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The use of observational process recording to identify children's initial reactions to hospitalization

BOSTON UNIVERSITY
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THE USE OF OBSERVATIONAL PROCESS RECORDING TO IDENTIFY CHILDREN'S INITIAL REACTIONS TO HOSPITALIZATION

A thesis

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CHAPTER I

INTRODUCTION

Purpose and Background of Study

Prevention in mental health as opposed to prevention in physical health is still in its formative stages. Today the National Institute of Mental Health and other agencies are seeking knowledge and understanding of the potential areas of stress in life which precipitate emotional damage, the consequences of which may not appear until years later. As early as 1937 studies were being done on the treatment of hospitalized children and the frequency with which such children show a personality change after returning home.[1] Since that time many other authors have discussed and studied the effects of hospitalization and illness in childhood. Milton J. E. Senn, Director, Child Study Center, Yale University stated in the foreword of James Robertson's book, Young Children in Hospitals:

> The movement to humanize care of patients in American hospitals is growing, but progress is slowed by the paucity of well-documented case material which could be used as clinical evidence to impress the doubters among us of the validity of the concept that there is a close relationship between the kind of care provided for the sick and the emotional sequelae of hospitalization.[2]

The purpose of this study was to develop a method of analysis for observational process recording of the initial reactions of children to hospitalization. This study was undertaken in the Children's Project, a

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[1]Roger G. Barker, Adjustment to Physical Handicap and Illness: a Survey of the Social Psychology of Physique and Disability, pp. 228-335.

[2]James Robertson, Young Children in Hospitals, p. vi.

social work training unit for social group work and casework students on the pediatrics wards of Boston City Hospital. Because the training unit seeks to broaden the knowledge base of its service as well as support the hospital in providing the most adequate care for hospitalized children, it sees part of its purpose as research into the reactions of children to hospitalization. This study was envisioned as a first step in developing an on-going research program into children's reactions to hospitalization in this setting. Therefore, this is largely an exploratory attempt at organizing observational data which was recorded within this setting. It was felt that the volume and detail of the data indicated that exploratory analysis was necessary in order to determine the potential value and possible methods of analysis for this data. As the program develops it should also provide some of the "well-documented case material" that Senn feels is needed.

Statement of the Problem

The purposes of this study are:

1) To develop a method of analysis through which observational process recording can be used to study the initial reactions of children to hospitalization.

2) From the data used in developing these methods of analysis, to formulate hypotheses about these initial reactions which could be used for further research. For example, it was thought that the data might lead to hypotheses about the ways in which the child's behavior changes over a period of time, or what his reactions are to the stress and trauma of the situation.

Data Used

The data consists of observational process records of the first twenty-eight waking hours of hospitalization of three pre-school aged children. The observations of the first two patients were made during the summer of 1962 on the pediatric medical wards of Boston City Hospital. At the time these observations were being planned, it was decided that after a specified date the first two admissions on two medical wards would automatically become the case studies. These cases turned out to be a four-year old girl and a five-year old boy.

In order to provide one complete patient observation for each author, it was decided that the three participants of this study would make an additional observation. It was felt, too, that actual participation in an observation would give the authors a better understanding of the possible use of the observations. In order that this case would correspond to the other two, a pre-school aged child admitted to one of the same medical wards was chosen. This case was a three-and-a-half-year old boy. It also turned out that there was a similarity in the types of illnesses which all three cases had and in the treatment prescribed for their conditions.

The observations were supplemented with information from the medical record and pediatrician, a community study (to give a better understanding of the patient's home environment), and a personal interview with the mother (to give a better idea of the patient's family life and her predictions about his behavior while in the hospital). At the time of the initial two studies, forms were devised on which the desired information could be recorded for the community study and the interview with the mother.

The community study was done by one member of the observation team during the time of the observation, while another team member conducted the interview with the mother as soon after the admission of the observed child as possible.

The observations were conducted by a three member team. The two made during the summer were completed by staff members of the Children's Project at the Boston City Hospital, undergraduate students placed there for the summer through the Social Work Careers Program and Boston University medical students. The third observational study was made by the three authors of the present study.

The ward staffs were informed beforehand of the purpose of these observational studies and the procedure to be used. An observation began when the head nurse notified the team members of a patient's arrival on the ward who met the team's specifications, and it extended over a forty-eight hour period. Only twenty-eight of these hours were observed and recorded since a complete day of observation started at 7:00 A.M. and ended at 9:00 P.M. The observation period was divided into three hour shifts rotated among the three participating members.

The observers took a seat about five to eight feet away from the patient (preferably directly across from his bed) so as to be close enough to see and hear him while at the same time remaining relatively inconspicuous. At the time of the observation the observer was not involved in any ward activity or in any way with the child being observed. The observations were recorded in fifteen minute blocks of time, and each page of recording was divided into three columns - one for time, one for des-

cription of behavior, and one for comments. The pages were numbered consecutively with the name of the observer at the top of each page. If the patient left the ward at any time, the observer followed him as far as possible. This meant to the elevator if he left the floor, or to the door of the treatment room if that was his destination. If the observer could not see what was happening to the patient, he recorded any sounds the child made or conversations in which he was involved. (See Appendix A for observation directions and Appendix B for example of an observation.)

The observers were expected to note all factors, human and environmental, which influenced the patient's behavior and the patient's response to these influences. They had to be careful to separate objective information from interpretive comment. The observers were instructed to pay particular attention during these observations to the following: the patient and persons with whom he came in contact (the initiating event, the means used, and the consequences of this contact and interaction), the constraints imposed on the patient, the regularities and recurrences of a reaction and how long it lasted, significant omissions in responses, any deviation of behavior from what was usual, and any inconsistencies of his behavior. (See Appendix A for details.)

We will give a brief description of each case at this time, although a more detailed one will be given later in the study. Melvin was a five-year old boy who was admitted to the boy's medical ward with a diagnosis of infectious mononucleosis. He was admitted at 1:30 in the afternoon and was on bedrest during the time of his observation. The only treatment he received was several shots and he was put on a liquid diet. Timmy

was a three-and-a-half-year old boy who was admitted to the boy's medical ward around 6:00 in the evening. His initial diagnosis was pneumonia and he, too, was confined to bed during the period of observation. Unlike Melvin, however, he was allergic to penicillin so received no shots. His treatment consisted primarily of nose drops, liquid medicine, pills, and salve. Judy was a four-year old girl who was admitted to the girl's medical ward at about 9:00 at night. Her diagnosis was urinary tract infection. Her main treatment was sulfa (taken in drinks), supplemented by aspirin, sponge baths, and forced fluids. She was also put on bedrest.

Method of Data Analysis

It was decided that each author would undertake the analysis of one case in order to facilitate the organization of the observational material.

To analyze the data it was necessary to devise some uniform principles of coding which could be applied to the observational record of each case. Therefore, we constructed a three dimensional system of coding the data so that each event would be classified under each of these three dimensions. The first dimension included persons active in the event, such as various members of the hospital staff (doctors, nurses, and aides), other patients, or parents and visitors, and those times when the patient was alone. The second dimension included stimuli impinging on the child from the outside, such as medical procedures (physical exams, temperatures, and shots), ward routines (eating, sleeping, and toileting), and social activity (games and ward play activities). The third dimension included the child's emotional expression (crying, watching, sucking, and smiling) and his physical activity or lack of it, such as his

attempts to reach out to others and his activity when alone.

The next problem was to identify a basic unit of analysis for this coding. This unit was called an "event" and was a period in which there was no real change in the activity of the child when alone or in the activity of those involved with him at the time. Likewise, it was a period in which there was no change in the particular person or persons interacting with him.

The next step after setting up the system was the coding of the recorded events according to each of the three dimensions.

The third step was to devise some means of organizing the coded data in a way to show the important aspects of the child's reactions to hospitalization, i.e., how they progressed over time. This third step was carried out separately by each author in order to allow ingenuity and freedom in devising ways of organizing the coded data.

The results of each of these analysis were then brought together to see:

1) What procedures in analysis were most useful or feasible?

2) What hypotheses about the child's reactions could be formulated?

In conclusion we made various interpretations, speculations, and recommendations concerning the findings of this study.

The Setting

The setting in which the observations were made consist of a boys' medical and a girls' medical ward of the Pediatric Service of Boston City Hospital. Established in 1854, the Boston City Hospital is a voluntary, non-profit institution located in the South End of Boston.

When first founded, it was housed only in one building. Since then it has expanded to twenty-three buildings and is now one of the largest hospitals in the country.

In addition to medical services provided for the patients, this hospital conducts programs of medical education, research, and social welfare services. It is a medical training centre for Boston University, Harvard, and Tufts medical schools as well as a training ground for students from seventeen schools of nursing and three schools of social work.

At Boston City Hospital, medical services are offered free for city employees and people who cannot afford to pay. Eligibility for admission is restricted to people from the city of Boston who have been residents for a minimum of five years. The average yearly record of the number of in-patients served from 1958 to 1961 is 33,000.[3] The majority of the patients are from the immediate and neighboring communities such as Roxbury, Dorchester, Jamaica Plain, etc. These communities are characterized for the most part by disorganized, heterogeneous and highly transient groups. In other areas the population is quite stable, composed of a few tightly knit ethnic groups. In general the patients of the hospital come from a predominantly lower socio-economic environment with poorly-maintained apartment houses and housing projects.

According to the record compiled in 1961, over 4,000 of the total

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[3]Marian Chuan, "A Summary of Children's Group Work Project at Boston City Hospital," p. 1.

33,000 in-patients served by Boston City Hospital per year were children.[4] The hospital's pediatrics building houses four medical and three surgical wards. Patients are segregated according to sex and nature of illness, medical or surgical, except for infants. The age range is from infancy to thirteen years with very few exceptions. The types of cases most commonly seen on the medical wards are respiratory and neurological diseases, gastro-urinary infections, ingestion of poison, etc. On the surgical wards, post-polio deformities, tonsillitis, appendicitis, gastro-urinary infections, plastic surgery, and results of accidents are prevalent.

According to the statistics of 1961-62 (January to May) compiled by the Children's Project of Boston City Hospital, the average number of patients admitted to the girls' medical ward was fourteen; that of the boys' medical ward was sixteen. As to the age of the patients, 46.4 per cent of the boys and 31 per cent of the girls on the medical wards were pre-school aged children. With reference to the average length of hospitalization, 62 per cent of the patients on the boys' medical ward and 55 per cent of those on the girls' medical ward were first admissions. On the boys' medical ward 60 per cent and on the girls' medical ward 49 per cent of the patients were hospitalized for one week. On the boys' medical ward 40 per cent and on the girls' medical ward 47 per cent were hospitalized for one to three weeks. In both medical wards the family history of the patients was obtainable from the medical records of 98.8 per cent of the boys and 80 per cent of the girls. These records disclosed that the children usually came from large families of lower socio-

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[4] Ibid.

economic status. Of the total number of patients, 28.5 per cent of the boys and 25.3 per cent of the girls on the medical wards were from broken homes.[5]

Each ward has an inverted T shape and a twenty-four bed capacity with open cubicles separated by glass partitions. Outside the entrance of the ward, one finds the doctor's office, the nurse's desk, a utility room, a kitchen, a linen room, two washrooms, two single rooms for serious and contagious cases, and a treatment room. The other end of the ward is a fan-shaped sun porch used as a playroom for the patients. A more spacious part of the ward is the centre where the children play and eat their meals. Those confined to bed-rest occasionally have their beds wheeled there to watch television.

A "normal" daily schedule begins with the wakening of the patients at 7 a.m. Then they eat breakfast and bathe (usually in bed). The doctors make their rounds at this time, after which the patients have their beds made by the nurses, aides or student nurses. From 9:30 to 11 a.m. there is no structured activity. Lunch is wheeled in by meal carts at 11 a.m. and distributed by the nurses and aides. From 12 to 1:30 p.m., patients are required to take naps. Visiting hours are from 2 to 7 p.m. The ward is usually most active in the afternoon, for in addition to the parents' visits, the children assemble to watch television or engage in free play with each other. Dinner is served at 4 p.m. The doctors again make rounds at 5 p.m. By 6 p.m., after most visitors are gone, the children are again left on their own until bedtime, which is usually 7:30 p.m.

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[5]Compiled by Children's Project of Boston City Hospital, 1961.

Upon admission, each patient is given a "johnny", which is a white tunic tied together at the back, a bath robe, a pair of slippers, and a bracelet-like name tag worn around the wrist. Temperatures are taken approximately every four hours, and bed pans are given at regular intervals before or after meals or whenever they are requested.

The ward staff in the day time consists of a head nurse, one or two assistant nurses, depending on the number of patients, student nurses, and two or three aides. In the evening, one night nurse takes over until 7 a.m.

The authority to use the recorded material previously completed in the summer of 1961 and to gather further data for this study was granted through the Children's Project of Boston City Hospital where the authors were placed for field work practice. Established in 1958 as a joint three-year pilot social group work project of the Child Guidance Clinic, the Pediatric Service, and the Boston University School of Social Work, the Children's Project was initially made possible by a grant from the Children's Mission to Children. Now it is supported by a five-year grant from the National Institute of Mental Health.

The purpose of the Project is

> . . . to protect children from the effects of separation, isolation and specific reactions to medical and surgical procedures. The method used is that of social group work and consists of guided group experiences, catharsis through verbalization and play, and the opportunity for mastery of traumatic events as well as growth oriented experiences.[6]

Since September, 1962, direct case work service has also been added.

