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NURSING INTERVENTION IN THE RELIEF OF PAIN

by

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ABSTRACT

The problem of the study was to identify the activities employed by the nurse to relieve the patient's pain in a variety of pain incidents. Twenty incidents of pain, ten incidents on the medical service and ten incidents on the surgical service, were investigated. Incidents investigated were those selected by the nurse. After a measure for the relief of the patient's pain had been employed, the nurse and the patient were interviewed by the investigator. Questionnaire guides for interviewing the nurse and the patient were developed. Questions were related to the patient behavior which prompted the nurse to intervene to relieve pain, the factors related to the assessment of the patient's pain, the measures used to relieve pain, and the effectiveness of the measure to relieve pain.

The nurse most frequently initiated activities to relieve pain after having been informed by other members of the health or nursing personnel of the patient's complaint. The majority of the nurses investigated the patient's complaint before deciding upon a measure for the relief of pain.

Further studies are needed, but the findings suggested the following conclusions:

(1) When a definite source of pain could be identified and the patient's non-verbal behavior at the time of the incident indicated that the patient was in pain, the patient's pain was more apt to be considered severe by the nurse.

(2) When the patient was expected to have pain and the pain was presumed to be of short duration, the nurse was more apt to offer medication for the relief of pain and to consider the patient's reaction to pain only in terms of the immediate situation.

(3) When relief of the patient's pain or the patient's reaction to the methods employed to relieve pain became problematic, other factors influencing pain were considered.

(4) There were wide individual differences in the assessment of the different incidents of pain. No consistent criteria for the assessment of the intensity of the patient's pain nor the patient's reaction to his pain was found.

(5) Dependent activities to relieve pain were expected to be employed by both the nurse and the patient.

(6) Of the observations indicating to the nurse that the patient's pain was relieved, "resting" was the most reliable.

Other studies, using different methods of investigation, are recommended to further test the above conclusions.

CHAPTER I

THE INTRODUCTION

Every individual, excepting those very rare individuals who have a congenital indifference to physical pain,[1] has had experience with pain. He has learned to avoid pain or to reduce his own pain. An individual is likely to seek the help of others only after his own efforts and attempts at alleviation of pain have failed.[2] Pain and its relief is important, not only because it is usually a very uncomfortable and distressing state of affairs, but also because it evokes protective adaptive mechanisms which might be harmful.[3] Pain, if it is intense and continuous, leads to depression, disorganization of the personality, abolition of pleasure, and may terminate in self destruction.[4]

Pain is a subjective personal experience. It varies between individuals and in the same individual from time to time. Pain experience is modified, not only by past experience, expectations, and

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[1]Ronald Melzack, "The Perception of Pain," Scientific American, 204:41, February, 1961.

[2]Walter Modell, Relief of Symptoms (second edition; St. Louis: The C. V. Mosby Company, 1961), p. 34.

[3]Harold G. Wolff and Stewart Wolf, Pain, American Lecture Series; Publication Number 5 (revised third printing; Springfield, Illinois: Charles C. Thomas Company, 1948), p. 12.

[4]John Hunter, "The Mark of Pain," The American Journal of Nursing, 61:96, October, 1961.

culture,[5] but also by the various methods and activities employed to alleviate pain. The relief of pain constitutes a complex problem.

Pain is one of the commonest complaints which the nurse encounters. All nurses have to cope with the patient's complaint of pain, to select some activity which is both desirable and effective in the relief of pain, and to carry out these activities to the benefit and welfare of the patient. This study is concerned with those activities which the nurse employs as she intervenes to relieve pain.

THE PROBLEM

Statement of the problem. The problem of this study was to identify the activities used by the nurse in relieving the patient's pain. It consisted of three parts. First, what behavior manifested by the patient prompts the nurse to decide that the patient is in need of relief of pain? Second, what activities are employed by the nurse in relieving the patient's pain? Third, how effective was the activity in relieving the patient's pain?

THE PURPOSE OF THE STUDY

This study is an attempt to identify the activities used by the nurse in relieving pain in a variety of pain situations or incidents, to analyze these activities, and to determine the effectiveness of the activity in relieving pain.

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[5]Melzack, loc. cit.

Many activities of the nurse are concerned with the prevention or the relief of pain. A study of these activities should provide useful information about the process of pain relief. It might provide one way for nurses to view the process through which they attempt to relieve pain. This information might also be useful in helping the nurse to become more effective in relieving pain.

Since the practice of nursing reflects that which has been taught, the study might be of help in improving methods of teaching, either in the approaches to the problem or in the emphasis given to different aspects of the problem.

BASIC ASSUMPTIONS

The assumptions upon which the study was based are as follows:

1. The nurse will respond in some way to whatever indicates to her the presence of pain in patients.

2. The nurse has expectations and/or makes judgments about the effects of particular activities that are used to relieve pain.

3. The nurse makes assumptions about the characteristics of the patient's pain, about the reaction of the patient to pain, and about the patient's response to an activity used to relieve pain.

4. The nurse makes some evaluation of the effectiveness of her activity upon her patient.

5. The patient makes assumptions about the pain that is his and about the effectiveness of a particular activity in relieving that

pain.

6. Some of the activities and the basis for some of the assumptions can be related by the nurse and by the patient.

7. The effect of one particular incident can not be assessed in terms of long range benefit or contribution to the well being of the patient.

8. Many activities provide relief from pain.

THE METHODOLOGY

The method of research is a descriptive survey, an attempt to describe what nurses do as they endeavor to relieve pain; their observations, their interpretations, and the measures used to relieve pain, and the effectiveness of the measures used in relieving pain.

The tool. Two questionnaire guides, one to be used in interviewing nurses and one to be used in interviewing patients, were developed. These two questionnaire guides were used in interviewing five subjects, three nurses and two patients, to determine their effectiveness to elicit information. After this trial, the questionnaires were revised. One question was eliminated and some questions were combined.

The final questionnaire for nurses contained thirteen open end questions. A part of four questions could be checked. The final questionnaire for patients contained six open end questions. A part of one question could be checked and one question could be answered

"yes" or "no." The questions were in reference to areas about which information was wanted, such as: the cause of pain, a description of pain, and the effect of the activity in relieving pain (See Appendix A).

Method of collecting data. When nurses used an activity, performed for the specific purpose of relieving pain, they were asked to notify the investigator. Within one half to one hour after the investigator had been notified, the nurse was interviewed. Following this interview, the patient, for whom the activity had been performed, was interviewed. Patient interviews were held approximately one hour to one and one half hours after the activity. There was one exception to this. One surgical patient was interviewed two and one half hours after an activity to relieve pain had been performed.

Interviews with the nurses varied in length from twenty minutes to thirty five minutes. Interviews with patients varied in length from fifteen minutes to twenty five minutes. All interviews were conducted by the investigator.

The sample. The survey was conducted in a private general hospital of one hundred beds which is located in Gallatin County, Montana. Two units of this hospital were used, the medical service unit and the surgical service unit. The intensive care unit was not a part of either of these units. The survey was made at various times between the hours of 9:00 A.M. and 10:00 P.M. All days of the week, including week ends, were utilized. A part of the survey was done in 1962. The remainder of the survey was completed in 1965.

Twenty incidents of pain on twenty patients, ten occurring on the medical service and ten occurring on the surgical service, were investigated. The incidents are those which were voluntarily selected and reported to the investigator by the nurse. The criteria for selection was dependent upon the nurse having identified an incident of pain, having performed an activity to relieve pain, and having reported the incident to the investigator. To secure an adequate sample of nurses, a nurse was not interviewed for more than one incident each day. A nurse may have described more than one incident. On the medical service one nurse described three incidents. No other nurse described more than two incidents. Five nurses described only one incident. A total of twenty nurse interviews and nineteen patient interviews were obtained. One patient on the medical service refused to be interviewed by the investigator.

LIMITATIONS

No attempt was made to control factors which influence pain such as age, sex, culture, education, or time of day. Nursing activities or other factors which promote the general welfare of the patient were disregarded. Only those factors or activities, relating to pain or its relief, which were stated by the nurse or by the patient were considered. All incidents of pain were not necessarily considered, only those incidents selected by the nurses participating in the study.

No attempt was made to determine whether relief of pain was desirable or promoted the general therapeutic plan for the patient. Effectiveness in relief of pain was judged only on the patient's and the nurse's statement at the time that the interview was held.

All limitations to the use of an interview technique to obtain pertinent information apply to this study: the respondents' individual interpretations of the questions, the skill of the interviewer, the ability of the interviewee to recall, and the lapse of time between the performance of the activity and the interview.

The information requested might be considered confidential or socially not acceptable and not disclosed.

DEFINITION OF TERMS

Activities: any observations, interpretations, or actions stated by the nurse or the patient.

Nurse: a registered professional nurse, a person who has completed the requirements for licensure and is licensed to practice nursing.

Nurse Aide: a non professional member of the nursing personnel employed in the care of the sick regardless of the classification of the employing agency.

Incident of pain: a situation in which the nurse identified the patient as having "pain."

Intensity of pain: an evaluation of severity of pain in terms

of severe, moderate, or mild; not a measurement of pain intensity.

Dependent activity: a nursing activity which can be performed only on the explicit order of the physician.

Independent activity: a nursing activity which can be performed without an explicit order of the physician.

Comfort measure: any procedure performed to promote the general comfort of the patient.

Positioning: an activity performed to place or to maintain a therapeutic position for a specific disease condition.

Medication: any drug specifically given to relieve pain.

ORGANIZATION OF THE REMAINDER OF THE STUDY

The remainder of the paper is divided into four parts. Chapter II describes those activities relating to the assessment of the pain situation and the selection of the activities to relieve pain. Chapter III describes the specific activities employed to relieve the patient's pain and the effectiveness of the activities in relieving pain. Chapter IV describes other activities that might be employed to relieve pain or to provide for the comfort of the patient. Chapter V presents the summary, findings, conclusions, and implications for further study.

CHAPTER II

ANALYSIS OF ACTIVITIES RELATED TO ASSESSMENT

This part of the paper describes those activities of the nurse which were performed before deciding upon a course of action to relieve the patient's pain.

The participants. On the medical service the sample included ten patients and six nurses. Six of the patients were women and four of the patients were men. For the women the ages were: 25 years, 38 years, 40 years (2), 58 years, and 83 years. For the men the ages were: 42 years, 52 years, 57 years, and 59 years. The diagnoses represented in the sample were: Cancer, Coronary Heart Disease, Herniated Intervertebral Disc, Cholecystitis, Ventral Hernia, and five diagnoses were undetermined. For the nurses the actual practice in nursing ranged from nine months to five years.

On the surgical service the sample included ten patients and six nurses. Five of the patients were women and five of the patients were men. For the women the ages were: 24 years, 35 years, 38 years, 39 years, and 47 years. For the men the ages were: 29 years, 39 years, 46 years, 52 years, and 75 years. The diagnoses represented in the sample were: Appendectomy (2), Cancer, Herniorraphy (2), Cholecystectomy, Hemorrhoidectomy, Debridement of Wound, Fractured Tibia, and Fractured Femur. For the nurses the actual practice in nursing ranged from one year to eleven years.

Pattern of nursing care. Patterns of nursing care were not

investigated in this study, but an explanation of the method of assignment for staff nurses will be helpful in understanding the study. One staff nurse is assigned the responsibility for giving all medications and treatments on a unit. Incidents of pain which are believed to require medication for relief are reported to this nurse. This is important in the study for two reasons. First, this pattern of assignment might influence what would be regarded as an incident of pain. The staff nurse, not assigned to medications and treatments, might have performed activities to relieve pain which were not reported to the investigator. Second, the method of assignment might be a factor in the relief of pain.

