arts
Minneapolis 14

Department of Psychology

January 1947

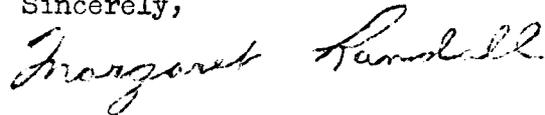
Dear Patient:

May we have ten minutes of your time? A few days ago you received some questions which the hospital and the University of Minnesota asked you to answer. So far some of the questionnaires have been returned to us, but there are still some "among the missing." If you have mailed yours, this letter will serve to convince you that we are eager to have the information and you can put this letter in the waste basket. If you have not mailed in your copy, won't you sit down for a few minutes now and check the answers and send it to us?

This whole situation reminds me of a story: "In a certain village in the United States, Mr. Peterson's house caught fire. His neighbors saw the blaze, but they knew that there was a fire department to take care of such things. Mr. Anderson was in the midst of planing a board so he said to himself, 'Let the fire department help him.' Mr. Jones had to get downtown for an appointment, so he said he couldn't take time and anyway George Anderson would help Mr. Peterson. Mr. Doolittle was reading an interesting book and didn't want to be bothered. Before the fire department arrived the house was badly burned and a few sparks had blown over onto Mr. Doolittle's house."

We are not in danger of burning down and we do have a health department to check on us, but we do need your interest and help in order to have more accurate information so that we can do our part in planning better health care for the citizens of this community.

Sincerely,



Margaret Randall
c/o Prof. D. G. Paterson
Department of Psychology
University of Minnesota
Minneapolis 14, Minnesota

Figure #4

UNIVERSITY OF MINNESOTA
College of Science, Literature, and the Arts
Minneapolis 14

Department of Psychology

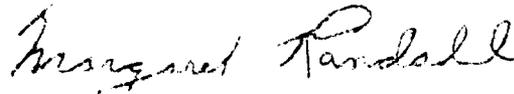
Dear Patient:

We really do want your suggestions and answers to our questions!

Perhaps we already have them, and if so this letter will tell you that we are very interested in the answers we have received so far. Many of the suggestions will prove to be very helpful, and we are getting ideas that may make our future patients' stay with us more effective and pleasant.

If we do not have your suggestions yet, we do need them in order to have an accurate report. Some of you may have misplaced your first questionnaire, so we are enclosing another one (checking time about 10 minutes) for you to check and return to us.

Sincerely,



Margaret Randall
c/o Prof. D. G. Paterson
Department of Psychology
University of Minnesota
Minneapolis 14, Minnesota

TABLE #1

Returns From Questionnaire Sent to 400 Hospital Patients

Hosp-ital	Number of Ques-tion-naires sent	Number Return-ed First Letter	Per Cent Re-turned First Letter	Number Dis-satis-fied First Letter	Number Return-ed After First Follow-up Letter	Per cent Return-ed First Follow-up	Number Dis-satis-fied First Follow-up	Number Return-ed After 2nd Follow-up	Per cent Returned After 2nd Follow up	Number Dis-satis-fied	Total Return	Total Per cent Return	Number Tab-ulated	Total Num-ber Dis-satis-fied
A	100	35	35%	0	32	32%	2	13	13%	2	80	80%	79	4
B	100	36	36%	4	25	25%	1	9	9%	0	70	70%	68	5
C	100*	33	33%	0	36	36%	2	13	13%	2	82	82%	80	4
D	92**	32	34%	0	21	23%	1	9	9%	1	62	66%	61	2
Total For 4 Hosp-itals	392	136	35%	4	114	29%	6	44	11%	5	294	75%	288***	15

* 2 of these returned - wrong address

** 6 of these returned - wrong address

*** 6 could not be tabulated - insufficient checking

TABLE #2

Per Cent Patients Who Had Specific Complaints Even Though Generally Satisfied With Hospital Care

Note: If less than 5% of the patients in any hospital registered complaints, the percentages are not included in this table except for comparison purposes.