The permanent Project staff provides supervision for graduate social

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[6]Lydia Rapoport, "The Concept of Prevention in Social Work," Social Work, vol. 6 (January, 1961), p. 11.

work students, volunteers, and student teachers from local colleges and universities. The social group work and case work services are provided for selected patients aged six to thirteen on four of the medical and surgical wards. This selection is based on such factors as the patients' psychological and emotional needs, problems of adjustment to hospitalization, ability to help other children who need group work service. On the girls' wards, student teachers provide a play program for pre-school children and the older ones not included in the social work groups. On the boys' wards, volunteers from Harvard and Radcliffe provide recreational service for such patients.

Survey of the Literature

After ten years of observing young children in hospitals and sanatoria while studying at the Tavistock Child Research Unit, James Robertson in 1958 wrote Young Children in Hospitals. He revealed in a clear and dramatic way his deep concern for children during hospitalization. He saw the role of the mother as indispensible in sustaining the child and he saw the task of separation as the greatest stress for the hospitalized child. He observed three stages in the process of "settling in" or adjustment of the child to the loss of his mother: PROTEST, DESPAIR, DENIAL.[7]

> PROTEST In this initial phase, which may last from a few hours to several days, the young child has a strong conscious need of his mother and the expectation, based on previous experience, that she will respond to his cries. He is grief-stricken to have lost her, is confused and frightened by unfamiliar surroundings, and seeks to recapture her by the full exercise of his limited resources. He has no understanding of his situation, and is distraught with fright and urgent desire to find his mother. He will often cry loudly, shake the crib, throw himself about, and look eagerly toward any sight or sound that might prove to be his missing mother. He may reject the attentions of nurses.

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[7]Robertson, op. cit., pp. 20-22.

> DESPAIR In the second stage, Despair gradually succeeds Protest. This is characterized by a continuing conscious need of his mother coupled with an increasing hopelessness. He is less active and may cry monotonously and intermittently. He is withdrawn and apathetic, makes no demands on the environment, and is in a state of deep mourning for his mother - grief of the greatest intensity . . .
>
> DENIAL In this phase, which gradually succeeds Despair, he shows more interest in his surroundings, and this may be welcomed as a sign that he is becoming "happy". It is, however, a danger signal. Because the child cannot tolerate the intensity of distress, he begins to make the best of the situation by repressing his feelings for his mother . . . Then he is free to take such satisfactions, food and attention as the ward can offer. It may then be thought that because he smiles and responds to play he has "settled" in the sense that all is well. But it will often be seen that when his mother comes he seems hardly to know her, and no longer cries when she leaves - on the face of it a peaceful situation, but, on reflection, surely a disconcerting thing that a child so young should seem to have lost his love for and attachment to his mother.

In this description of the process of "settling in" Robertson points to many potentially observable responses of the child on the ward. However, in his effort to depict the stress of separation he largely neglects the unique nature of the traditional ward environment that produces other stresses for the child.

From the other studies of children's reactions to hospitalization and illness we will review two which make a direct attempt to focus on the hospital ward environment and also make use of observations as part of their data. The first of these was done by Dane G. Prugh in 1953.[8] The initial goal was to determine the nature and degree of the emotional reactions of children and families to hospitalization. The secondary goal was to devise an experimental ward environment which would support the

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[8] Dane G. Prugh, et al., "A Study of the Emotional Reactions of Children and Families to Hospitalization and Illness," American Journal of Orthopsychiatry, vol. 23 (January, 1953), pp. 70-104.

patient in order to minimize the effects of hospitalization. Two hundred children (age 2 to 12) took part in the study. One hundred were in a control group and one hundred were in an experimental group. Both groups were studied by a psychiatric team consisting of a psychiatrist, psychologist, social worker, and nursery school teacher. While the control group received traditional methods of management, the experimental group was under a coordinated program designed to prevent traumatic emotional reactions.

The methods of obtaining the data and analysis of its content were diverse. Complete histories were obtained through interviews with the parents upon admission. Observations of the child's behavior on the ward, his relationships and his reactions were independently recorded by psychologist, play supervisor, head nurse, and other professional personnel. The material from play and verbal interviews with individual children was carefully recorded. In the interviews an attempt was made to gain, through play or fantasy, an understanding of the child's interpretation of his illness and hospitalization, his personality structure and currently employed defense mechanisms, and other factors.[9]

Several hypotheses were formulated as a result of the study: a) for preschool children separation from mother poses the principal threat; b) hospitalization has more severe effects on children aged three and under; c) preventive techniques can serve in minimizing effects of hospitalization; d) threat of bodily mutilation has a special meaning for boys aged four to six; e) specific treatment procedures may under varying

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[9] Ibid.

circumstances arouse specific anxieties in children which are related to the level of psychological development.[10]

Hattwick in 1937 used observational methods to tabulate all of the contacts on a particular ward between the nurses and patients for a three hour period.[11] She structured her observations by determining categories beforehand and recording only within the limits of these categories. She wanted to show the relationships between medical and social contacts, situations which were or were not met with resistance by the child, and situations where self-help was or was not permitted. She interpreted her results to mean that nurses should be alert to the opportunities for increasing self-help on the part of the patients, which she believed would not only be good for the patients in terms of lessening their resistance but would also amount to a saving in nursing time. She also believed that provision of more play materials, which the child should be left to use in his own way, would be desirable for the children and the hospital.

The two studies just cited show two methods of studying children's reactions to hospitalization as well as suggesting ways of supporting the child while he is in the hospital.

Other studies have emphasized other aspects of the child's reaction and used other means of obtaining data. Three theses (see bibliography) done at the Children's Project in 1962 evaluated children's reactions in terms of the insights of social group workers who were then working with

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[10] Ibid.

[11] B. W. Hattwick, "Mental Hygiene Considerations in the Care of Young Children," Mental Hygiene, vol. 21, (1937), pp. 263-270.

the children studied. The criteria for evaluation, therefore, largely represented the "practice wisdom" of the workers. It was felt by those writers that a more objective and factual evaluation would be of more help in communicating the effects of hospitalization to doctors, parents, and other people in contact with children. Gofman, et al., focused on the post hospitalization reaction of the child.[12] In reviewing four previous studies they found that twenty percent of all hospitalized children and fifty per cent of hospitalized children under the age of four showed the following behavior changes after hospitalization: regressive behavior, with extremely increased dependence; loss of bowel and urinary control; loss of ability of self-help; fears; sleep disturbances; speech disturbances; tics and mannerisms; and negativistic reactions. Other authors join with them in stressing the negative effects of lack of preparation for hospitalization and lack of explanation about illness and medical procedures. A study by Jackson, et al., emphasized the need to study the child's life before hospitalization for factors which might predispose particular children to psychic breakdown.[13] Kassowitz did a study of the effect of the use of hypodermic needles in an attempt to show the traumatic nature of a particular procedure.[14] Sutton, et al., studied

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[12]Helen Gofman, et al., "The Child's Emotional Response to Hospitalization," American Medical Association Journal of Diseases of Children, vol. 93, no. 2 (February, 1957), pp. 157-163.

[13]Katherine Jackson, et al., "Problem of Emotional Trauma in Hospital Treatment of Children," Journal of American Medical Association, vol. 149, no. 17 (August 23, 1952), pp. 1536-1538.

[14]Karl A. Kassowitz, "Psychological Reactions of Children to the Use of Hypodermic Needles," American Medical Association Journal of Diseases of Children, vol. 95 (January-June, 1958), pp. 253-258.

how the pathology of children treated in a psychiatric unit expressed itself when these same children were subjected to medical procedures for physical illness.[15]

The pediatrician is the person directly in charge of the treatment of the child in the hospital. This treatment must take into account the total well being of the child, both physically and mentally. This makes it essential that evidence offered to the doctor be in a form that he can understand and that he can use in helping the rest of his staff to understand the reactions of the child and the effects of hospitalization. As Robertson points out, the ultimate goal is to enable the child upon returning from the hospital to resume his normal growth and development from where he was when he left to go to the hospital.[16]

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[15]Helen A. Sutton, et al., "Emotional Reactions to Medical Procedures and Illness in a Hospital Child Psychiatry Unit," American Journal of Orthopsychiatry, vol. 28 (1958), pp. 180-187.

[16]Robertson, op. cit., pp. 27-28.

CHAPTER II

THE CASE OF JUDY
by
Sarah Case Savage

Introduction

Description of Patient

Judy was a four-year old girl admitted to the girls' medical ward of Boston City Hospital for urinary tract infection. This was her second admission to the hospital, her first being at the age of one when she was admitted for seven days with diarrhea. Judy was a white child, who was small and looked skinny for her age. Her hair was blonde and her large eyes emphasized the thinness of her face. Her admission took place during the summer around 9:00 in the evening. In order to cover the admission procedure which took place before Judy was finally put to bed, the observation on which this study was based lasted until 11:00 p.m. that night.

Judy's neighborhood was pictured as being a clean, congenial, stable and predominantly Irish-American residential area, where the three-storey wooden frame buildings were well kept up. The neighborhood was convenient to local stores, churches, and schools. Most of the residents were Catholic and, according to Judy's mother, religion played an important part in their lives. Most of the residents appeared to be young families who had settled in the area with the intention of raising their families there.

Judy came from a family of five children and was the next to oldest. Her only sister was a baby and the family's youngest member. Judy's parents both had some high school education and her father was employed

by the city, making approximately $105 a week. About a year before Judy's admission her father had an ulcer for which two weeks of hospitalization were required. Her maternal grandmother had diabetes. A few years before Judy's admission, her mother had an infection very similar to the one for which Judy was admitted. The only other hospitalizations in the family were for two of Judy's brothers. One was admitted for two weeks for pneumonia and the other was admitted for the same length of time for a mastoid operation. When questioned about the reactions of these children to their hospitalizations, Judy's mother claimed that they were all too young to really understand what was happening to them.

About six months previous to Judy's second hospitalization she became enuretic. This is one of the symptoms of an infection such as Judy had. For four days before her admission, she had fever, vomiting, and was incontinent with frequency. She had been sleeping poorly and had complained of pain in the right side of her abdomen. At the time of admission, Judy had a temperature of 106°. The treatment prescribed for her condition was bedrest, forced fluids, sponge baths, and sulfa in liquid form taken four times a day. (The sulfa was to be continued for three months.)

Judy's mother was described as a pleasant and friendly woman who showed and expressed verbally very little emotion. She denied or avoided the fact that Judy might become upset during her hospital stay although she did indicate that if Judy became upset, she would not come to see her. Judy's father on the other hand appeared more capable of expressing emotion and seemed to have a genuine interest in his family. He said that Judy was "Daddy's girl" and that it was as hard for him to leave her in the hospital as it was for her to have him leave.

In preparation for her hospital stay, Judy's mother said that she told Judy that she would be seeing more children and nurses. However, although she and the doctor tried, further explanation was apparently impossible as Judy was too irritable at the time to listen. Her mother felt that Judy's general reaction while in the hospital would be to be quiet, to lie down, and to not want anyone to bother her. She thought that Judy would probably be terrified of the doctor, would not be too afraid of the nurse and that if not babied by the nurses, she would be accepting of treatment - otherwise she would "put on a show." In general she did not see Judy as getting upset or bothered by the experience, although she thought that she might get restless after a few days.

The general description which Judy's mother gave of her was that she was shy, quiet and had always been nervous, often picking her toes or fingers. When especially nervous, she rubbed one eye with her hand. Her mother felt that this nervousness may have had something to do with the new baby. She also said that Judy was very stubborn, did not mind physical punishment and disliked sitting in a corner by herself. Her only developmental problem seemed to have been around toilet training and she enjoyed eating and liked most foods. She apparently acted younger than her age when with others but got along well with her peers. Within her family, Judy was extremely interested in the new baby, was very close to her father, loved her paternal grandfather, and had little to do with her mother or other siblings. Judy's mother summarized her behavior by saying that she was a "funny kid" who wanted a lot of attention and affection but did not show this except with her father. She tested out a situation until she knew who was "boss" and at that point

would give in. The only other separation Judy had had from her family besides her first hospitalization was when she visited her grandparents, who lived nearby, for a weekend.

General Description of Judy's Day and Her Behavior on the Ward

A typical day for Judy was fairly similar to that described in the first chapter for all patients on a pediatric medical ward at Boston City Hospital. For the purposes of organizing the data obtained from the observational material, the ward day was divided into six parts with the first evening as a special unit called "first day - admission procedure." The periods of the second and third days were: early morning activity, mid-morning activity, mid-day activity, afternoon activity, late afternoon activity, and evening activity.

The early morning period included waking up, breakfast, and the use of bedpans both before and after breakfast. The mid-morning period included the general housekeeping activities of the ward, ward rounds by the doctors on the floor, bathing the patients and changing their beds, and the general play activities of the patients both with each other and with the nurses and aides. There were usually toys available on the ward for use by the patients. Mid-day activities included lunch, the use of bedpans afterwards, and rest hour. The afternoon period included the quiet play of the girls after rest hour, followed by more active play when visiting hours began. During this period the nurses usually spent some time with the patients and there were often informal visits by the doctors who mingled for a while informally with the girls. If there was a case of special medical interest on the ward, more formal medical rounds were conducted during this period which included most of the pediatricians in the hospital.