To simplify the reporting of the study, the staff nurse who performed activities specifically designed to relieve pain, was referred to as "the nurse." Other staff nurses who are mentioned in the study were referred to as "staff nurse."

The pronoun used to designate the patient was "he," regardless of whether the patient was a man or woman. This was done to help prevent identification of the individuals.

Informant of the patient's complaint. The nurses were informed of incidents of pain in two ways. One way of acquiring the information was by direct observation and interaction between the nurse and the patient. The second way was receiving the information from another person. This is illustrated in Table I.

On the medical service the physician reported one incident by

giving a "stat." order (to be done immediately) for a patient who had complained to him. One incident was reported by the head nurse. One incident was reported by a staff nurse. Seven incidents were reported by nurse aides.

On the surgical service four nurses received the information by direct observation and interaction with the patient. One incident was reported by a staff nurse. One incident was reported by the patient's wife. Four incidents were reported by nurse aides.

For the total sample the person most likely to report the incident was the nurse aide, accounting for eleven (55 per cent) of the twenty incidents. If services are compared, the reporting of incidents by the nurse aide occurred almost twice as frequently on the medical service. On the medical service seven (70 per cent) of the ten incidents were reported by the nurse aide; on the surgical service four (40 per cent) of the ten incidents were reported by the nurse aide. For the total sample the nurse received direct information by observation and interaction with the patient in four (20 per cent) of the twenty incidents. If services are compared, direct observation occurred only on the surgical service. The nurse on the medical service was not likely to obtain information this way; all incidents of pain were reported to the nurse by someone other than the patient.

Investigation of the patient's complaint. Unless counter-indicated by a physician's order, it is expected that a nurse will investigate a patient's complaint of pain before action is taken to

TABLE I

NURSE'S INFORMANT OF PATIENT'S COMPLAINT OF PAIN

Informant	Medical Service Incidents Number	Per cent	Surgical Service Incidents Number	Per cent	Totals Incidents Number	Per cent
Nurse	0		4	40%	4	20%
Physician	1	10%			1	5%
Head Nurse	1	10%			1	5%
Staff Nurse	1	10%	1	10%	2	10%
Nurse Aide	7	70%	4	40%	11	55%
Patient's Wife	—	—	1	10%	1	5%
Totals	10	100%	10	100%	20	100%

TABLE II

INCIDENCE OF NURSE'S INVESTIGATION OF PATIENT'S COMPLAINT OF PAIN BEFORE DECIDING ON ACTIVITY TO RELIEVE PAIN*

Investigated	Medical Service Incidents Number	Per cent	Surgical Service Incidents Number	Per cent	Totals Incidents Number	Per cent
Stated	6	66.6%	9	90%	15	79%
Not stated	3	33.3%	1	10%	4	21%
Totals	9	99.9%	10	100%	19	100%

*Excludes the incident in which the nurse acted on "stat." order.

relieve pain. The nurse was not asked directly if, before deciding on a course of action, the patient's complaint had been investigated. From responses to other parts of the interview this could be determined with some degree of certainty. The nurse usually responded: "The nurse aide [or whomever had reported the incident] told me. Then [or when] I went down [or in] to see him. . ." The number of nurses stating specifically that the patient had been seen by her before action was taken was determined. This is illustrated in Table II.

On the medical service six nurses stated specifically that the patient's complaint had been investigated. One nurse stated that she had acted on the physician's "stat." order and had not investigated the complaint. Three nurses did not state that the complaint had been investigated before action was taken. For these three incidents investigation of the patient's complaint could not be determined from the data collected.

On the surgical service, as previously described, four nurses received the complaint directly from the patient. Five nurses stated specifically that the patient's complaint had been investigated. In one incident the nurse did not state that the complaint had been investigated and this could not be determined from the data.

For the total sample, excluding the incident in which the nurse acted on a physician's "stat." order, in fifteen (approximately 79 per cent) of the nineteen incidents the nurse stated that the complaint had been investigated. On the medical service in six incidents (66.6

per cent) the nurse stated that the complaint had been investigated.

In the majority of the incidents of pain the nurse stated that she had investigated the patient's complaint before deciding upon a course of action. While it can not be assumed that every incident was investigated prior to action, the tendency was to investigate complaints before taking action to relieve pain.

Indications of pain. The nurse stated the verbal complaint of pain and the non-verbal behaviors of the patient indicated the presence of pain. Table III, part A, illustrates the type and number of non-verbal behaviors mentioned by the nurses (See Appendix B, for classification of non-verbal behaviors). Table III, part B, shows the incidence in which non-verbal and/or the verbal complaint were noted.

On the medical service the nurse stated there was no indication of pain except the verbal complaint in five incidents. Eight non-verbal behaviors were noted in the other five incidents. One nurse mentioned facial expression with this reservation: "I'm a little skeptical about this. Face all screwed up, but he doesn't look too uncomfortable to me." Other non-verbal behaviors were related to change in activity or changes in movement. Examples were: "His slowness to move," "not reading, just lying there," and "couldn't straighten out." The following response did not consider just the particular incident of pain.

> With him, it's kind of different. He's kind of a boarder. He'll get dismissed go [out of the hospital] for about twenty

TABLE III

TYPES OF NON-VERBAL PATIENT BEHAVIOR WHICH INDICATED TO THE NURSE THAT THE PATIENT HAD PAIN

Part A

Non-Verbal Behaviors	Number of times mentioned		Totals
	Medical Service	Surgical Service	
Action:			
Change in activity	2		2
Specific action	1	4	5
Movement	2	3	5
Apprehension	1		1
Facial Expression	1	8	9
General Appearance	1	2	3
Total	8	17	25

Part B

INCIDENCE OF VERBAL AND NON-VERBAL PATIENT BEHAVIOR NOTED BY THE NURSE AS INDICATION OF PAIN

Behavior Noted	Number of Incidents		Totals
	Medical Service	Surgical Service	
Verbal complaint only	5	2	7
Non-verbal behavior and verbal complaint	5	8	13
Total	10	10	20

four to forty eight hours. Comes in dopey. He has had seizures. [Don't know] if he has pain from being away from drugs or [if the pain is] organic. He has had various operations and may have a tumor.

On the surgical service the nurse stated there was no indication of pain except the verbal complaint in two incidents. Seventeen non-verbal behaviors were noted in the other eight incidents. Facial expression was the most frequently mentioned of the non-verbal behaviors. Other non-verbal behaviors were related to specific action and increased movement. Examples were: "rather restless," "gasping," and "holding hand on wound." In one incident in which no non-verbal behavior was noted, the following response illustrates a source for verifying the patient's complaint. "The other patient in the room said, 'You should have seen her'."

For the total sample the verbal complaint of the patient was stated as the only indication of pain in seven incidents. The verbal complaint and twenty five non-verbal behaviors were noted in thirteen incidents. Non-verbal behaviors were more frequently noted by the nurse on the surgical service than by the nurse on the medical service. On the medical service the number of incidents in which the verbal complaint was the only indication of pain was higher than on the surgical service. On the medical service fewer non-verbal behaviors of patients in any one incident were noted than on the surgical service.

Estimates of intensity. The nurse and the patient were asked

to estimate the intensity of pain as severe, moderate, or mild. In three incidents, two on the medical service and one on the surgical service, an estimate of the range of intensity was stated by the nurse. An estimate of the intensity was not stated in one incident on the medical service. On the medical service the nurse estimated the pain as severe less often than did the nurse on the surgical service. The patient estimated the intensity of pain as severe more often than did the nurse, as can be seen in these results:

	Severe		Moderate		Mild	
	Patient	Nurse	Patient	Nurse	Patient	Nurse
Medical Service	5	1	3	5	1	1
Surgical Service	6	4	4	4	0	1
Totals	11	5	7	9	1	2

Table IV, Part A, compares the statement of the nurse and the statement of the patient on the estimate of the intensity of pain. Table IV, Part B, illustrates the degree of agreement and disagreement between the estimate of the nurse and the estimate of the patient. On the medical service in three incidents agreement was found between the statement of the nurse and the patient; one agreed that the pain was severe, two agreed that the pain was moderate. In four incidents the patient estimated the pain of a greater degree of intensity than did the nurse. In one incident the patient estimated the pain of a lesser degree of intensity than did the nurse. Only eight incidents were

TABLE IV

DEGREE OF AGREEMENT AND DISAGREEMENT BETWEEN NURSE'S AND PATIENT'S ESTIMATE OF INTENSITY OF PATIENT'S PAIN

Part A

Medical Service			Surgical Service		
Patient's Estimate	Nurse's Estimate	Number of Incidents	Patient's Estimate	Nurse's Estimate	Number of Incidents
Severe	Severe	1	Severe	Severe	3
Severe	Moderate	2	Severe	Moderate to Severe	1
Severe	Mild to Severe	1	Severe	Moderate	2
Severe	Mild	1	Moderate	Moderate	2
Moderate	Moderate	2	Moderate	Severe	1
Moderate	Not Stated	1	Moderate	Mild	1
Mild	Moderate	1			
No Interview	Mild to Moderate	1			—
Total		10			10

TABLE IV

DEGREE OF AGREEMENT AND DISAGREEMENT BETWEEN NURSE'S AND PATIENT'S ESTIMATE OF INTENSITY OF PATIENT'S PAIN

Part B

Agreement and Disagreement	Medical Service* Incidents		Surgical Service Incidents		Total Incidents	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Agreement	3	37.5%	5	50%	8	44.4%
Patient's Estimate Greater	4	50.0%	4	40%	8	44.4%
Patient's Estimate Lower	1	12.5%	1	10%	2	11.1%
Total	8	100.0%	10	100%	18	99.9%

*Two incidents not included
One incident the nurse did not state intensity
One patient was not interviewed

used in the comparison since one nurse could not state the intensity and one patient refused to be interviewed. The incidents, stating a range of intensity, were classified as disagreement.

On the surgical service in five incidents agreement was found between the statement of the nurse and of the patient; three agreed that the pain was severe, two agreed that the pain was moderate. In four incidents the patient estimated the pain of a greater degree of intensity than did the nurse. In one incident the patient estimated the pain of a lesser degree of intensity than did the nurse.

For the total sample eight incidents of agreement of intensity (44.4 per cent) were found. Eight incidents (44.4 per cent) were found in which the patient estimated the pain to be of a greater degree than did the nurse. Two incidents (11.1 per cent) were found in which the patient estimated the pain to be of a lesser degree than did the nurse. On the surgical service agreement between the statement of the nurse and of the patient on intensity of pain was greater than on the medical service.

Descriptions of pain. On the medical service the descriptions of pain related by the nurses were usually prefaced by "the patient said," or "by what he told me." Table V, Part A, illustrates the descriptions of the nurses on the medical service. The descriptions of pain were generalized and did not describe a particular quality of pain in a particular location. Examples of these responses were: "He said it was an uncomfortable type." "Well, by what he told me,

TABLE V

DESCRIPTIONS OF PAIN RELATED BY THE NURSES AND THE PATIENTS ON THE MEDICAL SERVICE

Part A

Descriptions by Nurses	Number of Incidents
The patient said	6
The patient asks for medication when needed	1
Location and/or quality of pain	2
Persistent aching	1
Total	10

Part B

Descriptions by Patients	Number of Incidents
Reaction to pain	3
Intensity of pain	2
Pain variation with treatment	1
Multiple pains related to normal body function	1
Location and intensity	1
Can't describe	1
Total	9

he was very uncomfortable." "It would have to be subjective. He said he had it." Five descriptions were of this type. A sixth description was similar: "I don't know. He says it's severe and it doesn't look severe to me. Maybe he is feeling generally miserable." In two of the four remaining incidents the location of the pain and the quality or intensity of the pain were described as follows: "sharp lower abdominal pain," and "severe, lower abdomen." In the remaining two incidents pain was described as having persisted over a period of time in the following manner: "He is a person who asks for it when it is building up. Knows when it is coming," and "not too much outward appearance of pain. Most always has a ... pain. He is never free of pain, always some aching."