	Hospital A	Hospital B	Hospital C	Hospital D
1. No ideas about home care	42.6%	33.3%	51.2%	23.7%
2. No explanation of hospital schedule	30.6%	33.3%	28.2%	16.9%
3. Awakened too early	14.6%	42.8%	15.3%	35.7%
4. Waiting to have light answered	13.3%	6.3%	6.3%	5. %
5. Costs not reasonable	12. %	36.5%	*	*
6. Odors disturbing	12. %	9.5%	9.5%	11.8%
7. Food not hot	10.6%	23.4%	19.2%	13.5%
8. Nurses not planning work	10.6%	4.7%	3.8%	7.1%
9. Lighting inadequate	9.3%	4.7%	2.5%	11.8%
10. Noise	9.3%	12.6%	14.1%	7.1%
11. Visiting rules not satisfactory	8. %	7.9%	16.6%	22. %
12. Disturbed by other patients	5.3%	6.3%	14.1%	15.2%
13. Doctors not answering questions	6.6%	6.3%	11.5%	7.1%
14. Room not attractive	6.6%	12.6%	9.5%	8.4%
15. Disliked food	1.3%	14.2%	10.2%	13.5%
16. Schedule not arranged for rest	1.3%	7.9%	2.5%	10.1%

*Tax supported hospitals

The significance of the differences in percentages was computed for Hospitals A and B (the two private hospitals) and for Hospitals C and D (the two tax-supported hospitals). The significance ratios go to the .1% levels of confidence. We

find that 4 of the 16 differences between Hospitals A and B and 3 of the 16 differences between Hospitals C and D are significant to the 5% level of confidence or more.

SIGNIFICANCE OF DIFFERENCES IN PERCENTAGES OF
COMPLAINTS BETWEEN HOSPITALS A AND B *

	Significance Ratio
1. No ideas about home care Hospital A, 42.6% complained Hospital B, 33.3% complained	1.1
2. No explanation of hospital schedule Hospital A, 30.6% complained Hospital B, 33.3% complained	.3
3. Waiting to have light answered Hospital A, 13.3% complained Hospital B, 6.3% complained	1.4
4. Costs not reasonable Hospital A, 12% complained Hospital B, 36.5% complained	3.3
5. Odors disturbing Hospital A, 12% complained Hospital B, 9.5% complained	.47
6. Food not hot Hospital A, 10.6% complained Hospital B, 23.4% complained	2.
7. Nurses not planning work Hospital A, 10.6% complained Hospital B, 4.7% complained	1.3
8. Lighting inadequate Hospital A, 9.3% complained Hospital B, 4.7% complained	1.09
9. Noise Hospital A, 9.3% complained Hospital B, 12.6% complained	.51

* Private Hospitals

** Edgerton, H. A., and Paterson, D. G. Table of Standard Errors and Probable Errors of Percentages for Varying Numbers of Cases. J. Appl. Psychol. 1926, 10:378-391.

	Significance Ratio
10. Visiting rules not satisfactory Hospital A, 8% complained Hospital B, 7.9% complained	.1% difference not significant
11. Awakened too early Hospital A, 14.6% complained Hospital B, 42.8% complained	3.8
12. Disturbed by other patients Hospital A, 5.3% complained Hospital B, 6.3 complained	.1% difference not significant
13. Doctors not answering questions Hospital A, 6.6% complained Hospital B, 6.3% complained	.3% difference not significant
14. Room not attractive Hospital A, 6.6% complained Hospital B, 12.6% complained	1.2
15. Disliked food Hospital A, 1.3% complained Hospital B, 14.2% complained	2.8
16. Schedule not arranged for rest Hospital A, 1.3% complained Hospital B, 7.9% complained	1.8

SIGNIFICANCE OF DIFFERENCES IN PERCENTAGES OF
COMPLAINTS BETWEEN HOSPITALS C and D *

	Significance Ratio
1. No ideas about home care Hospital C, 51.2% complained Hospital D, 23.7% complained	3.5 **
2. No explanation of hospital schedule Hospital C, 28.2% complained Hospital D, 16.9% complained	1.6
3. Waiting to have light answered Hospital C, 6.3% complained Hospital D, 5% complained	.05
4. Cost not reasonable	Not computed for the public supported hospitals

* Public Supported Hospitals

** Edgerton, H.A., and Paterson, D.G. Table of Standard Errors and Probable Errors of Percentages for Varying Numbers of Cases. J. Appl. Psychol. 1926, 10:378-391. Based on 59 cases satisfied patients from Hospital D and 78 Satisfied patients from Hospital C.