The late afternoon period included supper, the use of bedpans, and what was generally more quiet play among the girls until visiting hours were over. The last period or evening was the time of general quieting down and preparing for bed. Temperatures were taken, evening medication and treatment given, and the girls were washed and put to bed, the older ones remaining up until around 9:00.

It should be mentioned that because the third day of Judy's stay was a holiday, the ward was much quieter than usual in respect to medical activity, such as teaching rounds with the doctors, planned play activities, and the number of aides and nurses on duty. Also as many patients as possible were probably sent home beforehand and only emergency cases admitted, making the total number of patients on the ward at that time relatively small.

During the observation, Judy spent the day in her cubicle except for an hour in the morning of her second day and two hours in the late afternoon of the same day. During these hours, her bed was moved out into the middle of the ward in front of the T. V. set.

Judy received most of her medical treatment her first night after admission (see Figure 4, Appendix C). At that time she was given a shot, some pills, two bloodtests, her blood pressure and temperature were taken twice, and a clean catch urine specimen was taken. During her second day, after being presented at ward rounds she was examined less thoroughly by the doctors, another clean catch specimen was taken, she was given a suppository, her temperature was taken three times, and she was given a set of pills and a medicated drink. On the latter two days she was given fluids frequently and it was difficult to tell which were medicated drinks. Judy was on

bed rest during the entire observation period.

Judy slept a fair amount during the first three days. She went right to sleep each of the three nights and slept during the rest hours of her second and third days. In addition, on her second day she slept for a short while before supper and on her third day for awhile before lunch and also after supper.

Judy's only visitors during this time were her parents. Her mother brought her to the hospital initially and then visited her both days in the late afternoon. On Judy's second day she came for about an hour after supper but spent a good deal of this time with the team member who interviewed her. However, Judy was able to see her mother from her bed during this interview. On the third day, Judy's mother came at the same time and stayed about as long as she had the previous day. On this day, though, she remained with Judy the entire time. Judy's father came to see her for about forty-five minutes in the middle of her third afternoon.

Judy's predominant behavior pattern during these three days was one of defiance turning into passive compliance. As her mother had indicated, Judy seemed to test a situation briefly to see "who was boss." She refused to do what was asked of her at first and then after realizing that she was overpowered, passively complied. This pattern was particularly apparent during her initial physical exam. She also displayed the various nervous habits which her mother had described, and the ones she used when particularly nervous were apparent during her first evening and her second day. As indicated by Figures 5 and 6 (Appendix C) Judy sucked her thumb quite consistently during her first evening, and the next day, in addition to

other mannerisms, rubbed her eye frequently. Although, as the figures indicate, these habits declined rapidly during the third day, Judy began to develop a cough which was quite severe by her third day. Whether this had a physiological basis or was a different type of nervous manifestation was difficult to say. Judy's emotional reactions seemed to take a similar trend as her nervous habits. Initially she was quite fearful and apprehensive about what was happening to her, but by her third day she was visibly more relaxed and less withdrawn. Her verbal expressions also changed during this period. At first, if she talked at all, she only gave one word answers in a "whiny" voice. However, by her third day she began to really talk and in a normal voice.

Reactions to Medical Procedures

Judy's general reactions to medical procedures were similar to her overall reactions, being mainly ones of fear, defiance, passivity, and compliance. They also changed to some extent over the three day period. While extremely nervous and apprehensive at first during medical procedures, by the end of her third day Judy's main responses at such times were unhappiness and passivity. The defiance persisted to some degree throughout the three days, but while at first it was mainly in response to what was done to her, by her third day it had taken the form of a verbal withholding.

This pattern was seen particularly in her responses to physical exams. Her first exam was at the time of her admission and it was the most thorough one she received. She was extremely tense and fearful throughout and showed the regressive behavior of thumb sucking. She

refused to answer questions and constantly looked down. Judy reacted quite violently to both the taking of her blood pressure and to the taking of a throat culture. She screamed and fought the nurse who took her blood pressure and did the same with the doctor who took the culture. During the latter she yelled loudly and clearly, "Don't choke me," which gives a pretty graphic idea of how a child can visualize such a situation. Judy also screamed when a shot was given and when her blood was taken, but quieted down shortly afterwards. She definitely did not want to lie down to be examined - it was as if this would put her in a position where she could not fight back. Her cries of pain when her abdomen was probed indicated that she probably had some realistic tenderness. This would fit in with her diagnosis of urinary tract infection. Judy's vocalizations consisted of grunts, mumblings, whimpers, cries, screams, and talking to herself when the doctors left the treatment room for a few minutes. The mumbles and whimpers were the most frequent. Her only verbal responses were one syllable words, usually mumbled or whined, in reply to questions which involved some benefit for her such as, "Would you like to get up?" If the questions were about herself personally or how she felt, Judy gave no reply. Her only clearly spoken words during the entire exam were ones of violent protest at times when she was frightened, such as when her throat culture was taken.

Judy's reactions were similar although not so violent in each of her two succeeding exams. It should be noted, though, that each of these exams was less thorough than the previous one. Judy continued to look down in the presence of the doctors, to refuse to answer

questions, to refuse to lie down when first asked, and to cry when her abdomen was examined. However, she was less tense each time and by her third exam was even able to respond to the doctor's comment that she could get up soon and play with the other children by visibly relaxing when he left.

The first time Judy's temperature was taken she displayed fear and passivity. Thereafter, though, her reaction was more one of passive compliance than defiance. As shown in Figure 4, this was the most consistent type of medical procedure to which Judy was subjected and this may be one reason why she was more passive in response to this procedure than to any of the others.

Although Judy's reaction to taking medications was fairly similar to her other reactions, she showed more defiance to this procedure than she did to almost any of the others. Her reaction to taking pills and her liquid medicine seemed to be one of real defiance. However, after expressing some protests, Judy usually adopted a compliant attitude. An example of this was in the afternoon of her second day when Judy refused to take her pills, and after finally complying, she proceeded to vomit. This vomiting could be considered an act of defiance. Judy's only other type of medication was a suppository to which she passively complied when it was given by the nurse. The two clean catch urine specimens which the nurse took fell into a slightly different category in respect to Judy's reactions. In this procedure, although Judy protested at first, it seemed mainly because of pain or discomfort.

It should be mentioned that throughout all of the medical pro-

cedures in which Judy was involved, little if any explanation was given as to what was going to happen to her. It can be speculated that if the nurse had explained beforehand how blood pressure was taken, Judy would not have reacted so violently to the procedure. The same is true about the time the doctor took her throat culture. Similarly, Judy might have been much more accepting of taking her medications if she had been given even a simple explanation of how they would help her.

After the initial admission procedure, medical treatment for Judy steadily declined. As seen in Figure 4, Judy's contacts involving medical procedures went from fourteen at the time of her admission, to ten on her second day and finally to only six on her third day. The last number probably remained stable during the rest of her stay in the hospital as she would have continued to see the doctor once a day, her temperature would have been taken at least twice a day, and she would have taken her sulfa drink even after leaving the hospital. We can speculate that this decline in the number of medical procedures during the observation period was a major factor in Judy's declining fear towards such procedures. Another very realistic fact is that Judy was also becoming somewhat used to the routine and began to know what to expect in these various procedures. After the initial admission procedure she was not subjected to any new type of procedure.

Reactions to Ward Routine

Judy's reactions to ward routine were very similar to her reactions to medical procedures, although they lacked the element of fear that she initially displayed towards most of the medical procedures.

Judy's response to meals was quite interesting. She was fed what little she ate of her first breakfast, only nibbling at it when by herself. Although she initially appeared quite interested in lunch that day, the constant crying of another patient and preparations of a set of twins on the ward to leave with their mother seemed to cause her to lose all interest in eating - even when fed. That night she showed little interest in her food from the start and looked quite unhappy during the entire meal.

On Judy's third morning she appeared quite hungry and although she did not eat too much, for the first time she really seemed to become involved in eating. Throughout the meal she played with both her food and her spoon. She was also fed a little and although unresponsive at first, soon started to talk with the aide who was feeding her. At lunch that day Judy showed very little interest in eating and was unresponsive to the order from the nurse and aide to eat. She coughed a lot, looked quite unhappy, and vomited during the middle of the meal. This could have been another act of defiance because she was being forced to eat, but since her fever went up that day it could also have been because she did not feel too well. Judy was put on the bedpan while being fed her dessert, and she ate very little of it. At supper that day Judy showed a similar reaction to her food, and this time no real effort was made to force it on her. She was extremely passive and wanted to be fed what little she ate by the nurse. It is interesting that this regressive behavior occurred shortly after her father had visited her.

Judy received drinks fairly regularly during both days but unlike

her response to food, she usually took these quite readily and drank them quickly. Although she never responded with more than one word when asked if she wanted a drink, she always appeared quite thirsty.

Judy's reactions to bathroom routine were also extremely passive and compliant. The only time that she acted otherwise was on her second morning when she needed a bedpan quite badly and finally called the nurse and asked for one. (She said little else all day.) Judy also wet her bed two times that day and although this could have been a result of her particular infection, the fact cannot be overlooked that it was a form of regressive behavior. The incidents occurred within a fairly short time of each other, one during rest hour, and the other about an hour and a half later. Judy was extremely unhappy and apprehensive after both mishaps. She also wet her bed on her third day while sleeping after supper. However, this time she did not appear as upset, just preoccupied. Her reaction towards being bathed was completely passive except when she protested briefly at having her face washed.

Judy slept during both rest hours, one other time during her second day and two other times her third day, as well as at night. The first night she slept quite soundly. She was in a fetal position with her mouth slightly open and a paper towel in her hand which during her physical exam she had asked the nurse if she could keep. On her second day, she slept for about fifteen minutes before supper with a toy radio next to her. She again slept in a fetal position with her mouth open. That night she went to sleep with the doll her mother had brought her and again in what seemed to be her character-

istic position - mouth slightly open, her hands near her face or under her head, and lying on her side. She appeared to sleep soundly that night too. On her third day, Judy slept for about a half an hour before lunch with the phone which she had been playing with next to her. She also slept for a half an hour after supper. That night she went to sleep with another doll which her mother had brought her, which was in parts by that time. Her sleep during her naps that day as well as her sleep that night appeared quite restless and unlike her sound sleeps of the day before. That night she moaned, mumbled and whimpered in her sleep. It should be noted that most of the time she had some toy or familiar object with her.

Judy was completely poassive when her bed and johnny were changed after she had wet her bed and vomited during supper. This was undoubtedly due in part to her guilt feelings around wetting or messing her bed. This is supported by the fact that during the regular changing of beds in the morning although she still remained fairly passive, Judy did show some interest in the procedure.

Judy's reactions towards other ward activities were similar to those mentioned above. She never showed very much interest in T.V. even when her bed was put in front of the set. She was probably the most tense during ward rounds in the morning, especially when some other patient was receiving treatment and crying as a result. However, in spite of Judy's rather constant passive attitude towards ward activities and lack of verbal response, her chatter with her mother indicated that she was aware of what had been going on and she was able to tell her mother things about several of the girls on the ward.

One other ward routine which should be mentioned is the taking of a patient's clothing at the time of admission and either giving it to a parent or putting it in a locker until the child leaves. Although Judy did not comment on this at the time, when her mother came to visit her on her second day, she immediately asked her where her clothes were. This indicated that Judy had had them on her mind and probably felt as if nothing familiar had been left with her. A similar reaction was seen during her initial physical exam when she violently objected to the removal of a bandaid from her knee. Her protests on her third day at having to take off the sneakers which her mother had brought her are still another indication of how important even the most simple familiar item can be to a child in a strange setting.

Behavior When Alone

Judy's activity when by herself also showed a distinct pattern. During her first evening and second day she was constantly engaged in nervous movements as seen in Figures 5 and 6. All of these declined during her second day except for her cough which started to develop at that time. Her high fever on that day was an indication that she may have been developing a cold. She was passive towards her surroundings. Although she did become more involved in her toys as the day went on, she still looked quite unhappy.

Although the figures show an increase in miscellaneous habits from the second to the third day, it should be pointed out that by her third day Judy was so active that it was difficult to distinguish nervous movements from pure physical activity. Therefore, this

increase really suggests an increase in physical movements rather than an increase in general nervous habits. While during her second day she spent most of her time lying down or sitting, during her third day most of her time was spent sitting or standing up. When the observer arrived on the ward that morning she was already awake and standing up in her crib - something she had not done the entire previous day. She was also much more physically active during her third day. When she picked her toes, she really picked them, becoming quite aggressive and becoming more completely involved in her body than she had previously. In addition, she became completely absorbed in her play. She looked around the ward very little except when observing some particular activity among other patients or ward staff. However, she did look out of the window quite frequently which was most likely an attempt to see if her parents were coming. This behavior of looking for her mother fits in with the characteristics Robertson sees in the "protest" period of separation mentioned in the first chapter. On her third day Judy sang and talked to herself quite consistently - something she had not done previously. Later on that day her play became extremely aggressive and she literally pulled apart a doll which her mother had given her the previous day. It is quite possible that this was an expression of hostility towards her mother for leaving her in the hospital and making her go through such an unpleasant experience.