In addition to these descriptions of pain, in three incidents the nurse gave the following comments which included observations, interpretations, background of the patient, and in one incident, what the nurse did. "Sometimes he's shaky, sometimes not. He's alone. I think he's lonely. If he had someone else, he'd probably stay out [of the hospital] longer." "He is a Negro, hard to talk to. I watch him closely because he might not tell." "He has been on narcotics a long time and has no tolerance for pain."

In summary, on the medical service the descriptions of pain by the nurses were usually prefaced by "the patient said." Pain was usually described as being "uncomfortable" or as being "a general discomfort." In six incidents the nurse described pain in this manner.

In two incidents the location of the pain and the intensity or quality of the pain were described. In two incidents pain of long duration and the effect upon the patient were described. In addition the nurse expressed concern about patient's being alone, about the patient's not reporting the symptom of pain, or about the patient's having been on narcotics over a long period of time.

On the medical service only nine patients were interviewed. The patient described by the nurse as having been on narcotics for a long time refused to be interviewed. Pain as described by the patients on the medical service is illustrated in Table V, Part B. In none of the incidents did the patient describe his pain as being "uncomfortable." In three incidents vivid descriptions of pain and his reaction to pain were stated (see Appendix C for descriptions of pain given by patients on the medical service). In two incidents the patient described the severity of the pain. In the remaining four incidents one patient stated: "Severe pain in lower abdomen." One patient described the onset of pain, his treatment, and compared his present pain to these various factors. One patient described multiple specific pain and their causes. Most of the pain was related to some normal body function with the exception of a headache. One patient stated that he did not know how to describe the pain.

In summary, the patient emphasized different aspects of the pain experience: (1) the intensity of pain when it occurred, (2) his reaction to pain, (3) the onset of pain and the course of treat-

ment, and (4) various specific pains. Only in one incident the patient stated just the intensity and the location of his pain. In one incident the patient stated, "I don't know how to describe it."

In comparing the descriptions, the nurse's description was a generalization of the patient's description and did not include the individual aspects of the patient's description. The nurse commented on the patient's aloneness or loneliness, his indifference to pain, his dependency on drugs, or the intermittent character of his pain.

On the surgical service the descriptions of pain related by the nurses and by the patients were classified under the following characteristics: quality, location, and factors which initiated or aggravated pain. These descriptions are illustrated in Table VI. Part A illustrates the descriptions stated by the nurses on the surgical service; Part B, the descriptions stated by the patients on the surgical service. Not all characteristics were described in each incident. Seven incidents were described by the nurses in this manner. Examples of descriptions were: "Actually had more burning and shooting pain up his arm. Zephiran soak dissolved old blood and started tingling as well." "Not really cramping, but sharp pains in the operative area." Two incidents were described in terms of what the patient said. "He said he felt very sore over the incision area. Was nauseated and had tried to turn." "He said it was sharp aching from the broken bone." These were not typical descriptions for the

TABLE VI

DESCRIPTIONS OF PAIN RELATED BY THE NURSES AND THE PATIENTS ON THE SURGICAL SERVICE

Part A

Descriptions by Nurses	Number of Incidents
Location, quality, initiating or aggravating factors	7
The patient said	2
Persistent discomfort	1
Total	10

Part B

Descriptions by Patients	Number of Incidents
Location, quality, initiating or aggravating factors	8
Can't describe	2
Total	10

nurse on the surgical service in that the nurse most often stated the description in her own terms. The nurse did state in her own terms the two factors which either initiated or aggravated the pain. In the tenth incident the description of the nurse is atypical in that a continuing discomfort was described: "probably a persistent discomfort which gets steadily worse."

On the surgical service in eight incidents the patient described characteristics of pain in terms of location, quality, or initiating or aggravating factors. Examples were: "Sharp pain under the edge of my ribs. Moderate to what it was yesterday." "Burning sensation, I guess that's what it would be. Throb pain." In two incidents the patient used the term "pressure" to describe pain, a term not used by the nurses. In two incidents the patient could not describe the pain, stating: "Don't know exactly." "Hard to do. Can't think of anything to compare it with."

In the eight incidents described by the patients and in the nine incidents described by the nurses the descriptions of pain were very similar. In some incidents the terms were identical. Pain was described as having a certain quality, located in a distinct area, and initiated by rather well defined stimuli. In one incident the description of the nurse deviated from this pattern.

Differences in descriptions between the medical service and the surgical service were more apparent than were similarities. In two incidents on the medical service the descriptions resembled those

on the surgical service. In one of these incidents the patient whose pain was being described was a pre-operative patient. In one incident on the surgical service pain was described as a persistent discomfort and was similar to descriptions on the medical service. On the surgical service in the majority of incidents the nurse described pain in discrete terms which closely resembled the descriptions stated by the patient. Concerns or factors which influence pain other than those related to the immediate pain experience were not expressed by the nurse or by the patient. On the medical service the nurse's description of pain was most often a generalization which only in part reflected the description of the patient. Concern about various factors which influence pain or its relief were expressed by the nurses and by the patients. The nurse and the patient expressed different concerns.

Cause of pain. On the medical service uncertainty regarding the cause of pain was expressed by the nurse and by the patient. Table VII shows the cause of pain as stated by the nurse and by the patient. In six incidents the nurse expressed in various ways that the cause of the pain was not known to her. Examples were:

> I don't know. Doesn't even have a diagnosis. Is having an upper G.I. series [gastro-intestinal X-ray series]. Having trouble with legs, and also arms. Said something about being run down from 'flu.' Can't pinpoint anything.

> I don't know. This isn't the pain he is in for. He had a rough night—pain in the epigastric region. Maybe this is it.

TABLE VII

A COMPARISON FOR THE MEDICAL SERVICE OF NURSE'S STATEMENT AND PATIENT'S STATEMENT ON THE CAUSE OF PAIN

Nurse's Statement on Cause	Number of Incidents	Patient's Statement on Cause
DIAGNOSIS:	3	
Cancer and coughing		Cough
Coronary and ischemia		I guess it's from my heart... may not right
Ventral hernia		Hernia...there may be other things
NOT KNOWN:	6	
Imagine a slipped disc		Carrying equipment
A "rough" night		Don't know if I sleep too hard
Tumor		I don't know...know it has to do with my stomach
Patient thinks it's from an accident		From not being able to go to the bathroom...I wish I knew
Patient said something about being run down from "flu"		I don't know...the virus infection, I guess
I don't know		From being taken off Codeine
PREVIOUS BACK INJURY AND SURGERY*	1	
Total	10	

*Patient was not interviewed

He thinks it's from an accident he had about a month ago. At this time he received a concussion. Now he's in for back pain.

In three of these incidents the nurse stated or had previously stated an assumed cause of the patient's pain. In two incidents the nurse stated what the patient had said or thought was the cause of his pain. In the sixth of these incidents the nurse stated: "I don't know." "I don't know" without stating an assumption of cause was an unusual response. This particular patient, when asked, responded: "Had an operation two or three years ago. Had me on Codeine and are taking me off. I believe that's what is causing it." It could not be determined from the data whether or not, in the interaction between the nurse and the patient, this aspect of the illness had been discussed. In three of the remaining four incidents on the medical service the nurse stated the diagnosis and/or the aggravating or initiating symptom as the cause of the patient's pain. In the tenth incident the nurse gave information from the medical history of the patient, "had a back injury three years ago and has had surgery." Concern for the probable dependency of this patient on narcotics, the harmful effects of such practice, and the nurse's inability to limit the narcotics taken by the patient were expressed. (This patient was not interviewed.)

On the medical service the patient in three incidents stated a definite cause. One of these incidents has already been discussed (see above). In the two other incidents one patient stated a symptom;

the other patient stated an event which precipitated the pain. In the other six incidents the patients stated causes but prefaced or supplemented the statements with: "I don't know," "I guess," "that's as far as we know now," or "there may be other things."

In general, the nurse's statement reflected what the patient stated as the cause of pain. There were exceptions. In one incident the nurse stated that a "rought night" was the cause; the patient stated, "Don't know if I sleep too hard." In another incident the nurse stated that the patient thought the accident was the cause; the patient indicated an interference with bodily function. In the four incidents in which the nurse stated the diagnosis or an assumed diagnosis one patient stated the symptom; one patient, the event. The other two patients stated that this condition (the diagnosis as interpreted by the patient) might be the cause of pain, or that other things might also be involved.

The patient expressed concerns which were not expressed by the nurse. These concerns were highly individualized and could not be categorized. Generally, the patient expressed concern about his inability to tolerate pain, the possibility that the cause of his pain might not be found or the pain relieved, and his treatment and its effectiveness. Doubt was expressed about the source of pain even when the condition or disease entity was known to him. One patient expressed concern about other people's response to him by stating: "...people laugh at me." These concerns of the patient were not

stated by the nurse.

Table VIII illustrates the cause of pain as related by the nurse and the patient on the surgical service. In nine of the ten incidents on the surgical service either the surgical operation, a wound, a procedure related to the care of a wound, or symptoms resulting from a fractured bone were stated by the nurse. In one incident the nurse indicated that the cause of the patient's pain was not known to her: "This I wouldn't have any idea. His surgery was in the lower abdomen and this is upper."

In eight incidents the patient, stating the cause of his pain, responded in much the same manner as the nurse. In two incidents the responses were different. "Don't know why my back hurt. Change in system. Stitches," was a different response in that it referred to a change in the body system and not merely to a procedure done to the body. This patient expressed a different interpretation of the surgical operation and the experience of pain than the other patients had expressed. How the patient interpreted the change was not determined. "No, couldn't say," was an atypical response. The nurse in describing the patient's pain, had indicated that the pain was a persistent discomfort. The nurse described the wound as the cause of pain. The patient, while he described his pain similarly to other patients, did not state the wound or a procedure as the cause of his pain. It was not determined from the data what the patient assumed to be the cause of his pain.

TABLE VIII

A COMPARISON FOR THE SURGICAL SERVICE OF NURSE'S STATEMENT AND PATIENT'S STATEMENT ON THE CAUSE OF PAIN

Nurse's Statement on Cause	Number of Incidents	Patient's Statement on Cause
I don't know	1	Operation
Operation	5	Operation Operation Moving Turning Change in (body) system
Wound	1	Couldn't say
Removal of dressings	1	Removal of bandages
Muscle Spasms	2	Muscle Spasms Muscle Spasms
Total	10	

In seven of the incidents on the surgical service the cause of pain related by the nurse and the patient were very similar. In two incidents that the patient stated movement of the body caused the pain, the nurse stated that the operation caused the pain. In describing pain, the nurse sometimes mentioned movement or turning as an initiating or aggravating factor in pain, but none of the nurses stated this as the cause of the pain. In one incident the nurse stated the cause of pain was not known to her; the patient stated the cause of his pain was the operation. The other two incidents in which the cause of pain was differently stated by the nurse and by the patient were discussed.

Little similarity was found between the statements on the cause of the patient's pain by the nurses on the medical service and by the nurses on the surgical service. The incidents on the medical service in which the nurse stated a symptom and/or the diagnosis as the cause of the patient's pain resembled the responses of the nurse on the surgical service. However, on the surgical service the nurse did not state diagnostic categories. The response was stated as "the surgery," "the operation," or more precisely "the incision." On the medical service in some incidents the nurse stated the patient's previous history of illness. On the surgical service the nurse did not state this in relation to the cause of the patient's pain.

On the medical service the number of incidents in which a definite cause of pain was stated were fewer than on the surgical service.