	Significance Ratio
5. Odors disturbing Hospital C, 9.5% complained Hospital D, 11.8% complained	.3
6. Food not hot Hospital C, 19.2% complained Hospital D, 13.5% complained	.95
7. Nurses not planning their work Hospital C, 3.8% complained Hospital D, 7.1% complained	1.1
8. Lighting inadequate Hospital C, 2.5% complained Hospital D, 11.8% complained	2.1
9. Noise Hospital C, 14.1% complained Hospital D, 7.1% complained	1.4
10. Visiting rules not satisfactory Hospital C, 16.6% complained Hospital D, 22% complained	.8
11. Awakened too early Hospital C, 15.3% complained Hospital D, 35.7% complained	2.08
12. Disturbed by other patients Hospital C, 14.1% complained Hospital D, 15.2% complained	.18
13. Doctors not answering questions Hospital C, 11.5% complained Hospital D, 7.1% complained	.91
14. Room not attractive Hospital C, 9.5% complained Hospital D, 8.4% complained	.23
15. Disliked food Hospital C, 10.2% complained Hospital D, 13.5% complained	.6
16. Schedule not arranged for rest Hospital C, 2.5% complained Hospital D, 10.1% complained	1.8

Conclusions From
This Study

Number of
Satisfied
Patients

One of the most startling conclusions to the people who participated in the study is the low percentage of dissatisfied patients. To be sure we do not know how the 25 per cent who did not respond feel, but other studies^{56, 86} have shown that with return this high there is no significant difference between the responding and not-responding group. This does not mean of course that we can sit back, pat ourselves on the back and disregard all future complaints.

Complaints About
Not Receiving Ideas
For Home Care.

One rather startling complaint of the generally satisfied patients is revealed in the high percentages of patients (Hospital A 42.6 per cent, Hospital B 33.3 per cent, Hospital C 51.2 per cent, and Hospital D 23.7 per cent) who did not receive information about taking care of themselves after going home. Although some of the doctors and nurses may have assumed rightly that the patient knew how to take care of himself, the fact remains the patient did not record that he received instructions which he would have done if the doctor or nurse had even started to give instructions to find out if the patient did know. This is a striking bit of evidence of the failure of nurses and doctors to seize opportunities for health teaching as well as showing a lack of interest in the patient as a person who will continue to exist and have health problems related to his illness even after he leaves the hospital. It could show too a lack of integrated planning with allied health agencies for follow-up care of the sick.

Complaints on not Having the
Hospital Schedule Explained

The high percentages of patients who did not have the hospital schedule explained to them (Hospital A 30.6 per cent, Hospital B 33.3 per cent, Hospital C 28.2 per cent, Hospital D 16.9 per cent) can readily be seen as one point on which we might get busy and start to remedy with the assurance that our showing interest enough in the patient to explain "what it is all about" will certainly minimize bewilderment and apprehension which make the hospital stay more disagreeable than it need be.

However one reason that hospital personnel have not instructed patients in taking care of themselves after they go home and have not explained the routine of the hospital adequately when the patient is admitted may be because both of those activities take time and hospital staffs are inadequate so that there may not have been sufficient time for these activities. Another very interesting conclusion to these figures was made by one of the hospital administrators who stated that he felt that one of the biggest arguments for having well qualified professional nurses doing bedside care was that they were competent to give instructions about home care and they understand more of the "whys" of treatments and hospital routines so that they could give more adequate explanations. One of the reasons this figure is high may be that we are using larger numbers of non-professional workers in the hospital than heretofore. However, I suspect that one of the major explanations is that the doctors leave patient-teaching and explaining to the nurses and the nurses think the doctors are taking care of it.