Interpersonal Relationships

Contacts with Hospital Staff

Judy showed very distinct reactions to the various ward per-

sonnel. These also changed over time. It can be speculated that her relationships were effected by the activity which involved her with these various people as well as by the number of contacts she had had with each of them. As can be seen in Figure 1, Judy had most of her contacts with the nurses and the least with the doctors. She had almost as many contacts with the aides as with the nurses.

The most negative of Judy's reactions were towards the doctors. She was always nervous when with them or if they were nearby. Her initial reactions were fear and defiance which were replaced on her third day with nervousness and tenseness. As seen in Figure 2 Judy's most painful experiences were with the doctors and a result of medical procedures which they subjected her to. She usually resisted them briefly before complying. An additional reason for her fear of doctors was the fact that she witnessed them hurting other children and probably wondered if they would do the same things to her. At such times she looked very unhappy and became quite fidgety, especially if the patient was crying. It is very likely that the reason her fear of them declined was because exams were less thorough. In addition, they did not give her any more shots or blood tests which can be a particularly traumatic experience. Judy never looked up when the doctors were examining her and never talked to them even though by her third day she was responding verbally to other staff members. The only times she showed any interest in the doctors was when she thought she was unobserved. All of her contacts with doctors were during the mid-morning period, as shown in Figure 3.

Judy's relationship with the nurses was quite different. Although initially fearful when the nurse took her temperature and blood pressure, she was quite easily consoled and offered only a little resistance. As shown in Figure 2, most of Judy's contacts with nurses were concerned with temperatures, eating, social activities, and giving medications. Although none of these involved a painful procedure, having her temperature taken and particularly taking medicine probably were considered rather unpleasant experiences by Judy. Throughout the three days of observation, Judy said very little to the nurses other than one syllable words such as "yes," "no," and her most common response of "uhh." Judy's overall reaction to the nurses was one of passive compliance and verbal withholding. Although she did not seem to be afraid of the nurses and recognized that they were the ones in charge on the ward, she never opened up with them in the way that she did with the aides. The very fact that they were the consistent authority figures on the ward was probably the main reason that she could not or would not open up with them. As can be seen in Figure 3, Judy's contacts with the nurses increased during the afternoon which was mainly because the aides went home around this time. This points out the fact that the nurse was the one staff person who was on the ward at all times during day and night.

It was with the aides, who had the least to do with medical procedures, that Judy was able to open up most quickly. As shown in Figure 2, most of their contacts with her centered around giving

bedpans, bathing, feeding and ward social activities. The aides were the ones who took care of Judy's bodily needs and did not make unpleasant demands on her as did the other staff members. Although her main reaction, particularly at first, to the aides was one of passive compliance, she showed a continual interest in all of their activities around the ward. It is not surprising that because of the nature of their contact with her, her first real phrases spoken on the ward were said to them. Most of these bits of chatter came at times when the other girls on the ward were involved in play and the aides were supervising the activities. Most of the aides' contacts with Judy were in the morning and early afternoon as their workday ended around the middle of the afternoon. (See Figure 3.)

Contacts with Other Patients

Judy's reactions to other patients were quite interesting. At first she gave no sign that she was aware of their presence when one of them approached her. These advances usually consisted of a friendly attempt to make conversation or to involved Judy in some type of play. A couple of times during her second day she even shrank back in fear when approached by another patient. By her third day, though, she did not look away when approached by another girl, although she still did not respond. As seen in Figure 2, her contacts with them increased each day. It was not until her third afternoon, though, that Judy finally spoke to another girl. Judy was the one who initiated this conversation by telling the girl who had approached her that she could not have any of her lollipops.

It should be noted that most of Judy's contacts with other patients came during visiting hours and usually when one of her parents was present. However, in spite of their presence, she still did not respond to these advances.

Contacts with Parents and Visitors

The visits of Judy's parents seemed to play an extremely important role in her hospital experience. When her mother first came to visit her on Judy's second day, Judy did not open up for several minutes. However, once she did open up, she chattered away until her mother started to leave. At this point she began to withdraw again and become uncommunicative. During her father's first visit and her mother's second visit, Judy opened up more quickly and became more involved with them in play and conversation than she had during her mother's first visit. However, the minute either of them showed signs of leaving, she immediately began to withdraw. It was as if she was trying to keep herself from being hurt through this separation. The fact that Judy really cried for the first time after her mother left on the third day is probably a healthy sign. Judy's previous apparent lack of response to separation and her use of extreme control after her parents left indicated that repression was taking place. The fact that by the end of the third day she was able to cry when her mother left meant that she was entering what Robertson sees as the first stage in the process of separation - that of "protest." It is interesting that after each successive visit by her parents, Judy became more relaxed on the ward and more responsive and communicative verbally with the ward staff and other patients.

Summary and Interpretation

In summary we can say that Judy's main pattern of behavior was one of defiance, compliance, and passivity. These types of reactions were manifested in varying degrees towards the different medical procedures to which she was subjected and towards the various people with whom she had contact. Her most negative reactions were towards the doctors and physical exams, while she appeared to be most relaxed with the aides who had very little contact with medical procedures. Her entire behavior showed a definite change over this three day period going from being very tense and withdrawn to being more relaxed and communicative. This was seen in the fact that her nervous habits decreased while her verbalization increased during this time.

One of the most interesting things pointed out by this case study was the similarity between the description of Judy's behavior in the hospital, and Judy's actual behavior while being observed. She displayed the same nervous habits her mother had mentioned and also appeared quite quiet and shy. It should be noted that this type of compliant-defiant behavior pattern is usually a result of some problems around the toilet training of a child, and Judy's mother indicated that there had been some difficulty around this developmental task. Therefore, I feel that this case quite clearly illustrated the fact that a traumatic experience such as hospitalization does not change a person's behavior but merely emphasizes the already existing behavior patterns.

Another finding of this study was that there seemed to be a definite relationship between the activity which involved a person with Judy on the ward and her reactions towards that person. Her most negative feelings were towards the doctors who subjected her to the most painful procedures while she was most relaxed with the aides who had little to do with medical procedures.

CHAPTER III

THE CASE OF TIMMY

by

Gerald Clarence Martin

Introduction

Timmy was a three year, nine month old Negro boy admitted by his mother to the boy's medical ward of Boston City Hospital with a diagnosis of pneumonia.

Timmy had lived all of his life in Boston. His mother was divorced when he was six months old at which time he was placed in a foster home for a short time. From then until the time of the study he lived in a public housing project, predominantly Negro, with his mother, seven year old brother, and five year old sister. Timmy lived close to busy streets and large stores but his own street had little traffic during the day. Many children of all ages lived close by and play space was limited to fenced in concrete areas supplied with swings, slides, and basketball hoops. Teen-age delinquency had been a particular problem in this project not only because it was a transient, low-income, and crowded area but also because of racial conflict between the people living there.

For three weeks prior to Timmy's hospitalization his mother had been keeping in the home a small baby with whom Timmy was competing for his mother's attention by complaining of aches and pains. His mother said that she usually kept Timmy "pretty close" and that

the presence of this baby had been the first time Timmy had been "pushed away" from her. She said that Timmy often woke up at night and was enuretic four or five times per month. She described his personality as being lovable and affectionate but that he could be very mean and liked to have his own way.

This was Timmy's third hospitalization at this hospital. He was hospitalized twice at the age of two and one-half for allergic reactions to various foods. It was also recorded that he was allergic to penicillin which was usually used in treating pneumonia. His mother said that the hospital had spoiled him during those times by giving him his own way to keep him happy.

The present illness began with a mild cough a week before he came to the hospital. He developed a rash and complained of a sore throat three days before, and in the afternoon before the day of admission he developed a fever and vomited five times. That evening he had awakened with a bad coughing spell, vomited and complained of ear aches. The morning he came to the hospital his fever was 104.6 and he complained of chest pain and breathed rapidly. His mother reported that he had been perspiring profusely, his appetite had fallen off, and that he had been sleepy, lethargic, and listless.

In predicting Timmy's reaction to hospitalization his mother said that he had no preparation for or knowledge of the fact that he was to be left in the hospital. She said he would be afraid of needles but he was a good medicine taker. He had been afraid of doctors and nurses at one time but she felt that he would be more accustomed to them. She said that he wouldn't like the idea of

being restricted to bed or using a bedpan (hadn't used one before) but this would be when he got better. He would miss his brother and sister most, but also the little baby. She said he would be all right while he was in the hospital as long as she wasn't there with him.

Timmy came onto the ward at 6:00 P. M., after being in the hospital since 9:00 A. M. Because the day of admission was Friday many of the diagnostic tests ordinarily done were delayed until Monday which meant that they would not be included in the observation period. Because knowledge of the admission came after Timmy was brought to the ward and because his mother was hesitant to permit the observation, there was some confusion before getting the observation started. This consequently resulted in an inadequate recording of Timmy's arrival and first reaction to the ward.

Because of the long day already spent in the hospital the interview with Timmy's mother was delayed until the following evening. However, even then the interview was very short because of her desire to join Timmy when she heard him crying for her.

Timmy was in his crib in his cubicle (see Diagram, Appendix B.) during the first half hour on the ward and was then taken into the treatment room (see Ward Diagram, Appendix B.) where for the next hour he underwent the admitting physical examination. At 7:30 he was returned to his crib where he lay sleeping restlessly until the observation period ended for the day (9:00).

He was awakened the next morning at 7:15 A.M. He was then fed, toileted, and had his clothes changed. He also had his temperature

(rectal) and pulse taken, received nose drops, and had salve applied to his arms and legs. At 9:15 his bed was pushed to the center of the ward so he could watch TV. He stayed there until after he ate his lunch at 12:00 when he was returned to his cubicle to use a bedpan. He stayed in his cubicle during rest period and was not returned to the center of the ward until he had his temp taken and was given nose drops, liquid medicine and had salve put on his arms and legs. He was again taken to the center of the ward at 2:00 where he stayed for supper at 4:00. He had just been given salve and nose drops when his mother came to visit him at 6:15. She held him in her lap during much of her hour long visit. She helped him use the bedpan and also to get his evening snack before she left. He was left in his cubicle after which a nurse took him out of his bed to the sink in front of his cubicle to be washed and then returned to his cubicle chair where he sat while she changed his bed and got him a clean johnny. He was put in his bed and given nose drops and medicine after which he immediately fell asleep (8:15).

In the third and final day of the observation Timmy was awakened to the noise of the breakfast cart at 7:15 A. M. He ate his breakfast, was washed, got his bed changed and a clean johnny, and was then taken to the center of the ward in his crib to watch TV at 8:30. He received salve, pills, and nose drops and then the doctor came to give him a short physical examination. He ate his dinner and was then taken back to his cubicle at 11:45 to use the bedpan. While in his cubicle he slept and received medicine and had his temp

taken. He was returned to the center of the ward at 1:30. At 3:45 he was again taken to his cubicle to use the bedpan but was returned to the center of the ward upon finishing. At 4:00 he ate supper and from then until 5:45 he was given medicine, salve, and nose drops and had his temperature taken. He then fell asleep and remained sleeping until the observation period ended (6:00).

During the observation time he was in his crib in his cubicle ten hours and in his crib in the center of the ward fifteen and one-fourth hours. He spent four and one-half hours during the observation time sleeping, chiefly at noon, during rest period, and at night before 9:00 (the end of the observation day).

The major activities which Timmy participated in during the observation period can be divided into three broad categories: first, medical procedures, including the admitting physical examination and the administering of nose drops, salve, liquid medicine, and having his temperature and pulse taken; second, ward routines, including eating, toileting, washing, changing bed, and changing johnny and shorts; third, social activities, including talking, playing, receiving toys, bodily holding, and comforting activities such as wiping his nose and brushing his hair. I will not describe the behavior of the persons involved in these activities at this time but I will describe the activities and Timmy's reaction to them in an effort to show how they contributed to the total effect of hospitalization.

Reactions to Medical Procedures

The admitting physical examination was done by two male doctors

in the treatment room. The examination centered on the head and upper part of his body, however, it also involved receiving a needle in his arm for a blood test and a shot (body area not noted). The observer was not permitted in the treatment room so the record included only what the observer could hear from outside the treatment room door.

Timmy was brought to the treatment room sniffling and crying, at which time his mother kissed him and then left the ward. He was in the room lying down or sitting on the examining table for one hour. He was physically compliant to all of the doctor's commands but upon examining his throat he told the doctor, "Don't put it way down there." Although the doctor said he wouldn't, Timmy cried out angrily when the doctor examined his throat. Twice he asked if he could put on his clothes. The doctor reassured him four different times that the exam was finished. Once, about half way through, Timmy asked, "Done?" and was reassured, "Yes, all done." Other than these reactions he verbally protested by crying and yelling seven times for his mother, which were his most intense reactions throughout the observation period, e. g. when he received the needle - "doctor, doctor, mama,... doctor, I want mother, mommy, mommy (several times)." He also talked softly, mumbled, and whimpered at other times during the examination.

Temperatures (rectal) was a procedure taking a couple of minutes which involved no pain for Timmy. His temp was taken seven times and each time he was motionless and quiet throughout the procedure. The last time he lay on his stomach in preparation for the insertion.

In the third, fifth, and sixth times he remained in the same position after the procedure and the last two times he went to sleep after it, once with his shorts still down. Timmy often watched the other patients have their temps taken and he usually looked at the thermometer cart when it was brought on the ward. Because of his passive compliant reaction followed by sleep and on one occasion his clear preparation for the temp, it seems clear that he enjoyed the procedure.