On the surgical service the statement of the nurse and of the patient regarding the cause of pain were more often in agreement than were the statement of the nurse and of the patient on the medical service.

Duration of pain. The nineteen patients who participated in the study were asked if they had had the pain previously. In two incidents the information obtained did not indicate the length of time the pain had been present. In these two incidents the patient stated: "frequently" and "yes." Other patient's statements indicating the length of time that the pain had been present are represented in Figure 1. On the medical service in one incident the patient had not had the pain previously. In five incidents the patient stated that the pain had been present for over two years. In two of these incidents the patient dated his pain from the time of a surgical operation, three years and five months, and two years previously. In two incidents the patient described the pain as "comes and goes" or "gets worse at times and comes back." These two patients were describing pain of a particular type which is associated with the diagnoses stated by the nurses. In one incident the patient stated: "always have them" (since childhood). The last response was stated by the patient who had previously described numerous pains. In the seventh incident the patient stated what he was doing, "letting down equipment," when the pain had occurred two months ago. Of the two remaining incidents one patient stated that the pain had been present for about one week. The other patient stated that the pain occurred

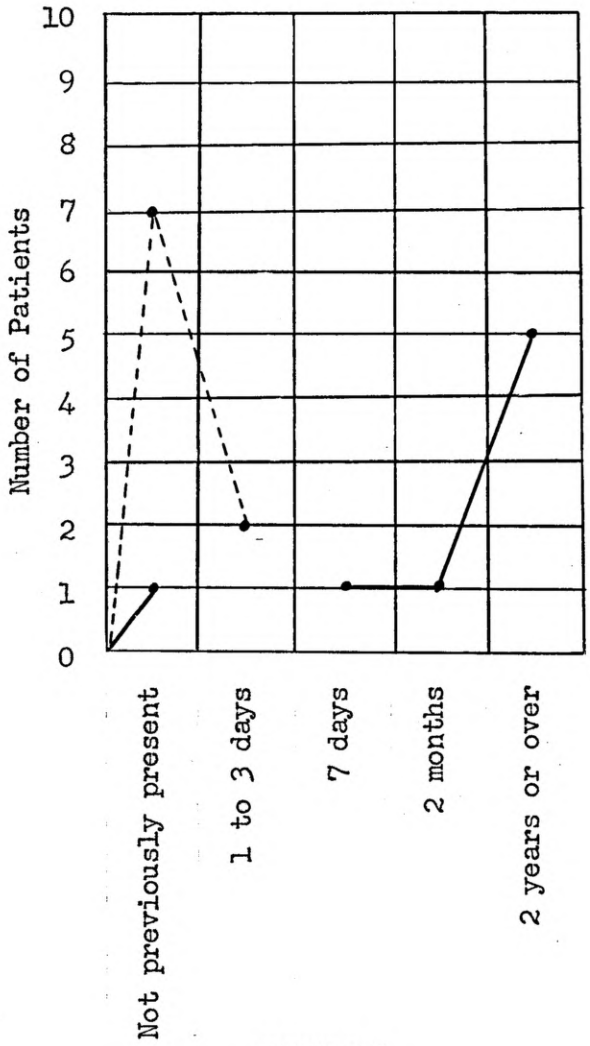


FIGURE 1

STATEMENTS OF THE PATIENTS ON THE MEDICAL AND SURGICAL SERVICES INDICATING THE LENGTH OF TIME PAIN HAD PERSISTED*

_____Medical Service - - - - - - - -Surgical Service

*Seventeen incidents, three incidents were not determined. On the medical service one patient was not interviewed; one patient stated "frequently." On the surgical service one patient stated "yes."

frequently but the period of time was not stated.

On the surgical service in seven incidents the patient stated, "No." In two incidents the patients dated the pain from the time of surgery but did so in terms of not having had the pain previously: "No, not before surgery, but since." In one incident the patient stated, "Yes." The information obtained did not indicate why this response differed from the responses of the other incidents on the surgical service.

For the total sample in nine incidents (47.4 per cent) the pain had been previously present. In ten incidents (52.6 per cent) the pain had not been previously present. Figure 2 illustrates this information and compares the medical and the surgical services. Of the total incidents (47.4 per cent) in which pain had been previously experience 42.1 per cent of the incidents were on the medical service compared to 5.3 per cent of these incidents on the surgical service.

Reaction to pain. The nurses were asked whether the patient was over-reacting or under-reacting to his pain. A third category of neither over-reacting nor under-reacting was added by the participants. There were differences in the number of incidents on the medical and surgical services which were classified in each category. The percentage of the incidents on the medical and surgical services which were classified in each category is illustrated in Figure 3.

On the medical service in three incidents (30 per cent) the patient's reaction to his pain was classified as over-reacting.

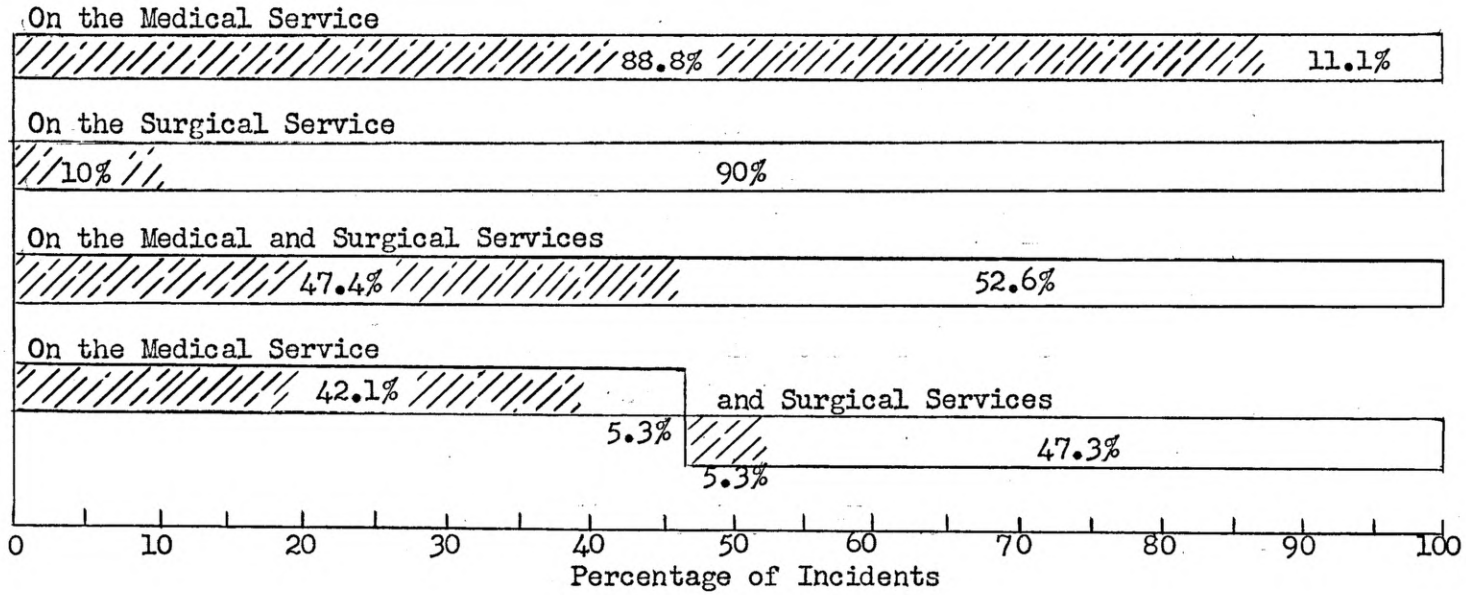


FIGURE 2

A COMPARISON OF THE DISTRIBUTION ON THE MEDICAL AND SURGICAL SERVICES OF PATIENTS WHO STATED PAIN WAS PREVIOUSLY PRESENT AND PATIENTS WHO STATED PAIN WAS NOT PREVIOUSLY PRESENT

Patients stating pain was previously present

Patients stating pain was not previously present

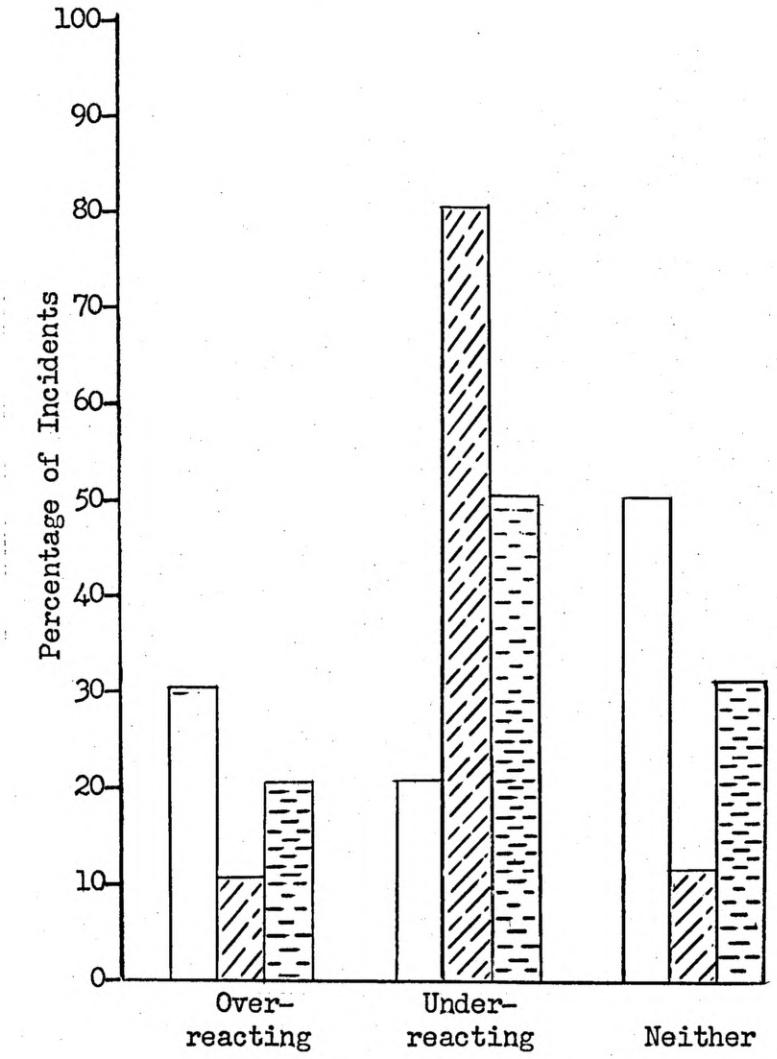


FIGURE 3

A COMPARISON OF NURSES' STATEMENTS OF PATIENT'S REACTION TO PAIN ON THE MEDICAL AND SURGICAL SERVICES

Medical and Surgical Services

Medical Service

Surgical Service

Three different descriptions characterized the over-reacting patient. One patient was described as an "emotional type person, easily upset, nervous, and sometimes cries." The second patient was described as having had "a cycle of things; nausea, then, headache, and nothing had helped him." The third patient was described as using pain as an excuse to have someone in the room with whom to talk.

In two incidents (20 per cent of the incidents on the medical service) the nurse classified the patient's reaction to pain as under-reacting. In both incidents the patient's reaction was described as enduring pain for too long a period of time before asking for relief. In one of these incidents the nurse elaborated:

> He had pain to a certain degree all the time but hesitates to take anything. In fact, you have to stay or he won't take his medicines. I think he has given up. He knows the disease is terminal. I don't think he wants to prolong it.

Both patients had had pain for more than two years but the eventual outcome of the illness was not a consideration in the other description.