Complaints on Being
Awakened too Early

The high significance ratios in the two tables of significance for the question on being awakened too early aroused my interest sufficiently to check up on

the time of waking the patients in the four hospitals; in Hospital A it is 7 a.m., in Hospital B it is 6 a.m. for wards, 7 a.m. for single rooms. In this case the objective evidence does not support the patients' opinions. For Hospital C the waking time is 6:30 a.m., for Hospital D it is 5:30 a.m., and here the objective evidence bears out the significance in difference as far as patients' opinions are concerned. The question of patients coming from rural or urban areas may enter into this picture, as a large per cent of the patients in one of the hospitals do come from rural areas; however the point can certainly be made that we could make some of our patients a great deal happier if we rearranged the work schedules so that patients can sleep longer in the morning.

It is rather interesting that the percentages of patients who complained about being awakened too early are so much higher than the percentages for those who complained that the schedule was not arranged for rest (consider the time you were awakened, etc.). This is particularly important when the sample coefficient for these questions was .60.

Sex Differences

One opinion that nurses have long held was born out by the results of this study. Ten of the dissatisfied patients were women, three were men, and two did not indicate their sex. Nurses have always said that women patients are harder to please than men, so it appears that if we are going to further lower the number of dissatisfied patients, we will need to concentrate our efforts on the women patients.

Evidence of Patients Interests in the Subject

Another conclusion that seems justified is that there appears to be enough interest among the consumers of hospital service to warrant a project of this sort being done. Although there was some variation in the returns from the four hospitals; nevertheless a 66 per cent to 82 per cent return is evidence of interest. I believe another

evidence of interest is shown by the comments made by the patients; fifty-two of the eighty-two patients from Hospital C and fifty-four of the eighty patients from Hospital A made comments on their questionnaires. A few of these comments extended to the point of two and three page letters, some describing disagreeable experiences and some expressing specific points of appreciation. Two patients of the entire group said, "Thanks for the opportunity to express my opinion."

Enough Nursing Care

One result of this study that proved to be very interesting is that very few patients recorded the opinion that they did not have enough nursing care. Nine of the 273 (3.3 per cent) satisfied patients checked "No" for the question. "Do you feel that you had as much nursing care as you needed?" This was quite a surprise in view of the present shortage of the hospital nursing staff. In pursuing this topic further we find that 7.7 per cent of the patients stated that they had to wait a long time whenever they called for a nurse. This percentage is a bit higher and proves to have a significance ratio of 3.1, still it does not seem inline with the acute shortage. Shortages show up in patients having to wait for care and also in the thoroughness of the care the nurse gives while she is with the patient. We find that none of the satisfied patients checked the statement that "most of the nurses did not give thorough care." but that 125 (45 per cent) of the patients checked the statement that "most of the nurses seemed to be as thorough as time permitted them to be." In other words it would seem most of our patients understand the staffing problem of the hospitals and are judging the amount of nursing care they need in light of what is available. Such comments as: "They need more help at night", "considering the shortage of nurses", "did things for myself", "did not bother the nurses much", "did not always ask for the care I felt I needed"

emphasize this interpretation. On the other hand there were such comments as "more care than necessary", "during the time I needed attention the nurses made frequent visits and generally took things into their own hands" could indicate that nurses may be doing everything they can when they do have time, but even more importantly they are making an effort to handle the critical situations effectively.

Relationship of
Reasonable Costs of
Hospital Insurance

There is interesting information regarding the patients' opinions on hospital costs in the two private hospitals; 12 per cent of the satisfied patients in hospital A thought the costs were too high, whereas 36.5 per cent of the satisfied patients in hospital B thought the costs were too high. This gives a significance ratio of 3.3. The comparative cost for rooms in the two hospitals at the time of this study yields some interesting information.

	Hospital A	Hospital B
4 bed room	\$6	\$6.50
2 bed room	\$7-\$7.50	\$7.50-\$8
single room	\$8-\$12	\$8.50-\$12

The costs in hospital B are slightly higher, but it is questionable whether 50% difference in cost would produce a significance ratio of 3.3 for the differences in percentages of patients who thought the costs were too high in the two hospitals.