Nose drops were given to Timmy six times during the observation period. Besides this he picked his nose, wiped it several times, and the nurses, aides, and his mother wiped it several times. Although these were comforting activities accepted with compliance, he always cried, screamed, or yelled violently for his mother when he was given nose drops, and five times he directly protested against the nose drops, once pushing the nurse away and once vomiting after receiving them. The first three times another staff member assisted the nurse by physically restraining Timmy during the procedure. The drops were put in his nose and he was then told to "sniff" at which time he evidently drew the medication into his throat which in turn caused him to gag and cough. The intensity of his reaction was also shown by the fact that he continued crying or whimpering for his mother after the procedure four times. There may be a relationship between his reaction to the nose drops and his reaction to having his throat and mouth examined during the admitting exam since the same area of the body was involved and the reactions were similar.

Salve was applied to his arms and legs five times. The first time the application was preceded by being held for a few minutes in the nurse's lap and although watching interestedly at first he soon began looking around, compliant and quiet. The second and fourth times he talked throughout the procedure and played with the applicator stick and top of the tube. Once he started to smile, almost laugh, during the procedure. This was the only procedure he told his mother about. It is clear that this was an enjoyable experience for Timmy which he received passively and compliantly.

Medicine was given to Timmy five times and pills once. He took both the liquid medicine and the pills obediently and without hesitation or comment. We can presume that the medicine was flavored so it wouldn't be excessively offensive to his taste. However, there are two other factors which may account for his acceptance of the medication. First, his mother mentioned that Timmy and the rest of the family all took medicine without protest. Therefore, it might be that Timmy was accustomed to it and saw it therefore directly' related to getting well. Secondly, he took the medicine in a small cup and drank it by himself. This may mean that he felt more in control of taking it.

Reactions to Ward Routines

Ward routines designate the hospital's provision for Timmy's daily needs which are present both at home and in the hospital. I have divided this area into three parts: eating; toileting; and, washing, changing his bed, shorts, and johnny.

Eating: Timmy was fed nine times during the observation period. Within these times he was served five complete meals. During these five meals he began eating by himself and ended being fed by the aide. When being fed he often delayed the feeding by not swallowing, by talking or mumbling, and by looking around at the other patients and staff. He would always stop eating if anyone left after starting to feed him. However, he always drank his liquids by himself and usually finished them with only momentary hesitation and minimal encouragement. During all of the complete meals Timmy progressed from asking for the nurse to crying for his mother, except in the last meal when the aide was with him most of the time. He cried for his mother throughout breakfast the third day. Timmy never asked for food or drink and appeared completely uninvolved in his meals showing only sporadic interest in either eating by himself or being fed. However, to be considered along with his eating behavior are these facts: many of the solid foods probably tasted foreign to him since they were cooked in large quantities and decided by the dietician of the hospital; his apparent sore throat, plugged nose, medicine, and nose drops may have further decreased his ability to enjoy his food; and, his mother said that he had had a poor appetite for the last few days before coming to the hospital.

Toileting for Timmy was chiefly through his use of the bedpan. He was offered a urinal once but didn't use it and evidently used the bedpan for urination. Although he was offered bedpans twice before his mother's visit, it wasn't recorded that he was wiped until she gave him the bedpan. After she took him off the bedpan

she took great pains to wipe him and also washed his rectal area. In the last two uses of the bedpan he apparently had a bowel movement since it was recorded that he was wiped.

Timmy's activity during his use of the bedpan, except for the time his mother gave it to him, could be characterized by looking around and talking softly to himself. In one instance he hollered to another patient, "Hey, can I have that truck over there?" However, when his mother gave him the bedpan he sat complacently moving his fingers and toes in front of him and drew his blanket over his legs and genitals. In all except the time with his mother he seemed to be denying the intimate nature of going to the bathroom, perhaps because he felt exposed before the other patients and staff. He was always moved to his cubicle to use the bedpan but he was still visible to many people on the ward.

Timmy did not resist being seated on the bedpan. He plainly said that he had to go to the bathroom the fifth time and as soon as he was moved to his cubicle and put on the bedpan he hollered that he was finished and asked to have his bed taken back to the center of the ward. This was a more active position for him than when the bedpan was given to him by the aide after a meal or when he woke up. At these times he never said when he was finished but tried to get up by himself. Although this may be resistance to allowing the aide or nurse to help him, there were no clear signs of fear or resistance to using the bedpan, as his mother had predicted.

Changing Timmy's bed, washing him, and changing his johnny and shorts were done together at three different times during the observa-

tion period. These times were twice following breakfast and once before going to sleep at night. The first morning Timmy seemed to enjoy being washed and accepted it passively, apparently asking if he would get his back washed. He also asked if he could get out of bed when finished but was refused. In the evening of the second day (second time) Timmy asked for a clean blanket and johnny. The nurse took him to the ward sink to be washed and he and the nurse continually talked together while she washed him. He was then returned to his cubicle chair where he sat quietly while the nurse finished making his bed. The second morning (third time) he took his johnny off in expectation of being washed. He was passive until the aide began washing his stomach, arms and legs. He then cried and yelled for his mother, refusing to cooperate further. This burst of protest seemed unprovoked and unwarranted.

The intensity of his wish to get out of bed was revealed on several occasions: once he got out of his chair to walk to the center of the ward, only to be rushed back; once he hollered to a nurse that she would beat him if he got out of bed; once he tried to let down the side of his crib; and once he attempted to step over the side; several times he shook the sides of his crib.

Behavior When Alone

Timmy's behavior when alone had great variety and included playing with toys, crying, hollering, talking, mumbling, looking and watching. While he was in the center of the ward he was much more involved with looking and watching other people than when he was in his cubicle. The height of his crib made it possible to see

all of the activity occurring on the ward and it was just high enough that when adults walked by they saw Timmy at eye level. This also made it possible for him to see activity in all directions and watch that which most interested him. His response showed a very short interest span and he continually shifted his gaze to that which made the loudest noise, appeared to be his mother (dressed in civilian clothes), or that which promised him some individual attention.

In the second day on the ward Timmy mumbled his attempts to initiate or sustain interaction with staff and other patients. Consequently, if people did not come close to his face (not possible for the other patients) they did not hear what he was saying. Thus his attempts to initiate or sustain interaction failed. During the third day he tried more and louder verbal comments and demands toward the staff and patients around him. He also expressed his envy of the boys who were able to be out of bed and run around. He became openly angry at them several times for not sharing their toys with him. The third day he was able to sustain his individual play for longer periods and he added singing and dancing to his play activities. He also began to use his toys (airplanes, horses, and comic book) to initiate interaction with the staff and other patients.

During the two days Timmy was on the ward he spent the greatest portion of the time when he was alone, verbally asking for the nurse or his mother with intensity varying from mumbling, through whining, calling, crying, to screaming. This behavior is plotted graphically in Figure 7 (Appendix C) showing which were directed to "nurse" and

to "mother" and the time and order of their occurrence. These periods of calling, whimpering, and crying usually began after failure to find attention from those around him and lasted from a few seconds to twenty or thirty minutes. He also cried during part of each meal time. The figure shows that Timmy fluctuated rapidly between asking for his mother and asking for the nurse. However, it also shows that he usually called for the nurse and cried for his mother. At times he would call loudly for the nurse and when she walked by him he would only softly mumble that he wanted her. In comparing the language used in asking for his mother and the nurse there is a striking difference. When he asked for the nurse he used only the word "nurse," repeating it several times with varying volume, but when asking for his mother he used many words in addition to "mommy," such as "I want you," "my mommy," "mama." In comparing the two days, he asked somewhat less for the nurse (10 per cent decrease in time periods) and much less for his mother (36 per cent decrease in time periods) during the same period the second day. This may indicate that his desire for his mother was not as overt or that additional play activities helped him control his longing for his mother.

Contacts With Staff, Patients, Mother, and Visitors

In this section I will describe how the staff, patients, mother, and visitors interacted with Timmy and how he reacted to them. Figure 8 (Appendix C) attempts to outline these contacts by using the major activities discussed in the preceding section as a guide. It should be noted that this figure shows only the general type of

contact and the person involved without reference to its intensity, duration or time of occurrence. Because the figure only includes the contacts during the two full days of observation the admitting physical exam occurring on the evening of admission is not shown.

The role of the two doctors in the admitting medical examination was naturally active and varied. They asked Timmy eighteen questions during the exam, such as: "Want to wipe your noes?" "Did they clean your ears out?" (The only one answered). "Want to lie down?" None of the questions permitted Timmy to make a choice or say more than "yes". Several were efforts to reinforce demands. Twenty-three commands were given which primarily related to performing bodily movement. Reassurance was offered twenty times, e.g., "atta boy," or "you're a good boy". These usually followed his compliance with a command. Four times throughout the exam the doctors made reference to being finished or to Timmy's leaving the treatment room to return to his crib. Two of these statements appeared to be intended to stop him from crying. The only explanation Timmy heard about his illness was when he heard the doctors say such things as, "Isn't that beautiful, so inflamed," or "looks like a virus," as well as the many medical terms that were exchanged in discussing his condition. Upon concluding the exam he was told, "You're going to be with us awhile."

Although Timmy yelled "doctor" several times during the exam, in the two succeeding days he only looked momentarily at the doctors when they came on the ward or momentarily watched them as they stood around the bed of a crying child. He showed no interest or alarm

when they came to give him a short exam during each of the two days after the initial exam.

The chief responsibility of the nursing staff was in relation to the medical procedures, i.e., giving nose drops, salve, medicine, and taking pulse and temperatures. The registered nurses and the student nurses shared in giving all of the medications and temperatures to Timmy. They did these after his meals or just before bedtime. They gave him no warning or explanation of any of the procedures and he was simply told to lie down or else they laid him down or sat him up without asking him. They didn't make any comments related to his resistance or crying during the procedures. Timmy had some time to prepare for receiving the thermometer since all of the patients had their temperatures taken at the same time. In receiving medication the nurse would come on the ward and go directly to his bed. This was often seen by Timmy as a social visit and he would then start talking with the nurse, only to be interrupted by the medical procedure.

The aides and nurses shared the responsibility for feeding Timmy. However, the nurse's role was chiefly in serving the food and perhaps carrying it to his bed. A nurse only fed Timmy once, and once she called upon an aide to feed him when he refused to eat after her encouragement. The aides usually began feeding Timmy as soon as they noticed that he wasn't eating, and he always showed resistance to being fed. The aide's ways of coping with his resistance were to verbally encourage him, bribe him with ice cream, talk of competition with other patients (last meal), and once she got

mad at him and left. The role of the aide compared with that of the nurse points out that the aide felt more responsible to stay and make more efforts to get him to eat his meal. Although in the first meal the aide said that she wouldn't force him to eat if he didn't want to, she always tried to get him to eat as much as he could. The aide offered very little social conversation during this time, and she would continually tell him to stop mumbling and eat. She was also careful to keep him from making a mess while he ate.

In the morning the aide changed Timmy's bed, washed him, and changed his johnny and shorts. There seemed to be more social conversation during this time but the aide was also concerned with getting her job done and once told him to stop messing up "her" bed. However, in the first morning the aide spent extra time getting his feet clean as well as cleaning his toenails. She was also concerned with Timmy's training, commenting on his toilet training, his ability to eat by himself, and also telling him he should not cough in her face.

When the aide was on the ward she took the responsibility of getting Timmy his bedpan, sitting him on it, and taking him off. If this happened while she was busy with other chores she would pressure him to hurry. However, twice when the bedpan was given during time when she was not busy, she left him on the bedpan after he had tried to get up. The aide always pushed his crib back to his cubicle when he used the bedpan. She spoke to him very little during his use of the bedpan but immediately after it or just after he was moved to the center of the ward she took time to provide him

with toys and twice spent two or three minutes playing with him. Timmy tried to involve them in his play by copying what they did and dropping his toys on the floor.

Most of the attention Timmy received from the nurses and aides outside of the routines and medical procedures came when they were the adults closest to his bed. They responded either to his asking them for something or to his crying for his mother. When he was crying during rest period they were concerned that he didn't wake the other patients and told him to stop. Only once a nurse held and comforted him when he was crying and once the aide volunteered to stand by his bed if he would stop crying. They played with him only when they had nothing else to do and then they usually involved themselves with the boys who were out of bed. When they talked or played with him they usually put the crib side down or else handed him toys from over the top of his crib.

Timmy's contact with the other patients was dependent upon his ability to view them. He would first watch and listen to them and as he understood what they were doing he would make some effort, usually a verbal comment, to involve himself in what they were doing. Their contact with him was almost entirely dependent on his being in the center of the ward. Several times patients walked around his bed, looking but not saying anything to him. Twice they stuck their fingers into his crib and he looked quite frightened. Twice he handed toys over the top of his crib, but when they fell they scared the boy who was to receive them. He also tried to stick his hands through the bars of his crib to give and receive play materials.

Although he spent much time looking at the visitors who came into the ward, they didn't seem to notice him even when they were close by. One mother did ask him why he was crying but then left. Timmy usually watched quietly when they were close to his bed but never watched them very long regardless of where they were.