In five incidents (50 per cent of the incidents on the medical service) the nurse classified the patient's reaction to pain as neither over-reacting nor under-reacting. In two of the incidents the nurse stated that she did not know the patient well enough to make this judgment. In two incidents the nurse described the patient's reaction as not complaining excessively. In the fifth incident the nurse stated that the patient did have pain, so much, that he thought it was

worse than it really was.

On the surgical service in one incident (10 per cent of the incidents on the surgical service) the patient's reaction to his pain was classified as over-reacting. The nurse stated that the patient did not appear to be having pain which would require the amount of medication as often as requested for the length of time after surgery. "Shouldn't be this much pain now" was the further comment of the nurse.

In eight incidents (80 per cent of the incidents on the surgical service) the nurse classified the patient's reaction to pain as under-reacting. These patients, compared to other post operative patients, seldom asked for medication, attempted to control themselves when having pain, and, for one particular patient, maintained function of an injured part though this was painful.

In one incident (10 per cent of the incidents on the surgical service) the patient's reaction to his pain was classified as neither over-reacting nor under-reacting. The patient's reaction was described as similar to other post-operative patients.

On the surgical service the majority of incidents were classified as under-reacting. On the medical service the most frequent classification was neither over-reacting nor under-reacting. On the medical service the patient's reaction was classified as over-reacting more frequently than on the surgical service. For the total sample the most frequent classification was under-reacting.

No common criteria for determining the patient's reaction to pain was identified. On both the medical and the surgical service the nurse mentioned the amount of complaining and the amount of drugs needed or requested by the patient, but these criteria were applied differently. On the surgical service in the majority of the incidents the nurse judged the reaction in terms of her expectations of the usual patient's reaction after surgery. On the medical service the nurse judged the reaction in terms of the emotionality of the patient, the purpose of the request for relief of pain, the accumulative effects of pain, the lack of effectiveness of previous measures to make the patient comfortable, and the seriousness of the prognosis of the illness.

Conditions of the patient checked by the nurse. The nurse was asked if she had checked anything about the patient before taking action to relieve his pain. On the medical service in seven incidents the nurse stated that nothing had been checked. In three incidents, four conditions of the patient (pulse, position, temperature, and blood pressure) were checked.

On the surgical service in five incidents the nurse stated that nothing had been checked. In five incidents six conditions were checked. Of these conditions alignment of the body or of an extremity and circulation of an extremity were mentioned in the care of the patients with fractured bones. The other conditions were micturition, dressings covering the surgical wound, and the pulse.

The patient's pulse and his position were the two conditions checked on both the medical service and the surgical service. Conditions checked were related, not only to the relief of pain, but also to the care of a patient with a particular illness.

Persons consulted by the nurse. On the medical service and on the surgical service in some incidents the nurse, before taking action to relieve pain, consulted other persons concerned with the care of the patient. In one incident the nurse consulted another staff nurse. This consultation took place after action had been taken to relieve pain and was not included in the analysis. This consultation was concerned with positioning to insure continuous traction and was important in the prevention of pain. On the medical service and on the surgical service the physician and the head nurse were the persons consulted as shown in these results:

	Physician	Head Nurse	Totals
Medical Service	1	5	6
Surgical Service	1	2	3
Totals	2	7	9

For the total sample in nine incidents the nurse consulted either the physician or the head nurse before taking action to relieve pain. Consultations were held twice as frequently on the medical

service as were consultations held on the surgical service. The person most likely to be consulted was the head nurse for both services. The physician was consulted in one incident on each of the services.

All nurses, who gave medication to relieve pain, consulted the patient's chart and/or the Kardex. The information from the chart or Kardex concerned the physician's order and the time the medication had been given to the patient. In one incident on the medical service the nurse stated that she had checked the nurses' notes regarding the patient's previous complaints.

Summary of assessment. In the majority of incidents the nurse initiated activities to relieve the patient's pain on having been informed by another member of the health or nursing personnel that the patient was complaining of pain. The person most likely to inform the nurse of the patient's complaint of pain was the nurse aide. On the medical service the nurse did not receive the initial complaint of pain directly from the patient in any of the incidents. On the surgical service the nurse received the complaint of pain directly from the patient in approximately one half of the incidents. In the majority of incidents the nurse, on being informed of the patient's complaint, visited the patient before deciding upon a course of action to relieve his pain.

Patient behavior, indicating that the patient was in pain, included the verbal complaint of pain and non-verbal behaviors. In slightly more than one half of the incidents some non-verbal behaviors

were noted. More non-verbal behaviors, occurring in more incidents, were observed by the nurse on the surgical service than were observed by the nurse on the medical service. In one half of the incidents on the medical service no non-verbal behaviors were noted and the patient's verbal complaint of pain was the only indication that the patient was having pain.

The intensity of the patient's pain as described by the nurse was of a lesser degree of intensity than stated by the patient in approximately one half of the incidents. On the surgical service the nurse tended to estimate the intensity as severe and to agree with the patient's estimate of intensity more often than did the nurse on the medical service. The patients on the medical service and on the surgical service tended to estimate the degree of intensity as severe in an equal number of incidents.

On the medical service the nurse's description of the patient's pain was most often a restatement in a generalized form of the patient's complaint. The nurse's descriptions most often indicated an "uncomfortable" state while the patient's descriptions included different aspects of the pain experience and in no incident described his pain as being merely "uncomfortable." The nurse considered such factors as race, ease of communicating with the patient, continuous discomfort, aloneness, dependency on drugs, or indifference to pain in the description of pain. When the diagnosis of the patient's illness was known the cause of the pain was most often stated in terms of the

diagnostic category or a symptom associated with the diagnosis. In other incidents the cause was an assumption or a generalized statement based on information received from the patient. Much uncertainty regarding the cause of pain was expressed by both the nurse and the patient. In most incidents on the medical service pain had persisted over long periods of time and, in stating the length of time the pain had persisted, the patient usually mentioned the occasion or the event which had precipitated the pain. Previous surgical intervention was mentioned in three incidents.

On the surgical service the nurse and the patient used almost identical terms in describing the pain or in stating the cause of the pain. Neither doubt nor uncertainty about the cause of pain was expressed by either the nurse or the patient.

In judging the reaction of the patient to his pain in one half of the incidents the patient's reaction was classified as under-reacting. The remaining incidents were almost equally divided between the categories of over-reacting and neither over-reacting nor under-reacting. On the medical service one half of the incidents were classified as neither over-reacting nor under-reacting. The other one half of the incidents were about equally divided between the other two categories. On this service no common criteria of patient behavior on which the judgment was based was identified. On the surgical service the majority of the incidents were classified as under-reacting. The categories of over-reacting and neither over-reacting nor under-reacting contained

only one incident each. The criteria identified for judging the reaction was based on the nurse's expectations of patient behavior which had been observed in other post-operative patients.

Conditions of the patient which were checked before taking action to relieve pain were: on the medical service — pulse, temperature, blood pressure, and position; on the surgical service — the alignment of the body or a part of the body, dressings covering the surgical wound, pulse, and micturition.

Consultations regarding the measure to be used in relieving the patient's pain were held with the head nurse and with the physician. Such consultations occurred twice as frequently on the medical service as on the surgical service. In one half of the incidents on the medical service the head nurse was consulted. The physician was consulted with equal frequency on the two services.

CHAPTER III

ANALYSIS OF ACTIVITIES RELATED TO RELIEF

This part of the paper describes the specific activities employed by the nurse to relieve the patient's pain. The statement of the nurse and the statement of the patient regarding the effectiveness of these activities in relieving pain are compared.

Specific activities employed to relieve pain. Specific activities employed by the nurse to relieve pain were classified as independent activities and dependent activities. These activities and the number of times employed are illustrated in Table IX. Turning a patient's body, a measure which does prevent muscular strain thus reducing painful stimuli and promoting comfort, was employed in six incidents on the surgical service. This measure was sometimes described by the patient as initiating or aggravating his pain rather than contributing to his comfort. A back rub was employed only once in an incident on the medical service. Positioning was employed in all incidents in which failure to assume or to maintain a particular position would have resulted in discomfort or pain for the patient. A variety of independent activities were employed by the nurses, but the majority of these activities were making the patient's bed more comfortable or assisting him to assume a more comfortable position.

On the medical service seventeen activities were employed. Of this total seven activities were independent activities and ten activities were dependent activities. On the surgical service twenty five

TABLE IX

SPECIFIC ACTIVITIES EMPLOYED BY THE NURSE TO RELIEVE PAIN

Activity	Number of times employed		
	Medical Service	Surgical Service	Totals
Independent Activities:			
Positioning	1	3	4
Comfort Measure	6	13	19
Total	7	16	23
Dependent Activities:			
Medication (Injection)	7	6	13
Medication (Oral)	2	3	5
Medication (Sublingual)	1	0	1
Total	10	9	19
Totals	17	25	42

activities were employed. Of this total sixteen activities were independent activities and nine activities were dependent activities. The number of independent activities exceeded the dependent activities. However, in considering the number of incidents in which the two types of activities were used, dependent activities were employed in all but one incident, as is shown in these results:

	For the Medical Service	For the Surgical Service	For the Total Sample
Independent and/or Dependent Activities	10 (100%)	9 (90%)	19 (95%)
Independent Activities Only		1 (10%)	1 (5%)
Totals	10 (100%)	10 (100%)	20 (100%)

On the medical service independent and dependent activities were employed in four incidents. Dependent activities only were employed in six incidents. On the surgical service independent and dependent activities were employed in eight incidents. Dependent activities only were employed in one incident. For the total sample independent and/or dependent activities were employed in nineteen (95 per cent) incidents. Independent activities only were employed in one (5 per cent) incident. Independent activities, in terms of the number used, and the number of incidents in which used, were employed twice as frequently on the surgical service as were these

activities on the medical service. Dependent activities on the medical service and dependent activities on the surgical service, in terms of the number used, and the number of incidents in which used, were almost equal.

Nineteen medications, nine medications on the surgical service and ten medications on the medical service were given. For the two services the drugs given and the methods of administration were similar in seven incidents, as is shown by this comparison:

	On the Medical Service	On the Surgical Service	Totals
Analgesic (oral)	2	2	4
Antispasmodic (sublingual)	1	0	1
Ataractic (injection)	2	0	2
Narcotic (injection)	5	6	11
Narcotic (oral)	0	1	1
Totals	10	9	19

Ataractic drugs and an antispasmodic drug (nitroglycerine) were given on the medical service but not on the surgical service. On the surgical service narcotics were given more frequently (in seven incidents) than on the medical service (in five incidents). Medications given by injection were more frequent on the medical service (in seven incidents) than on the surgical service (in six incidents).

The patient was asked what the nurse had done to make him more comfortable. The dependent activity employed by the nurse was the activity most frequently stated by the patient, as is shown in these results:

	On the Medical Service	On the Surgical Service	Totals
Independent and Dependent Activities	4	2	6
Dependent Activities Only	5	8	13

On the medical service the patients were more likely to mention independent activities as contributing to comfort. Four patients stated comfort measures as having been employed by the nurse. In one incident the patient stated that he had requested the nurse to perform the comfort measure for him. In another incident independent activities had not been employed by the nurse at the time of the incident, but the patient stated, "Everything you want to make you comfortable. Shots, medicines, and making the bed comfortable. A pillow so my bones don't rub together." In the six remaining incidents, the patients mentioned only the dependent activity in terms of "pills," "shot," or "hypo."

On the surgical service in nine incidents independent activities had been employed by the nurse. Only two patients mentioned

these measures. The incident, in which the nurse had employed only comfort measures, the patient stated that the nurse had done nothing other than offered him a "shot" which he had refused. In the other seven incidents the patients stated only the dependent activity, "pills," "shot," or "hypo."

Nurse's confidence in the activity employed. The nurse was asked to state the effect that the activities should have in relieving the patient's pain. All nurses stated that the activities employed should relieve pain. Examples of these statements were: "should relieve the pain," "relax the patient," "control the pain," or "make the patient feel better."