The possession of hospital insurance should minimize the complaints about hospital costs being unreasonable. There is some information on this point although it cannot be as completely followed through as one would wish. The significance of the differences between those having and those not having hospital insurance can be computed only by putting the patients from the two hospitals together because of the small numbers involved in the group not owning insurance. These differences and their significance ratios are shown in Table #3.

TABLE #3

DIFFERENCES IN COMPLAINTS ABOUT COSTS OF HOSPITAL CARE
BETWEEN PATIENTS* WITH HOSPITAL INSURANCE AND
THOSE WHO DO NOT HAVE HOSPITAL INSURANCE

	Owners of Hospital Insurance Policies	Non-owners of Hospital Insurance Policies	Significance Ratio
	100 patients	38 patients	
Number of patients considering hospital costs reasonable	73	19	
Per cent considering hospital costs reasonable	73%	50%	2.5
Number of patients considering costs not reasonable	23	14	
Per cent considering costs not reasonable	23%	36%	1.4
Number of patients recording "No Opinion" about costs being reasonable	4	5	

* Patients in Hospitals A and B

We find that the difference between the owners and non-owners of hospital insurance policies who consider the costs reasonable reaches the 1 per cent level of confidence, but that the difference as far as considering costs unreasonable does not reach the 5 per cent level of confidence.

Suggestions For Future Use

In discussing the ways the questionnaire has been and can be of help with the people in the hospitals directly involved, the consensus seems to be that this study has yielded considerable valuable information and should be repeated at periodic intervals. So far the results have been discussed in department head meetings in one hospital. The comparative figures for the four hospitals aroused considerable interest and the recommendation that the project be set up as a regular check-up by each hospital was made. The head nurse groups who have studied the results recommend that such a study be done at periodic intervals for each hospital ward separately so that the staff of the ward can know how their own services rate with the patients.

In view of the fact that there has been no observable antagonism or irritation expressed about this procedure among the hospital personnel, it would seem that it should be recommended to the hospital administrator as a routine procedure. It would seem important however, if it is to be done, to plan to do a follow-up to secure at least a 75 per cent return from the questionnaire. A brief glance at Table #1 substantiates this recommendation, as in three of the hospitals there was no record of dissatisfied patients until after the first follow-up letter was sent, which would indicate that there is some difference between the people who first responded to the questionnaire and those who did not respond until later. Of the 136 who first returned the questionnaire in the four hospitals 2.9 per cent were dissatisfied, whereas 5.2 per cent of the total respondents were dissatisfied. Although the significance ratio is only .41, it would still seem wise to pursue the follow up. If we exclude Hospital B from this part of the analysis, we find for the other three hospitals that none of the first 100 patients responding were dissatisfied, whereas 10 of the total 224 or 8 per

cent of the 124 responding later were dissatisfied. Statistical tables do not permit computation of the significance of the difference.

Conclusion - Cost

In conclusion it seems important to point out that although such a study of patients' opinions yields valuable information it is time consuming and expensive; the total cost exclusive of the time contributed by the regularly employed hospital staff and the time of the student who did the study was \$64.22 a cost of 21¢ per questionnaire returned. In view of this expense and the time needed for tabulation and checking of returns, it would seem that selecting a representative sample group, such as the first thirty patients to be discharged from a certain ward in the month perhaps twice a year would supply information needed. If, however, doctors complained about the care their patients received on a certain ward or several gripe letters from patients came to the hospital administrator, then a survey might be made to determine whether those patients' complaints are typical.

In conclusion, it is important to point out that cooperation in such a study is essential. Unless the various departments involved participate in the planning for the poll and have the opportunity to review the results without being made to feel that they are on the spot, any suggestions the patients might have or any criticisms they may show up will not be acted upon, or will cause resentment and as a result the remedial value of the information will be disappointing. It would not have been possible to carry out this study without the whole hearted cooperation of the Administrators of the four hospitals and of the directors of the nursing services in the hospitals.

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