Timmy and his mother expressed without hesitation a close and intimate relationship during her visit. His mother's activities consisted of examining his body for signs of his illness and talking to him about his activities in the hospital. She did many things to comfort him, e.g., wipe his nose, brush his hair, hold him tightly, rock him when he coughed and get water and a bedpan for him when he asked. She brought him something to eat and also gave him his evening snack. He took all of these comforts easily and cooperatively. When she came he said to her, "Don't go away, Mama." When she left he looked away from her and a few minutes later began crying for her.

Summary and Interpretation

This observational record covered the first forty-eight hours of Timmy's third hospitalization for pneumonia. Although his symptoms included a sore throat, vomiting, ear aches, chest pain and rapid breathing before admission, the only symptoms apparent in his observable behavior were intermittent coughing, and runny nose.

In predicting Timmy's reaction to hospitalization his mother was correct in saying that he would be a good medicine taker and that he would not like being restricted to bed rest. He appeared angry about having to stay in bed and felt he would be punished if he got

out of bed. However, contrary to his mother's prediction he did not seem to miss his siblings, but his periodic crying for her clearly showed that she was the focus of his feelings of separation and loss. Her reaction to hearing his cries for her during the interview and the intensity with which she cared for and comforted him, clearly showed that she did recognize his need for her.

Figure 7 (Appendix C) reveals that his crying for his mother was also related to his calling for the nurse. The frequency and intensity of crying for his mother seems to represent his unwillingness to give up his hopes for her return to protect and provide for him. His rapid fluctuation between crying for his mother and calling for the nurse indicated that he was in the midst of a great conflict over whether or not to accept his mother's absence and rely upon the nurse to meet his needs. This same conflict could have been a part of his resistance to eating or being fed. This conflict and the resulting behavior may be related to what Robertson described as the stage of PROTEST (see Chapter I, Survey of the Literature).

In the second and third days of the observation Timmy made many attempts to interact with the ward environment. In the last day he cried less for his mother and he became more active and demanding, using the other patients and his toys more as a means of interaction. This could signify a beginning resignation to his hospitalization and a greater acceptance of the hospital environment as able to meet his needs. The most important observable factor in determining his interaction with those people around him was

whether his crib was in the center of the ward, where he spent almost half of the observation time. From this position he was able to observe all of the ward activity and from there he made his loudest and most persistent demands of the nursing staff and the other patients.

Timmy's reactions to medical procedures were divided between passive-compliance, such as when his temperature was taken or when he was given oral medicine, and active-defiance such as his reaction to hypodermic needles and nose drops. Except for his temperature, there appeared to be no way for him to know when the nurse approached his crib if she was coming to him or another patient, was interested in social activities or administering medical procedures, or if the procedure was to be painful or pleasant. This prevented him from having any opportunity to prepare for the procedures.

The admitting physical examination was the most prolonged and uncomfortable subjection to medical procedures. This came immediately after he was admitted to the ward and just after his mother left him. This was done in the treatment room rather than on the ward and was his major contact with the doctors. Although the recorder could not observe the actual examination, Timmy was evidently physically compliant throughout the examination. He showed fear and panic when he was given needles and when his throat was examined. He was also concerned that the exam be over and that he could put on his clothes. His yelling for his mother seemed to indicate that he still relied on her to protect him.

In his reactions to ward routines Timmy was able to maintain a good deal of choice as to whether or not he complied with the wishes of the staff. Despite many efforts by the staff to persuade him, he continually persisted in eating at his own pace, and then only when he was fed. His crying for his mother indicated that he missed her during mealtime.

Timmy never resisted being placed on the bedpan but he didn't have a bowel movement until his mother placed him on the bedpan. During this time he carefully covered his legs and genitals and quietly looked down while he sat on the bedpan. At other times he appeared more involved in the activity going on around him while he sat on the bedpan than having a bowel movement. On all occasions of using the bedpan, except for one occasion when he had asked for it, he never said when he was finished, despite being asked several times.

Getting washed and having his johnny changed were operations about which he made demands and also offered protest. They were also times involving a good deal of conversation between him and the staff.

Aside from the medical procedures and ward routines Timmy was usually left on hiw own to initiate interaction with those around him. His chief behavior when he was alone was looking and watching the many activities happening around him. At times he also cried for his mother and called for the nurse or played with the toys in his crib. During the second day he was quite restrained in his demands from those around him, usually mumbling his words and

giving up easily. During the third day he was more persistent and louder in his demands. He also directed more of his demands to the other patients and vented his anger at them for not responding. He also added greater variety to his individual play and was able to play for longer periods.

Timmy's contacts with the staff were divided between those related to medical procedures, ward routines, and what I chose to call "social activities" (see Figure 8, Appendix C).

Timmy's contact with the doctors was chiefly during the admitting physical examination. Although the doctor talked a great deal to Timmy during this time, his words of reassurance and commands to perform bodily movement seemed to be directed toward supporting Timmy's compliance to the procedures involved. His reassurance that the examination was finished when some procedures still remained illustrated this. Although the doctor was the person introducing the medical procedures, diagnosing his illness, and determining his stay in the hospital, he apparently attempted no explanation of these things nor did Timmy ask the doctor about them.

The nursing staff administered all of the medical procedures after the admitting physical examination (see Figure 8, Appendix C). Twice one nurse held him in her lap to comfort him and several times the nurses wiped his nose. Although the nurses took charge of dishing out the food, the aides were chiefly the persons who fed him and persuaded him to eat. While the aides were on the ward they were responsible for the other ward routines. They were also

the chief persons to provide toys for him and play with him. Although Timmy reacted differently to the nature of his contacts with the nurses and aides he did not distinguish between them when he called "nurse."

During the first forty-eight hours of his hospitalization Timmy appeared chiefly involved in accepting his mother's absence and finding a means within the ward environment to meet his needs for care and attention. He submitted to the painful medical procedures only after protesting and passively accepted those which were not painful. He seemed to feel in greater control of his acceptance of the ward routines and often took advantage of his freedom of choice. But he actively participated and openly expressed his desires most freely with regard to obtaining toys and participating in the play of the other patients.

CHAPTER IV

THE CASE OF MELVIN

by

Denise Sin-Yue Ko

Introduction

This was the case of Melvin, a five and half year old white male patient admitted to the medical ward of Boston City Hospital with the diagnosis of infectious mononucleosis.

Melvin came from a large family of seven children, six boys and one girl aged three to sixteen, among whom he ranked sixth. They lived in a generally well-kept district, predominantly white, where the houses are used for multiple families and the unemployment rate is not high. Due to lack of small industry, there are not many job opportunities and most people hold jobs outside the district. Some of the neighbourhood's assets are: good parochial and public schools, low-cost living, good transportation, nearby beaches and parks,organized groups for recreation and adult education through schools. Both parents of Melvin had had high school education. His father was previously employed at the Fire Department, but he had been out of work since 1959 as a result of an accident occurring while at work. The family income from the pension received was $366 per month.

Several members of the family had been hospitalized in the past years. Melvin's father had had the most experience as a result of the accident for which he was hospitalized intermittently over a long period of time. The length of his stays varied from

two to eight weeks. During the last time he was hospitalized, he requested a transfer to Boston City Hospital, as he believed that "the best doctors were at this hospital." Three older brothers of Melvin had been hospitalized ten years before for tonsillectomy. His fourteen year old brother was once in the hospital for five weeks with the diagnosis of whooping cough. This brother's reaction to hospitalization had changed from initial quiet withdrawal to restlessness and constant daily expression of desire to go home. John, the eldest brother, was hospitalized for a broken arm at the age of six. His adjustment to hospitalization was so poor that the doctor had to send him home because of his homesickness. In general, neither of Melvin's parents had unrealistic fears about illness, doctors, nurses, or medical procedures. Melvin's father, in particular, seemed to be quite proud of his hospital experience and relationship with the doctors and nurses.

Melvin had always been in good health prior to admission to the hospital. He had had chicken-pox and measles. During the interview with his mother, she reported that he presented no special feeding problems although his appetite was usually fair. Chocolate milk was his favourite food. She did not have toileting problems with him; he was trained at eighteen months and there had been little or no bed-wetting. His motor and social development was considered "good". At five and a half years, Melvin was still exhibiting some "baby talk." His mental development was regarded as very good; the child seemed quite bright and was doing well in kindergarten. He never presented any behaviour or disciplining

problems at home. His relationship with the family members was good. His mother said that he was close to both parents, perhaps a little more to herself, and that he liked his one and only older sister best. There was some sibling rivalry between Melvin and the youngest three year old brother. His mother's description of his personality was that he was "the best one in the family," that he was calm and quiet and good-natured. He was a follower. He liked people to explain things to him but enjoyed coloring and playing by himself. Outside the family, he was able to relate well to the neighbours, the children in school as well as his teacher whom he "loved and gave flowers and presents." He was also fond of his maternal grandmother.

This was Melvin's first hospitalization. He developed a high fever and complained of a sore throat four days prior to admission. His mother called for a family doctor who suggested that they go to Boston City Hospital for a throat culture. He was brought to the emergency room, was asked to return twice to the Outpatient Department in the next two days, and was subsequently admitted to the ward. Before his second trip to the Outpatient Department, Melvin was prepared to enter the hospital by his mother, who explained that they had to come to the hospital again and that he might have to stay. Melvin was upset; he cried and claimed that he didn't want to stay in the hospital.

When he was led onto the ward, accompanied by both parents, Melvin seemed nevertheless not too frightened, remaining silent, observant, alert but quite calm without making any overt protests.

His mother reported that he would probably not have difficulty with the nurses. He had had no previous contact with the doctor, but he told his mother he liked him. His mother expected that he would "fuss a little" at the medical and nursing procedures. He had not minded the polio shot given him some time ago. She thought he would definitely not like being in the hospital, that he would probably not talk, that he might cry if unhappy. Despite the doctor's information that Melvin would be hospitalized for a week to ten days, the parents told Melvin that they would take him home the day following admission.

Melvin was admitted at 1:30 P.M. The first physical examination lasted for approximately one and one half hours. Different procedures were performed separately either at the patient's bed or in the treatment room, and there were intervals during which Melvin was brought back to his cubicle and left alone while his parents were interviewed by the doctor. During the rest of the day, there were five more physical examinations similar in nature to the first.

Melvin was old enough to be put in a full sized adult bed rather than a crib in a part of the ward shared by other patients in cubicles next to or across from his. He was confined to bed-rest throughout the first three days observed. Treatment consisted of a full liquid diet, penicillin, and aspirins if his temperature should reach or approach 103.

Like all patients on the ward, Melvin's day was from 7 A. M. to 8 P.M. Since he was confined to bed, there were more chances

of his being alone so that, except when others approached him or tried to stimulate interaction with him, he usually sat quietly in bed looking around, or gazing into space, or reading comic books, or playing with toys given by the nurse. In the morning after breakfast and rounds and before lunch, Melvin seemed quite lonely. This also held true for the late afternoon immediately following dinner and visiting hours.

On the second day of hospitalization, Melvin had several visitors. Both his parents came in the early afternoon, left for two hours but returned again at 6 P.M. His maternal grandmother and uncle also spent considerable time with him in the absence of his parents. The mother and father promised to come to see him the following day.

During the initial stages of hospitalization, the observed behaviour of this child was seen as reactions to various types of stimuli as follows:

1. Medical procedures -

   Physical examinations of the nose, mouth, ears, eyes, abdomen and other parts of the body; blood pressures; blood-tests; injections; taking of temperatures; medical rounds and other procedures.

2. Ward routines -

   Meals, bathing, linen-changing, toileting, changing of clothes, rest periods, cleaning of ward, etc.

3. Behaviour when alone -

4. Interpersonal relationships -

   Contacts with other patients, doctors, nurses, student nurses, aides, parents and visitors.

These will be discussed under separate headings.

Reactions to Medical Procedures

The general impression was that of overall passive compliance during the first three days of hospitalization. Melvin was slightly tense on the first day, with the many physical examinations and medical procedures to undergo. Upon admission, he had his blood pressure taken while the doctor obtained information about the history of his illness from his parents. The doctor briefly gave Melvin a physical examination in his cubicle, then after speaking to his parents in the office, took Melvin to the treatment room for a detailed examination. Melvin followed the doctor's orders without a word. His eyes tended to be looking up toward the ceiling as if he was somewhat afraid to look at the doctor or to pay close attention to what was being done to him. He lay still and looked lethargic although he denied feeling tired when the doctor questioned him.

Melvin was wakened from an afternoon nap for a second physical examination of the throat and eyes. He did not cry although he seemed annoyed. Later in the afternoon, he was wakened again from sleep for another physical examination, this time having to walk by himself to the treatment room. He obliged obediently and sleepily. Afterwards, he sat in bed with "raised eyebrows and slightly puzzled, then worried look." Before bedtime, he was taken for the last time to the treatment room for a blood-test, during which he cried loudly. But his crying subsided immediately as he

agreed with the doctor that it had not been "too bad."

On the second day, Melvin had two physical examinations. He complied obediently to the second one in the late afternoon with a solemn face. He even stared at the doctor's face for the first time. By the third day, anxiety related to examination seemed to have subsided somewhat. He resumed the play he had been engaged in immediately prior to the examination. These physical examinations were briefer than the first, each lasting for approximately fifteen minutes, and were held in the cubicle rather than in the treatment room.

The procedures in the physical examinations varied from the taking of a throat culture to an examination of the ears, eyes, nose, and feeling of the stomach. There was slight protest, if any; however, when the doctor had to examine his ears, Melvin would turn away, uttering "ouch" as an expression of pain.