In three incidents, two incidents on the medical service and one incident on the surgical service, the nurse expressed more than this. On the medical service in one incident the nurse commented on the attitude of the patient. Her comment was: "His attitude is improved. I think he thought we were afraid. ... . Don't think he feels this way now." In the second incident the comment of the nurse concerned the relief of anxiety: "Probably relax him and relieve his anxiety. Sometimes it does not and then we call the doctor. He's real worried about himself ... ." On the surgical service the comment by the nurse which revealed her expectations concerning the activity was: "It isn't going to relieve his pain for any length of time because he has had surgery and probably needs some medication for relief."

Interaction of the nurse and the patient. The questions asked did not reveal the nature of the interaction of the nurse and the patient. To obtain information on the nurse-patient interaction, observations and verbatim recordings of these interactions would need to be made over a long period of time and would need to include not only the interaction of the incident, but also other interactions as well. The data obtained revealed the kind of information that the nurse requested from the patient regarding his pain and the kinds of information, instruction, or suggestion that the nurse gave to the patient at the time of the incident. This information is illustrated in Table X. There were some differences in the approaches used by the nurses on the medical service and those approaches used by the nurses on the surgical service.

On the surgical service the nurse more often assured the patient that he could have the medication for pain, and in some incidents the nurse suggested that, if the patient were having pain, a medication be given. On the medical service the nurse less frequently assured the patient that he could have a medication for pain; and more often said that she would get "something" (or would see if she could get "something") for his pain. On the surgical service the nurse more often suggested that the medication would relieve the pain and that the patient "would feel better in a little while." On the medical service the nurse more often stated simply that the medication was for pain, or that she would "check" with the patient later. On

TABLE X

INFORMATION REQUESTED FROM PATIENTS OR GIVEN TO PATIENTS BY THE NURSES DURING THE PROCESS OF RELIEVING THE PATIENT'S PAIN*

Information Requested or Given	Medical Service	Surgical Service	Total
Asked for information about pain	2	4	6
Informed patient of intended activity			11
The nurse would get "something" for pain	4	1	
The patient could have "something" for pain	1	3	
The patient be given "something" for pain		2	
Informed patient of expected effect of activity			10
The medication was for pain	3	1	
The medication would relieve pain	1	3	
The nurse would "check" with the patient later	2		
Instructed the patient			6
To rest	1	1	
To report if pain was not relieved	1	2	
To maintain body alignment		1	
Did not say anything to the patient	1	1	2
Totals	16	19	35

*Excludes one incident on the surgical service

the surgical service the nurse gave instructions to the patient more often than did the nurse on the medical service. In two incidents, one incident on the medical service and one incident on the surgical service, the nurse stated that "nothing" had been said to the patient.

Table XI illustrates the information that the patient stated was received from the nurse at the time of the incident. The following incident was not included in either Table X or XI. On the surgical service the nurse suggested to the patient that she take a "pill" instead of the "hypo" which he had requested. The patient had refused, saying that the pill would take too long before relieving the pain. The nurse, then, instructed the patient to ask for relief of pain sooner and that the pill might control the pain. This patient, when asked what the nurse had said to her about the pain or about the activity, replied by stating information given to her by someone else: [Another nurse] "Told me that the doctor might give me something else to relax the muscles. I asked him but he said he did not feel this would help."

The most frequent response of the patient to the question, what did the nurse tell you [about your pain or what she did for you] was "nothing." On the medical service in two incidents the patient just stated "nothing." In four incidents the patients stated why the nurse had said "nothing." In three of these incidents the patient, in stating that the nurse had said "nothing," added (1) that the physician had been asked for the medication, (2) that it was what the physician

TABLE XI

PATIENT'S STATEMENT CONCERNING INFORMATION RECEIVED FROM THE NURSE DURING THE PROCESS OF RELIEVING PAIN

Information Received From the Nurse	Medical Service	Surgical Service	Total
Nothing (no information)			13
Nothing	2	4	
Won't tell anything	1		
Nothing unless asked	1		
Nothing and information unnecessary	4	1	
Asked if wanted a "shot"		2	2
Couldn't remember		1	1
Explained effect of other medicines	1		1
Told to ask for medication when needed	—	1	1
Totals	9*	9**	18

*One patient on the medical service was not interviewed.

**Excludes the comments of one patient on the surgical service.

had on the chart, or (3) that it was what the physician had told the nurse to do. In the fourth of these incidents that patient stated that the nurse had said "nothing," but "she knew I knew." In one incident the patient indicated that he received information from the nurse when he asked for it. Of the remaining two incidents one patient stated that the nurse would not give information to him. The other patient stated that the nurse gave him information concerning the action of the medicines which he was taking as part of the treatment regime.

On the surgical service in four incidents the patient just stated that the nurse had said "nothing." In a fifth incident the patient stated that the nurse had said "nothing," but added that the nurse knew that she knew. In one incident the patient, who had slept soundly and was not interviewed until approximately two and one half hours following his medication for pain, stated that he could not remember what the nurse had said to him. In two incidents the patient stated that the nurse had suggested the medication be given. In the remaining incident the patient stated that she had been told by the nurse to request the medication whenever needed for the relief of pain.

Effectiveness in relieving pain. The nurse and the patient were asked to state the result of the activities in relieving pain. The response of the patient which indicated that the pain was relieved was classified as "relief." If the patient indicated that the pain

was only partly relieved such as "it helped," "pretty good," or "almost relieved," the response was classified as "partial relief." If the patient stated that the pain was still present or that the activity had had no effect in relieving his pain, the response was classified as "no relief." The response of the nurse which stated that the pain was relieved was classified as "relief." If the nurse indicated that the pain was only partly relieved such as "not too comfortable," or "more comfortable," the response was classified as "partial relief." In fifteen incidents, seven incidents on the medical service and eight incidents on the surgical service, the nurse stated an observation on which the response was baded. The statement of the nurse and the statement of the patient pertaining to the relief of pain are compared in Table XII for the sample on the medical service, and in Table XIII for the sample on the surgical service.

On the medical service the nurse stated that the patient's pain was relieved in eight incidents and partially relieved in one incident. In one incident the nurse stated that she did not know whether or not the patient's pain had been relieved. The patient stated that his pain was relieved in five incidents, partially relieved in three incidents, and not relieved in one incident. In one incident the patient was not interviewed.

On the surgical service the nurse stated that the patient's pain was relieved in eight incidents, and partially relieved in one incident. In one incident the nurse stated that she did not know

TABLE XII

A COMPARISON FOR THE MEDICAL SERVICE OF THE NURSE'S STATEMENT AND THE PATIENT'S STATEMENT PERTAINING TO THE RELIEF OF PAIN

	Number of Incidents of Nurses Relief				of Patients Relief		
Statements	Yes	Partial	No	Not Stated	Yes	Partial	No
Relieved pain	2				1	1	
Relieved pain, appeared asleep	3				1	1	1
Relieved pain, eating, happier	1				1		
Relieved pain, appeared relaxed	1				1		
Relieved pain, hasn't complained*	1						
Relieved some, not very comfortable		1				1	
I don't know	-	-	-	1	1	-	-
Totals	8	1	0	1	5	3	1

*Patient not interviewed

TABLE XIII

A COMPARISON FOR THE SURGICAL SERVICE OF THE NURSE'S STATEMENT AND THE PATIENT'S STATEMENT PERTAINING TO THE RELIEF OF PAIN

	Number of Incidents						
	of Nurses				of Patients		
	Relief				Relief		
Statements	Yes	Partial	No	Not Stated	Yes	Partial	No
Relieved pain	1				1		
Relieved pain, sleeping	2				1	1	
Relieved pain, resting	3				3		
Relieved pain, hasn't complained	2				1		1
More comfortable, hasn't complained		1			1		
I don't know	-	-	-	1	1	-	-
Totals	8	1	0	1	8	1	1

whether or not the patient's pain was relieved. The patient stated that his pain was relieved in eight incidents, partially relieved in one incident, and not relieved in one incident.

For the total sample the nurse stated that the patient's pain was relieved in sixteen incidents and partially relieved in two incidents. In two incidents the nurse stated she did not know whether the patient's pain had been relieved or not. The patient stated that his pain was relieved in thirteen incidents, partially relieved in four incidents, and not relieved in two incidents. One patient was not interviewed. The majority of patients did experience relief of pain. In those incidents, in which the patient experienced only partial relief of pain, the greater number were on the medical service.

The statement of the nurse and the statement of the patient pertaining to the relief of pain were compared to determine whether or not agreement or disagreement existed between the statements. On the medical service in two incidents the statements could not be compared. Of the eight incidents which were comparable, agreement between the nurse's statement and the patient's statement was found in five incidents. Disagreement between the nurse's statement and the patient's statement was found in three incidents. On the surgical service nine incidents could be compared. Agreement between the nurse's statement and the patient's statement was found in six incidents. Disagreement was found in three incidents. For the total sample seventeen incidents could be compared. In eleven of these incidents agreement was found

between the nurse's statement and the patient's statement. Disagreement was found in six incidents.

To determine the significance of the agreement between the nurse's statement and the patient's statement of the relief of pain, Fisher's exact probability test[7] was used. The incidence of "partial relief" and "no relief" were combined (see Appendix D). For the medical sample the agreement of the nurse's statement and the patient's statement is significant at the .14 level. For the surgical sample agreement is not significant, the level of significance being .50. For the total sample agreement is significant at the .11 level.

Of the fifteen incidents, in which the nurse stated an observation, only three observations, "sleeping," or "appeared asleep," "resting," and "hasn't complained," are discussed. In five incidents the nurse stated that the pain was relieved and that the patient either "appeared asleep" or was "sleeping." Of these five incidents two patients stated that the pain was relieved; two patients stated that the pain was partially relieved; and one patient stated that the pain was not relieved "at all." In the incidents in which the nurse stated that the patient's pain was relieved and that the patient "hasn't complained;" two patients stated that the pain was relieved and one patient stated that the pain was not relieved. One patient was not

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[7]Sidney Siegel, Nonparametric Statistics for the Behavioral Sciences (New York: McGraw-Hill Book Company, 1956), pp. 96-101.

interviewed. In the three incidents, in which the nurse stated the patient was "resting," all three patients stated that the pain was relieved.

In two incidents on the medical service the nurse stated that she had specifically asked the patient about the relief of his pain. In both incidents the patient had told the nurse that the pain was relieved. In one of these incidents the patient told the interviewer that he still had some pain.

Summary of relief. An activity dependent on the explicit order of the physician was employed in all but one of the incidents. Independent activities were also employed by the nurse at the time of the incident. The independent activities were employed twice as frequently and in twice as many incidents on the surgical service as were these activities employed on the medical service.

All nurses expressed confidence in the activities employed to relieve the patient's pain. In the one incident in which independent activities only were used the nurse expected the patient's relief of pain to be temporary.

Little difference in the kinds of medications given to relieve pain or in the methods of administration were found between the two services. On the surgical service there was a slightly higher use of narcotics. On the medical service there was a slightly higher use of injection as the route of administration.

In the verbal interaction with the patient at the time of the

incident the nurse asked the patient for information about his pain, told him the medication was for his pain or indicated that the medication would relieve his pain, and/or gave instructions to the patient such as "to rest," "to maintain positioning," or "to report if his pain was not relieved."

The nurse stated that the patient's pain was relieved in the majority of the incidents, partially relieved in two incidents, and not known in two incidents. Of the observations stated to indicate relief of pain "resting" was the most reliable. "Sleeping" or "hasn't complained" did not necessarily indicate that the patient had experienced relief from pain.

Most often only the dependent activity employed by the nurse was stated by the patient as having been employed by the nurse to relieve his pain. On the medical service the patient was more apt to mention the independent activities of the nurse as contributing to his comfort than was the patient on the surgical service.

In the majority of incidents the patient stated that the nurse had said nothing to him at the time of the incident. In about one fourth of the incidents the patient indicated that no information was necessary. By some patients the nurse was seen as simply carrying out the physician's order for the relief of pain.

In over one half of the incidents the patient stated that his pain was relieved. In one fifth of the incidents the patient stated that his pain was partially relieved. In one tenth of the incidents

no relief of pain was experienced by the patient. The greater number of patients whose pain was only partially relieved were on the medical service.

In comparing the relief of pain as stated by the patient and by the nurse, in slightly more than one half of the incidents the statements were in agreement. In approximately one fourth of the incidents the statements were in disagreement. In three incidents either the nurse did not know whether the patient's pain was relieved or the patient was not interviewed and no comparison could be made.

CHAPTER IV

ANALYSIS OF SUPPLEMENTARY ACTIVITIES

Two suppositions were proposed: (1) that the patient's pain had not been relieved by the previous activities, and (2) that the patient would like performed some activities other than those previously employed. Assuming these two propositions as true, this part of the paper describes those activities which might have been employed by the nurse, but which were not necessarily performed by her.

Activities if pain were not relieved. Assuming that the patient's pain had not been relieved, the nurse was asked to state other activities that would be employed to relieve the patient's pain. In seven incidents the nurse stated two choices. In one such incident the choices involved an independent and a dependent activity. In the other six such incidents both choices were either independent activities or both choices were dependent activities. The activities were classified into first choice and alternative choice depending upon the order in which the activities were stated. The choices and the type of activity which would have been employed by the nurse are illustrated in Table XIV.

Of the thirteen choices stated by the nurses on the medical service, five activities were independent activities and eight activities were dependent activities. Of the fourteen choices stated by the nurses on the surgical service, six activities were independent activities and eight activities were dependent activities. The

TABLE XIV

ACTIVITIES WHICH WOULD BE EMPLOYED BY THE NURSE IF THE PATIENT'S PAIN WERE NOT RELIEVED

Activity	First Choice		Alternative		Totals
	Medical Service	Surgical Service	Medical Service	Surgical Service	
Independent Activities:					
Positioning	1	1	-	-	2
Comfort Measures	-	2	-	1	3
Talk or Stay With the Patient	3	1	1	1	6
Total	4	4	1	2	11
Dependent Activities:					
Call the Physician	3	2	1	2	8
Medication for Relief of Pain	1	4	1	-	6
Medication for Other Symptoms	2	-	-	-	2
Total	6	6	2	2	16

activities stated and the number of incidents in which independent activities, dependent activities, or a combination of independent and dependent activities would have been employed, were almost identical for the two services, as is shown in these results:

	Medical Service	Surgical Service	Total Sample
Independent and dependent activities		1	1
Independent activities only	4	3	7
Dependent activities only	6	6	12
Totals	10	10	20

On the medical service in four incidents the nurse stated that she would talk with the patient. In three incidents this was the only choice stated. In the fourth incident the nurse would have tried positioning of the patient first. In these four incidents independent activities would have been employed. Of the remaining six incidents the nurse would have given a medication for the relief of pain in two incidents. In one incident this was the only choice stated. In the second incident the nurse would have given oxygen for symptom relief before giving the medication for relief of pain. In four incidents the nurse would have called the physician. In three incidents this was the only choice stated. In the fourth incident the nurse would have given a medication for symptom relief (other than "pain") before calling the physician. In these six incidents dependent activities

would have been employed.

On the surgical service in two incidents the nurse stated that she would stay with the patient and employ comfort measures. In one incident comfort measures were stated as the first choice. In the second incident comfort measures were stated as the alternative choice. In a third incident the nurse stated only one choice, positioning of the patient. In these three incidents independent activities would have been employed. Of the remaining seven incidents the nurse would have given other medication for the relief of pain in four incidents. In three incidents this was the only choice stated. In the fourth incident, if the patient had refused the medication ordered, the nurse would have called the physician as an alternative choice. In three incidents the nurse stated that she would call the physician. In two incidents this was the only choice stated. In the third incident the nurse would have employed positioning of the patient before calling the physician. In these seven incidents dependent activities would have been employed.

Activities the patient would like done. The patient was asked if there was anything else that he would like the nurse to do to help him. The nurse was asked if she thought there was anything more the patient would like her to do in relation to the relief of his pain. The final question for the patient elicited some information about his expectations and his satisfactions concerning the relief of his pain or the nursing care being given to him. In some incidents the

final question for the nurse elicited information concerning other activities that might be performed for the patient. In collecting the data responses of the patients and of the nurses were not questioned or probed. Therefore, the respondent's meaning of certain words or phrases was not determined. To some degree the responses reflected differences and similarities in the perceptions of the patient and those of the nurse. In order to compare, in each incident, the response given by the patient and the response given by the nurse, first the patient's response was quoted, followed by the response of the nurse. The incidents on the medical service are discussed first, beginning with those incidents in which the patient stated his pain had been relieved.

In this incident the patient had stated that his pain had been relieved in "a matter of minutes." In replying to the question he stated:

> I get impatient when I can't have the shot. About a week ago I was getting one every hour. They called the doctor and made different arrangements. Everybody's been good to me. I wish I could get going.

The patient expressed his intolerance of discomfort and of delay in receiving immediate relief of his pain, his desire to get well in terms of "I wish," and his resentment toward the nurse for her interference, limiting the intake of his medication, but added "everybody's been good to me." The nurse responded:

> He always enjoys it if you sit and talk. Likes to show things brought in by the ... [a service organization]. Show interest.

In previous responses the nurse had recognized the patient's inability to endure discomfort and to tolerate delay in the relief of his pain, by saying, "I'd try to talk to him to see if he could wait and give it (the medication) a chance." The nurse had stated that the medication should "relieve his anxiety. Sometimes it does not and then we call the doctor." In giving the medication for relief of pain to this patient, the nurse had assured the patient that it was a "different" medicine than the one previously given and that he should "rest." The expectations of the patient and of the nurse that the medication would relieve the pain and the anxiety were similar.

In the second incident the patient had stated that the pain had been relieved "about twenty minutes later" (following the administration of a medication). He had expressed his desire to know the cause of his pain in terms of "I wish I knew." His response was:

> No. If I need them I'll call them. I don't like to call. Unless I'm really, really sick, I don't ask for nothing.

The nurse responded:

> I believe this satisfied him at this particular time. He has a lot of other problems. Rather withdrawn earlier this morning.

In a previous response the nurse had stated that this patient was

"using pain as an excuse to have someone in the room with whom to talk." In this incident the patient and the nurse expressed satisfaction with the result of the immediate situation. The nurse implied that the relief that the patient would experience was temporary. It was not determined what the nurse meant by "withdrawn."

In the third incident the patient had commented that the pain was relieved but that he did not know how long the relief would last, "when I get upset or excited it comes." He responded:

> No, not that I know of right now. They are nice and kind to me. I leave it to them. I take the medicine when they give it to me.

The patient expressed that at the moment, "not right now," he did not expect the nurse to do anything further to help him. Whether the patient also indicated his dependency upon the nurse or his indifference to his pain could not be determined from the data. The nurse responded:

> He's lonely. He would probably like you to stay. Usually doesn't like you to leave. I gave reassurance that I would come back and I did.

The nurse had previously commented that this patient might not report his pain and that he was "hard to talk to." It was not determined what the nurse meant by the term "lonely."

In the fourth incident the patient and the nurse stated "no." The patient did not expect the nurse to do anything further. The

nurse did not think that the patient wanted anything more done for him. The stated expectations of the patient and of the nurse were the same.

In the fifth incident the patient stated that his pain had been relieved and that his pain had not been present before the incident. This patient responded:

> No. Very good. ... . I hope that bug gets killed this time. This virus stuff has really been something this year. Everyone I've talked to says the same thing.

The patient had expressed satisfaction concerning the relief of his pain and the nursing care given. He expressed expectations from his treatment that were not expressed by the other patients. The nurse responded:

> I don't know [if the patient would like anything more done].

In a previous response the nurse had stated that "nothing" had made this patient feel better. The nurse expressed dissatisfaction with the result of her activities that were not expressed by the patient.

The following discussion relates to the three incidents in which the patient stated that the pain was only partially relieved. In this incident the patient had told the nurse that his pain was relieved, but he had told the interviewer that his pain was only partially relieved. The patient responded:

> No, I don't believe there is [anything more that the nurse could do to help him].

The nurse's response was:

> This patient. I think diversion away from pain. I think that he has done a lot with the help of the nursing personnel. His family are very good with him. Get him up and bring him out here. Seem to have a lot of fun together.

The nurse had previously commented that the patient hesitated to take medication, that the patient did not talk much, that the patient knew the illness was terminal, that he had "given up" and that his attitude had improved. It is not known what the nurse meant by "diversion away from pain." Nor could it be determined from the data if diversion would have met the expectations of the patient.

In the second incident the patient and the nurse had agreed that only partial relief of pain had been achieved. The patient stated:

> Everytime I get an attack they rub my back. Offer their services. ... .

The patient did not express further expectations regarding the relief of his pain or his nursing care. The nurse commented:

> No, I don't think so. I asked him if he'd like his back rubbed. I did send the nurse aide in to do it anyway.

It is not known why the nurse had a back rub given to the patient after

he had said that he did not want one.

In the third incident the patient responded:

> No. I think they are doing everything that should be done. The waiting is long. They give the hypo for pain often.

The patient, though his pain was only partially relieved, did not express dissatisfaction with the relief of his pain. He did comment that the time of waiting was long. This patient was anticipating surgery and had expressed some doubt about what might be found. The nurse responded:

> No. He's not very talkative. There's nothing he wants done. Usually have to wake him up.

The patient's perception of "waiting" was not perceived by the nurse.

In one incident the patient had received no relief from his pain. His comment was:

"No. At home the best thing is to get up and get busy." The patient did not express any expectations that further activities be employed to relieve his pain. The situation prevented the patient from using methods to reduce his pain that he had found successful in the past. The nurse's response was:

> I don't think so [that the patient would like anything more done].

In this incident the nurse had acted on the physician's "stat." order

and had not investigated the patient's complaint.

In the last incident on the medical service the patient was not interviewed. The nurse's comment was:

> No. The doctor has pills ordered but he insists upon hypos.

The nurse expressed the expectation that the patient's pain would be relieved by an oral medication rather than an injection, an expectation not shared by the patient.

In nine incidents on the surgical service the patient and the nurse stated that no other activities were desired. In the following the patient's response was:

> No, nothing.

The nurse responded:

> I don't know him well enough to know.

This was an unusual response in that it was the only time that a nurse on the surgical service stated that she did not know the patient well enough to make a comment.

Two other incidents on the surgical service are discussed. In the first incident the patient responded:

> No. She does about as much as she can. Ask how you are. Don't think they can do any more.

It was not determined whether or not the patient had expectations that were not really expressed. "About as much as she can" and "ask how you are" were not definite expressions of satisfaction. The nurse responded:

> No. He's rather independent and since he nearly lost all his fingers he doesn't want to appear debilitated. Seeing them was a shock.

In the second incident the patient responded:

> No [that there was nothing more the nurse could do to help him].

The patient did not express any activity that the nurse might employ to help him. The nurse responded:

> No. He's up and around, on his own. Make sure he has other comfort. Do change the dressing twice a day. Other than this, there's not too much you can do.