Blood pressure was taken twice on the first day, as part of the admitting procedures. Melvin complied without making any fuss or showing any fear of the pressure cuff. However, he rubbed that part of his arm where the cuff had been tied gently after the cuff was removed.

His temperature was taken once on the day of admission, twice on the second day, and once on the third day. For Melvin, it was a rectal temperature, of which he showed no apparent fear. At first he would do what he was told, lying down passively. As time progressed, he seemed to know what to expect and would turn over and lie on his stomach, getting ready as soon as he saw the nurse approach him with the thermometer.

Melvin's reaction to blood-taking was perhaps more conspicuous and axiety-laden. Despite the doctor's explanation of what he was going to do, Melvin started to cry hesitantly and yelled "ouch" as the needle pierced his skin. He tended to shake his leg and pull his hand away, but his crying stopped as soon as the puncture was completed. He would then watch the doctor intently or closely as the latter drew his blood. Blood was drawn from the finger as well as from the arm. This procedure was done four times on the first day and never recurred.

Melvin anticipated pain as soon as he saw the doctor approach him holding the syringe and needle, when the first injection was given. The reaction was similar to that towards blood-taking. He began to cry; the crying became louder as the needle was put in. It stopped immediately again as the needle was removed. After this, he seemed placid while recovering from the episode. He never struggled to get away. Once, he put one hand on his mouth to keep it from touching the other hand or the doctor as if he was afraid this might interfere with the procedure and cause damage to himself. He received two injections on the first day. The second time, he asked the nurse whether it was going to hurt and cried loudly for his mother. On the morning of the second day, he was told that he would be given a needle, but he tried to avoid it by protesting that he already had one. He screamed when the needle was injected, but only for a brief while. There was another needle on the third day.

Injections, nevertheless, remained a threatening experience. Melvin reacted later even to other children receiving needles from

the doctor. He watched with marked tension, and finally looked away as if he could not withstand the experience of pain, though only a vicarious one.

Melvin's temperature came down from 103 to 101. He was not required to take aspirins or pills.

Reactions to Ward Routines

One of the routine activities on the ward was the serving of meals. The meal cart would be wheeled in at definite hours and the food given out by the nurse or aide to each patient. Melvin was on a liquid diet, but there had been no explanation given him as to why this was so. Dinner on the first day consisted mainly of milk which he drank methodically. He chewed and answered "okay" when the nurse asked him to eat what he could. His appetite was fair, and he seemed to have a special liking for milk and ice cream only. He did verbalize what he liked and what he didn't want. He could eat pretty well by himself and seldom demanded to be fed. He never questioned why his diet was different from that of the others; but on the third day, he had learned enough to shake his head when the aide gave him a regular meal by mistake. He did not attempt to eat this, nor did he show any expressions of reluctance, when the aide took it away. He seemed always to look forward to breakfast, and he usually looked expectantly at the meal cart when it was brought in.

Melvin did not seem particularly to like or dislike bathing and gargling in the mornings. He was bathed in the evening of the first day, and once daily on the following mornings. He could wash

himself upon request of the nurse although he still relied on her to help him get dressed afterwards. On the second day, he took off his socks to get ready for his bath, played with water and rubbed the wash cloth up and down his arms, telling the nurse that he was doing all right. He sat on the bed drying himself and waited for the nurse to dress him. On the third, he cooperated pleasantly with the nurse when she suggested that he use the tooth brush. He enjoyed being bathed by the nurse that time. The changing of garments was not frequent; it was done only after baths since Melvin was not messy.

The boy never wet his bed during the observed period. He very seldom asked for bed pans but was always cooperative when given one to use. The aide or nurse gave him the bed pan once on the first and the third day. On the second day, orders came from the doctor that a urinanalysis was to be done. A sign "save urine" was hung over the patient's cubicle to which Melvin paid some attention out of curiosity. He used the bed pan three times during this day, twice demanded by his mother who brought in the urine urn from the utility room. Melvin always complied.

Bed-making was also one of the morning routines after the patients were bathed. On the second day, Melvin sat quietly on the chair watching the nurse make his bed. On the third day, however, he appeared to want to actively take part in this activity.

He was good at waking up by himself in the mornings without verbalizing any complaints. In the first evening, he had difficulty trying to sleep, probably as a result of separation from home and all

of the traumatic experiences related to his hospital admittance. At first he did not fall asleep during the rest hour of the second day, and was sitting in bed wide awake when the nurse approached. He protested to her suggestion to take a nap by informing her that another nurse had said he didn't have to sleep. Nevertheless, he fell asleep soon afterwards.

Behavior When Alone

Melvin was admitted in the early afternoon, so that, after various admission procedures and physical examinations were over, his first ward day was relatively short. When nothing specific was being done to him, he sat by himself, apparently exploring his environment. However, manifestations of his reaction towards separation from his parents became apparent shortly after their departure, when he started crying for his mother. The crying subsided when the nurse comforted him. He fell asleep during large parts of the first afternoon and was wakened several times for physical examinations in the cubicle or treatment room. He looked at the other patients without taking too much interest in them, and was oblivious to their crying. He looked often at the observer as if wanting some comfort. He sobbed and whined for his mother piteously as if feeling abandoned; such crying continued intermittently. He did not want to play with the toys offered by the nurse but started to read the comic books she gave him. These he selfishly claimed as his own and would not let others take them from him.

The second day was a much more active day for Melvin. His behavior when alone changed markedly with the passage of time, from unhappily gazing into space, appearing very forlorn in the morning, to acquiring

a more cheerful outlook and attempting to reach out to other patients on the ward, particularly after the parents' visit in the afternoon. He looked at other patients in the morning and faintly smiled at them for the first time. There was still some crying in his homesickness and reaction to the newness of the environment. He would look out of the window and back to the ward to watch other patients play, but refused to join in. He played with the books given him. There was constant preoccupation with the touching of various parts of his body, fingering his name tag on his wrist, fingering his knees, etc., except when he was totally occupied by the presence of his visitors. Gradually, he tended to look on more interestedly at other patients' play and repeated to himself the jokes the other patients made, smiling to himself at the same time. Early in the morning, he cried strenuously for his father: "I want my daddy." After his parents had visited him, the new toys they brought him served to keep him busy. Melvin was very proud and enthusiastic about them. He used these toys as a means of attracting the attention of other patients. He still whined when his parents left and muttered inaudible words to himself.

The third day started off with a busy morning as Melvin participated in making his own bed. He was very aware of what was going on in the ward and was alert and interested. He was in a much gayer mood, and was definitely pleased by the attention given him by the other patients. He talked and played with them, and looked forlorn when one patient who had been playing side by side with him left without saying anything. His toys were generously shared among other patients, and he did not seem to mind now. He sang quietly and talked

to himself. At one point, he lifted his tunic and compared his own genital to that of another patient within his sight who was taking a bath. There was no more crying or expressions of homesickness or longing for parents. He was capable of amusing himself with his toys, particularly his picture puzzle. His activities were quite well sustained; he was also able to hold his interest in one specific toy for quite a long period.

Interpersonal Relationships

Contacts with Other Patients

Melvin started to look at the other patients around him only at dinner time of the first day. He was withdrawn, self-centered, possessive of the books given him and would not let other children take them from him. He was oblivious to the crying of the other patients. There was no interaction or actual contact with the patients.

Despite the fact that Melvin was never wheeled to the center of the ward to watch television, he was in a position where he could clearly see what was going on around him, and the other patients often passed by his cubicle. Melvin's first reaching out was shown by his smiles on the morning of the second day. He watched the others play but refused when he was asked to join in. There was no response when the other patients tried to initiate conversation with him. Then he reached out a little more, watching more closely other patients' reactions to what he was doing. The first real interaction came about when one patient who stayed to look at the pictures of a book Melvin was paging through named the pictures

Melvin himself was pointing at. This patient then asked for something on Melvin's bedside table, a squeeze toy which Melvin willingly handed to him. He squeezed this plastic toy by the other patient's ear, and the latter also handed him his toy car. After this exchange of toys, Melvin still appeared unconcerned when the other patients left his cubicle after staying with him for some time. He still would not give his comic books to them, although he looked on interestedly at their play. He laughed at and repeated to himself the jokes of these other patients. There was no exchange of words. Melvin looked away when the nurse introduced a newcomer.

After the parents' visit on the second day, however, there seemed to be quite a change of behavior. He allowed other patients to play with his toys and puzzles, seemingly pleased and proud to show off these gifts. Only at dinner time did he ask for the first time if the other patients would like to read his book. There were two patients who had been trying to be friends with Melvin. He now looked around the ward as if watching for the sight of these patients and grinned when he caught their eyes. He would get up on his knees, looking through the glass partition, and knocking it with his knuckles to get the attention of the children. He tried to converse with another patient by asking if he knew how to do the puzzles. He said nothing when his toys were taken away by the children.

On the third day, Melvin began talking to other patients. Many gathered around his bed, which gave Melvin the pleasure of being the centre of attention. He joined the others in playing with plastic toys. He looked forlorn when one patient left him. He showed the

others some get-well cards he had received. One naughty patient threw some sweeping compound at the patients gathered around Melvin's bed. He watched indifferently, but those around him angrily told the patient to stop and vigorously brushed the sweeping compound off Melvin's bed. Melvin was more talkative and more frequently engaged in conversation and play with the other patients. He was also concerned with the ones getting injections.

Figure 9 (see Appendix C) shows the number and time of contacts Melvin had with other patients during his first three days of hospitalization. As in the case of Judy, the ward day is divided into six periods. This graph shows that mid-morning and late afternoon were the times of the day during which Melvin tended to have more contacts with the other patients. It also indicates marked increase in interaction in each succeeding morning as well as in the afternoon.

Contacts with Parents and Visitors

Melvin's reaction to separation from home represented perhaps the core of his discomfort and anxiety, although he was able to cope with it fairly well. He was accompanied by both parents at admission when he was tense and seldom exchanged words with them. He became frightened and cried at being left alone when the parents were requested to enter the doctor's office. During the physical examination, his parents left temporarily without telling him, and when they returned, they were not warmly received by Melvin; he rarely talked to them. At separation, there was no crying or any facial reaction. About half an hour later the actual reaction to

separation was manifested through crying for his mother. This subsided when the nurse comforted him. He slept during large parts of this afternoon. After dinner, Melvin started to cry quite intensively for his mother, apparently from loneliness and homesickness. The crying continued until he grew angry that no one was attending to his tears. The nurse came again to reassure and comfort him and finally put him to sleep.

Melvin was still unhappy the next morning. He cried strenuously for his father shortly after breakfast. This again stopped after the nurse gave him some words of comfort. Towards visiting hour, he whined for his mother, expecting her to be prompt because he remembered the parents saying that they would come to see him this day: "My mother said she is going to come at two o'clock."

He was very excited upon the parents' arrival, was at once talkative and rather babyish in his response to his mother who attended first of all to his toileting by giving him the bed pan herself and feeding him some chocolate milk. He was constantly smiling in the presence of his parents, apparently very happy. He wanted his mother to read to him and played games with both his parents. He drew pictures which he wanted the parents to admire. He was busily drawing and writing, asking his mother and father for spelling from time to time, showing what he had done and grinning at their approval. He tried to sing a song of the alphabet and got as far as "O....P.." with his mother's help. He was anxious to tell his parents that he liked the nurses but not the doctors: "I don't like the doctors because they took my blood and hurt my arm." He showed his mother the needle puncture in his skin.

The parents had to leave for two hours. At departure time, Melvin avoided looking at them and pretended to ignore them. The situation was "saved" by the presence of his maternal grandmother who came with the parents, and soon the arrival of his uncle who engaged in play with Melvin. When they also left, Melvin appeared sad and crestfallen. He controlled his tears, trying not to cry by keeping himself occupied with the new toys. At 6 P.M. in the same afternoon, his parents returned. Melvin was not as affectionate in greeting them. He continued with his play, but was concerned that his mother might be leaving soon. He asked, "Are you going to leave now?" His mother was talking to a Negro boy, but Melvin waved his pencil and tried in every way to divert her attention. He seemed quite jealous of his mother's talking to the other patients.

He played games with his parents again. His father usually stood at the bed's end, watching the other children on the ward while his mother sat nearer Melvin and fondled him somewhat. Towards the end of their visit, his father pointed out of the window, saying that he could see the road where the family car would be parked if they were on their way to the hospital, reminding Melvin to watch out for them the next time. They promised to return the next day and caressed Melvin at departure. Melvin whined and looked very bewildered. Later at night he refused to go to bed. This seemed to be his reaction to having seen his parents again. He looked out of the window frequently, hugging tight his stuffed animal, and waved again and again at the window, as if he saw his parents out on the street. He then finally buried his face in the pillow quite miserably. He cried

once, "I want Mommy," when he could not sleep.

Contacts with Hospital Staff

Since the recorded material did not indicate when different doctors were in contact with Melvin, it was difficult to estimate how differently the boy reacted to each. Melvin had the largest number of contacts with the doctor on the first day of admission. With the completion of the admitting physical examinations and procedures, there was a sharp decrease of contact on the second day, such contacts being made only at rounds. Slight increase of contacts with the doctor was noted on the morning of the third day. (See Figure 10, in Appendix C.)