The nurse expressed that there were limitations to what could be done.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary. The problem of this study was to identify the activities employed by the nurse to relieve the patient's pain in a variety of pain incidents. After the nurse had employed some measure to relieve a patient's pain, an interview was held with the nurse and with the patient. Twenty incidents of pain, ten incidents selected by the nurses on the medical service and ten incidents selected by the nurses on the surgical service, were investigated. The incidents were voluntarily selected by the nurses and not all incidents of pain occurring at the time of the investigation were necessarily included. Questions were related to the patient behavior which prompted the nurse to intervene to relieve pain, the assessment of the pain situation, the selection of an activity or activities to relieve pain, and the evaluation as to the effectiveness of the measure in relieving the patient's pain. Other activities which might be employed if the patient's pain were not relieved, or other activities which might be desired by the patient in the relief of his pain or providing for his comfort were elicited.

Conclusions. The nurse most frequently initiated activities to intervene to relieve the patient's pain after having been informed by other members of the health or nursing team that the patient was in pain. On the surgical service the nurse received the complaint directly from the patient in approximately one half of the incidents.

In response to this information the majority of the nurses directly observed the patient and requested further information from the patient regarding the nature of his pain. On the medical service the verbal complaint of the patient was more often the only indication that the patient was having pain. On the surgical service the non-verbal behaviors of the patient were more expressive and communicated to the nurse that the patient was in pain.

On the surgical service the nurse more often assessed the intensity of the patient's pain as severe and more often agreed with the assessment of intensity made by the patient of his pain. The nurse and the patient on the surgical service tended to describe pain and to give the cause of the pain in very similar terms. On the medical service the nurse more often assessed the intensity of pain as a lesser degree and less frequently agreed with the patient's estimate of intensity. The verbal complaint of the patient was reworded and generalized by the nurse in describing the patient's pain. Such generalizations were understatements of the patient's descriptions and did not reflect the specific aspects of pain related by the patient. In addition, the nurse considered factors of aloneness, dependency on drugs, indifference to pain, continual pain, race and ease of communicating with the patient. The cause of pain as related by the nurse and by the patient was unknown unless a diagnosis indicated the cause of pain. Assumptions of cause of pain were made by nurse and the patient. Assumptions by the nurse were based on the verbal complaint

of the patient or her interpretation of an event.

On the surgical service the patient's reaction to pain was most often described as under-reacting. The criteria used to determine the patient's reaction was based on comparison with other post-operative patient's behavior. On the medical service the patient's reaction was most often described as neither under-reacting nor over-reacting. No criteria was found for determining the patient's reaction to pain.

In selecting an activity to be employed to relieve the patient's pain, consultation was held with the head nurse more frequently on the medical service. In all but one incident on the surgical service the activity selected and employed to relieve pain was an activity dependent upon the explicit order of the physician. Though other nursing activities not requiring an explicit order of the physician were employed, the activity most frequently stated by the patient as having been employed by the nurse to relieve his pain was that activity which required a physician's explicit order. In the medical service the patient was more apt to mention the independent activity of the nurse. In the majority of incidents further dependent activities would have been employed if necessary to relieve the patient's pain.

Of the observations stated by the nurse which indicated that the patient's pain was relieved, "resting" was the most reliable. And "appeared asleep" or "sleeping" were less reliable. The majority of the patients stated that pain was relieved. In approximately one

half of the incidents the nurse and the patient agreed on the amount of relief experienced. The patient, even though his pain was only partially relieved or not relieved at all, did not state that he expected the nurse to employ further measures to relieve his pain.

There is some evidence that the nurse on the surgical service expected the patient to have pain and was more apt to offer medication for relief than was the nurse on the medical service. There is some evidence that when both non-verbal behavior and a definite source of pain could be identified that the pain was more apt to be seen as severe by the nurse. The patients were apt to describe pain as severe even though the source of pain was not identifiable.

It seems likely that the patient's reaction to pain when pain was presumed to be of short duration was considered only in terms of the immediate situation. Only after the patient's reaction to pain or the methods employed to relieve pain became problematic were other factors influencing pain stated as considerations by the nurse. Information about the patient's previous experience with pain, his reaction to pain, or his methods of dealing with pain was not stated. Devices previously employed by the patient to reduce pain were not stated.

There seemed to be wide individual differences in the assessment of the severity of pain and the patient's reaction to pain. Whether this would be true for all nurses in discussing the same incident of pain is not known. No consistent criteria of patient behavior

was identified.

Information given the patient by the nurse at the time of the incident did not seem to be remembered by the majority of the patients.

The patients and the nurses were apt to state that the relief of pain was dependent upon the physician's order.

There is some evidence that the patient was not dissatisfied even though he received only partial relief of pain or no relief.

Recommendations. A study of the same type would not be profitable. However, further study is needed to determine the effectiveness of nurse action in the relief of pain. Studies of nursing activities in relieving the pain of post-operative patients might yield some information on the methods that the patient uses to reduce pain. In some incidents the patient made the choice of the type of relief that he would be given.

A study of nursing activities in relieving the pain of patients who are seen as chronic complainers might yield some information on better methods of dealing with these situations.

A study of nursing activities of the different nurses who deal with the same patient in which the relief of pain is a problem might yield information on the degree of consistency that is maintained in dealing with the individual patient. It might produce information on the reasons for the differences in data obtained from the medical and surgical services.

Since the study focused only on the professional nurse's activity in the relief of pain and since the nurse aide most frequently reported the incident of pain to the nurse, a study needs to be done in which all nursing personnel concerned with the care of the patient are included. Such a study would yield a more complete picture of the nursing activities employed in the relief of pain.

It is further recommended that a study be done of a situation in which the method of nursing personnel assignment is that of the case method or of team nursing. The nurse assumes a different role in relation to the patient and to other nursing personnel. Therefore, each one's activities and effectiveness in the relief of pain might be different.

It is recommended that a test be made of the effectiveness in relieving pain when the focus of the nursing activities performed is directed toward the relief of specific discomfort rather than the performance of general comfort measures designed to promote comfort.

APPENDICES

APPENDIX A

QUESTIONNAIRE GUIDES FOR INTERVIEWS

Nurse interview Type: Medical Surgical

1. How did you find out that this patient was having pain?
2. What indicates to you that this patient is in pain?
3. How would you describe this patient's pain?
   Degree: Severe____ Moderate____ Mild____
4. What did you tell this patient?
5. Did you check anything about the patient?
   Blood Pressure____ Other____
6. What causes his pain?
7. Do you think this patient is over-reacting____ or under-reacting____ to his pain?
   What tells you this?
8. What nursing activity did you employ to make him more comfortable?
9. What effect should this have?
10. Did you consult his chart____ Kardex____ another person____?
    What information did this give you that influenced your choice of nursing activity?
11. What result did the nursing activity have in making the patient more comfortable?
12. If unsuccessful, what other nursing activity would you try?
13. Do you think this patient would like you to do something more in relation to the relief of his pain?

Nursing education and experience:

Associate degree (2 year program) ____
Diploma (hospital program 3 year) ____
Baccalaureate (collegiate 4 year) ____
Baccalaureate (5 year program) ____
Master of Nursing ____

Year of graduation ____

Years of actual practice in nursing since graduation ____

Patient interview Type: Medical Surgical

1. What is your pain like?
   Severe____ Moderate____ Mild____
2. Have you had this pain before?
3. What causes your pain?
4. What did the nurse do to make you more comfortable?
5. Did this relieve your pain?
6. What did the nurse tell you about your pain or the nursing activity?
7. Is there anything else that you would like the nurse to do to help you?

APPENDIX B

CLASSIFICATION OF NON-VERBAL BEHAVIORS

Categories

Action

Change in action

Just lying there--not reading
Not as ambitious

Specific action

Holding hand on wound
Big tears
Gasped
Moaning

Movement

Slowness to move
Hesitancy to move
Restlessness
Wiggling
Couldn't straighten out

Apprehension

Facial expression

Look on his face
Looked ready to cry
Facial grimaces
Looked distressed

General appearance

Position uncomfortable
Rolled up--high in bed
General appearance of discomfort
Looked real uncomfortable

APPENDIX C

DESCRIPTIONS OF PAIN GIVEN BY MEDICAL PATIENTS

"Cramps, like from eating green apples, in your stomach. ... . Have had it so long to me it's severe ... . It's hard to explain. I want to sit down, or lie down--double up and make a lot of noise. Get choking dry--tongue thick and like a stick of wood just before it happens."

"More or less soreness ... . Have had some pretty severe pains, too. [medicine] Always seems to help. Toss and turn all day, weary like. Helps to settle the nerves."

"Legs ache, bones ache. It will be over here and then there. The kind that you ache and just get nervous from aching. Goose pimples down my back and scalp. ... ."

"Right now, I've got four of them. ... . Severe, I've had them milder. I have headaches, too. Had a concussion and this is what causes my headaches."

"Sharp pain shoots through chest. They do really hurt when you have them."

"It's a steady pain and at times rather sharp ... . As a general thing, it's more moderate."

"[Day of onset] real bad, couldn't move. ... . Had felt pretty good, then [pain reoccurred]. Keeps me on the move."

APPENDIX D

FISHER EXACT PROBABILITY TEST

"..., the exact probability of the observed occurrence is found by taking the ratio of the product of the factorials of the four marginal totals to the product of the cell frequencies multiplied by N factorial."[8]

This test was used to determine whether or not the agreement between the nurse's statement of relief and the patient's statement of relief was significant. In using the test, the groups must fall into one of two possible scores, therefore, the categories of "partial relief" and "no relief" were combined. These scores are represented in a 2x2 contingency table. The marginal totals are regarded as fixed. The formula is:

$$p = \frac{(A+B)\,!\,(C+D)\,!\,(A+C)\,!\,(B+D)\,!}{N\,!\,A\,!\,B\,!\,C\,!\,D\,!}$$

Medical Service

	Relief	No Relief	
Nurse	7	1	8
Patient	4	4	8
	11	5	/16

$$p^1 = \frac{8\,!\,8\,!\,11\,!\,5\,!}{16\,!\,7\,!\,1\,!\,4\,!\,4\,!} = 0.128$$

Nurse	8	0	8
Patient	3	5	8
	11	5	/16

$$p^2 = \frac{8\,!\,8\,!\,11\,!\,5\,!}{16\,!\,8\,!\,0\,!\,3\,!\,5\,!} = 0.0128$$

$$p = \overline{0.1408}$$

Surgical Service

	Relief	No Relief	
Nurse	8	1	9
Patient	7	2	9
	15	3	/18

$$p^1 = \frac{9\,!\,9\,!\,15\,!\,3\,!}{18\,!\,8\,!\,1\,!\,7\,!\,2\,!} = 0.397$$

Nurse	9	0	9
Patient	6	3	9
	15	3	/18

$$p^2 = \frac{9\,!\,9\,!\,15\,!\,3\,!}{18\,!\,9\,!\,0\,!\,6\,!\,3\,!} = 0.1029$$

$$p = \overline{0.4999}$$

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[8]Siegel, op. cit., p. 97.

Total Sample

	Relief	No Relief	
Nurse	15	2	17
Patient	11	6	17
	26	8	/34

$$p^1 = \frac{17\,!\;17\,!\;26\,!\;8\,!}{34\,!\;15\,!\;2\,!\;11\,!\;6\,!} = 0.0928$$

Nurse	16	1	17
Patient	10	7	17
	26	8	/34

$$p^2 = \frac{17\,!\;17\,!\;26\,!\;8\,!}{34\,!\;16\,!\;1\,!\;10\,!\;7\,!} = 0.0182$$

Nurse	17	0	17
Patient	9	8	17
	26	8	/34

$$p^3 = \frac{17\,!\;17\,!\;26\,!\;8\,!}{34\,!\;17\,!\;0\,!\;9\,!\;8\,!} = 0.0013$$

$$p = \overline{0.1123}$$

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