The impression was that it was the same doctor who gave Melvin the many physical examinations on the first day. Simple explanations were always given regarding the procedure of the examination, such as, "I am going to give you a needle' it will hurt just a little bit." Melvin was never overtly resistant to the doctor. The first doctor that examined him teased him cheerfully and asked him questions about his age, number of siblings, school, etc., which he answered appropriately but quite seriously. All the blood-taking and the two injections were done by the doctor. The remaining procedures were administered by the nurse who seemed to hold a relatively important place in Melvin's mind. Melvin related well to her; for it was the nurse who was the main mother-substitute; it was she who asked for his preferences regarding food whenever he showed dislike of what was served. The nurse bathed him in the mornings and gave him bed pans and a few needles.

His contacts with student nurses were mainly around the taking of temperatures and around play. They gave him comic books and stuffed animals, or reassured and comforted him when he cried. The aides had comparatively less to do with Melvin. They talked to him mostly around meal time, commenting on the kind of food he had. At other times, when they were cleaning the cubicles, they would try to get Melvin involved in conversation, but Melvin did not respond to them readily. There was an increase of contact with the aides starting the second day, as shown in Figure 11. (see Appendix C).

Summary and Interpretation

Melvin's initial reaction to hospitalization seemed in general normal and realistic. Preparation by his parents for hospitalization and the good impression of the doctor on the child certainly helped in lessening the anxiety. Melvin's initial liking for the doctor could probably be explained by the fact that he did not yet view him as the pain-inflicting person, as when medical procedures were involved. Also the doctor's friendly approach and care in explaining when a procedure would hurt presumably were reassuring. The parents' realistic attitude, that of the father in particular, toward illness, hospitals, medical staff and medical procedures was presumably also an influential factor, as the child could easily pick up any tension or feeling of anxiety conveyed by the parents. The fact that both parents accompanied him upon admission was a great support for the child. He was really quite frightened and upset when he was placed alone on the bed while his parents were asked to

go into the doctor's office. He seemed also to be slightly angry at them for leaving without a word, hence his less affectionate response upon their return. The admitting procedure was "humanized" when the parents promised the distraught child that they would come to see him on the morrow, and kept their promise.

It was interesting to note that Melvin's behavior in the hospital was similar to his mother's expectations of his reactions. His relationship with his mother seemed very close. In his distress over loss of the mother, he cried for her. When she did not appear, he cried for his father, and finally called for the nurse who, to him, was the only available mother-substitute.

The time spent together by mother, father, and child on the second day helped to continue their relationship and did not break up the security, which would mean so much at this young age. Homesickness seemed to be lessened by the opportunity given Melvin to discuss his feelings with the understanding nurse or doctor, who showed their concern by asking questions about his family, and reassured him that his mother would soon be coming when he cried for her.

Melvin was not happy during the first two days of hospitalization. In a hospital stay, the child experienced not only a change of residence but also fatigue and pain, and even the pleasant moments were related to illness. On the third day, Melvin played joyfully with the other patients; but he was still confined to bed and could only withdraw in a forlorn way when the other patients left his cubicle.

Every child's initial response to hospitalization consists of apprehensi - concerning expected painful tests. This anxiety is initially substantiated by the paraphernalia of test tubes, needles, etc., which greet him during the admission examination. This was no exception for Melvin. He expressed greater anxiety over medical procedures than over illness. He complied passively to all procedures, but the most feared procedures were injections. Equipment like needles and syringe seemed to be most anxiety-provoking whenever they were in sight, hence his covering of his eyes upon witnessing another patient getting needles. However, it was interesting to note that he had reacted somewhat differently to the drawing of his own blood and injections. He tended to watch interestedly as the doctor drew his blood. Perhaps this could be explained by the fact that any procedure which could be observed by the child like the witnessing of blood being drawn was less objectionable than one which could not be viewed by him. There were many repetitious anxiety-laden questions about the needles each time he was given one. He would ask whether the needle would hurt, if the nurse or doctor did not explain.

Despite the child's efforts to control the expression of his feelings, he appeared overwhelmed by the first experience of being away from his parents in a strange environment. It seemed that his preoccupation with sleep during the whole afternoon of the first day was related to his attempt to avoid and withdraw in allaying anxiety. His constant preoccupation with playing with various parts of his body, putting on and pulling off his socks, touching the bracelet,

etc., may be interpreted as nervous and restless behavior as a result of his frustrations and anxiety about hospitalization.

The gradual decrease in Melvin's crying and increase in play and social activities was a good sign of healthy adjustment to hospitalization. The open cubicle system enhanced the visibility of other children and allowed increased communication among them. It was interesting to note how Melvin moved from being selfishly possessive of the comic books to offer voluntarily some of his toys to the other patients, using these toys as a means of attracting attention. Melvin's contacts with the other patients during his first three days of hospitalization out numbered those with the hospital staff. or with the visitors. As time progressed, there was marked increase in interaction in each succeeding morning as well as in the afternoon.

As was expected, the observation indicated the ever-present sensitivity to all aspects of basic separation. Melvin peeped under his tunic to see if his genital organ was still there when he saw another patient bathe in the nude. One might speculate that this was merely the child's curiosity with respect to parts of his body. On the other hand, the event might also be interpreted as the child's sensitivity to castration anxiety.

The author was struck by the passive-receptive reaction to medical procedures in general, although the child was known to be fully capable of verbalizing his feelings and thoughts. The author felt that the prolonged admitting physical examinations probably contributed to the child's anxiety and felt that, insofar as possible, the shortening and simplifying of these procedures would be beneficial.

CHAPTER V

SUMMARY AND CONCLUSIONS

Introduction

As stated in Chapter I the purpose of this study were: to develop a method of analysis through which observational process recording can be used to study the initial reactions of children to hospitalization, and from the data to formulate hypotheses about these initial reactions which could be used for further research. Although each of the authors felt free to use his own ingenuity in developing the method of analysis and in studying specific aspects of the data, there were many similarities in the use of the method and our findings. The purpose of this chapter is to evaluate the method of analysis and the overall reactions of the three children to hospitalization.

Evaluation of Method of Analysis

We first studied the two observations recorded before our study was planned. After deciding to do one more case in order to have the experience of doing an observation, we recorded the third case (The Case of Timmy). We then devised the three-dimensional coding system: persons involved, outside stimuli impinging on the child, and the child's emotional expression and physical activity. The basic unit of analysis used in coding the data according to this three-dimensional system was an "event." In organizing the data we first wrote an impressionistic survey of the major areas in each case and then we made quantitative analyses of selected areas within each case.

We found both advantages and limitations in carrying out this method of analysis.

Study of the first two cases and the experience in making an observation ourselves made us familiar with this type of data, the task of the observer, and the overall observation period. We recognized that this type of data contained a large amount of detail. The observer had to make his own subjective interpretation of the child's emotional responses, and sometimes the activity in the child's environment occurred so rapidly that the observer was unable to record it fully. Therefore, it was necessary for the coder to add his own interpretation where the date was incomplete.

There were several advantages in coding the data. First, it enabled each of us to become thoroughly acquainted with all of the data for each case. This was a major task since each case included from 75 to 120 type-written, double-spaced pages. Secondly, it enabled each of us to identify the general areas covered in the data. This became the basis for our collective decision on the major areas to be covered in each case study.

In the coding process we found some difficulty in identifying an "event," the basic unit of analysis. The major difficulty was in determining the beginning and ending of an event. An event was defined as a period in which there was no change in the activity of the child or when the same person (or persons) were interacting with the child. But there were instances when the person involved remained the same and the activity changed. Conversely, if a new person entered the picture it was not always clear whether the continuation of the

activity should be considered a new event. Such occurrences were quite frequent in the data.

Our quantitative analysis of the data was incomplete and experimental. Of the dimensions used in coding it was easiest to identify the persons involved and the outside stimuli impinging on the child, and tabulations were made of these two dimensions. The frequency and timing of outside stimuli and contact with persons were tabulated, and the resulting figures (Appendix C) gave an overall picture of the data. This added another means of portraying the data which supplemented our impressionistic summaries of the cases.

The use of interpretation by the observer and the difficulty in defining the third dimension of our coding (the child's emotional expression and physical activity) made it difficult to tabulate this dimension. Figures 5 and 6, showing "Occurrence of Nervous Habits," and Figure 7, showing "Asking for Mother and Nurse," were attempts at tabulating this dimension. The authors felt that other aspects of the child's behavior could also be tabulated in this way.

In the quantitative analysis of the coded data we found it an advantage to divide the day into six time periods. These periods not only represented the natural division of the daily ward routine but also provided a means through which one could determine the nature and frequency of what was happening to the child at different times during the day. This in turn was used as a basis for observing changes in the child's behavior over the three day period.

Each author felt that observational process recording provided a valuable means of studying the reactions of children to hospitali-

zation. It was agreed that the data merited further study and that our methods could be further developed to provide a more accurate and insightful method of analysis. However, it should be noted that a thorough content analysis of such an observation is extremely time consuming, especially if there are to be a greater number of cases studied.

The Children's Reactions to Hospitalization

One of the purposes of this study was to determine, on the basis of observational records of the two days immediately following admission, how the child reacted to hospitalization, that is to medical procedures and ward routines, to the hospital staff and other people with whom he came in contact, and how he behaved when alone. Although Melvin seemed to show the most realistic and constructive adjustment to hospitalization and Judy seemed to have the most difficulty in adjusting, there were certain trends which were evident in the reactions of all three children. In looking at these cases, though, the ages of the three children should be taken into consideration; Melvin was the oldest ($5\frac{1}{2}$ years) and this may have entered into his ability to adjust.

Because the illnesses involved in all three cases (i.e., pneumonia, infectious mononucleosis, and urinary tract infection) were not too traumatic or painful in terms of actual physical discomfort, it appeared that the anxieties of the patients were based more on the strangeness and unfamiliarity of the environment and the general emotional effects of hospitalization than on the illnesses themselves. It would be interesting, therefore, to examine the overall reactions of children

in the hospital who had more serious and painful illnesses.

In reviewing the three cases, we were struck by the frequency and length of the admitting physical examination as well as the number of medical procedures to which the child was initially subjected. Melvin, for example, was given six physical exams on his first day between the time of admission (1:00 P.M.) and his bedtime (8:00 P.M.). He was wakened several times during that afternoon to go to the treatment room. Similarly, on her first night in the hospital, Judy was wakened periodically until 11:00 P.M. for further-examining procedures. We felt that such prolonged physical exams probably contributed to the patient's initial anxiety.

No new medical procedures were introduced after this initial examining period, and the later examinations were less thorough. Although the general overall reaction of the three children towards medical procedures was one of passive compliance, the expressed anxiety towards most medical procedures was noted to decrease during the observed period. This could probably be attributed to the patient's increased familiarity with the procedures as well as to the decrease in frequency of their occurrence. In all of the physical exams, though, the children's unwillingness to respond to the doctors' questions persisted in spite of a good deal of mumbling and whimpering throughout, particularly by Timmy and Judy. All three children protested against various procedures during these exams both verbally and through physical resistance.

In all three cases, the most feared medical procedure was the use of needles for injections or for blood tests. In only one case,

Melvin, were there explanations that the needles would hurt and reassurances when the procedure was completed. However, the children did show distinct reactions to other types of procedures as well. One patient reacted to having his blood pressure taken by rubbing his arm afterwards, and another by screaming and fighting the nurse. One patient received oral medication willingly and without hesitation, while another showed open defiance to taking pills and even vomited afterwards. Rectal temperatures were the most common of all of the medical procedures and also seemed to be the least feared. Two patients were even noted to prepare themselves for this procedure as soon as they saw the nurse approaching with the thermometer.

The children's reactions to medical procedures seemed to be somewhat related to the way in which the medical personnel handled their administration and explanation. A doctor's friendly approach and care in explaining when a procedure would hurt presumably was reassuring, as seen in Melvin's reaction to needles. The fact that in two out of the three cases little if any explanation was given during medical procedures would suggest that this is an area for further investigation and one which might have some real bearing on the child's reaction to medical procedures and to hospitalization in general.

The major difficulties which were manifested by the children in relation to ward routines were concerned with eating. Disinterest in eating and demands to be fed seemed to be forms of regressive behavior. The child's feelings of separation from his mother at

times when she usaully played a very important role were emphasized at mealtimes as well as during other ward routines. This was seen particularly in the case of Timmy. This suggests the importance of having ward routines carried out by sensitive and understanding staff personnel in order to alleviate as much of the stress of the "settling in" process as possible.

Having their clothing taken away at the time of admission was a matter for concern to all three patients. Judy, for example asked where her clothes were as soon as she saw her mother on her second day, and later protested at having to take off the sneakers which her mother had brought her. She also protested violently during her initial physical exam at having the bandaid taken from her knee and took the paper towel which the nurse had given her at this time to bed with her that night. Having to wear anonymous hospital garments and being separated from familiar personal belongings probably added to the child's confusion about his self-identity in the hospital.

The behavior of these patients when left alone showed initial withdrawal, passivity and preoccupation with self. Nervous habits and playing with parts of their own bodies were noticeable. Such behavior was found to decrease with time as they gradually began to open up, to explore their environment, to reach out to others and to engage more actively in conversation or play with those around them.

The patient's relationship with those with whom he came in contact during hospitalization deepened also as time passed, with the exception of the doctor whose contacts decreased markedly after

completion of the admitting procedures on the first day. (See Appendix C, Figure 12.). His presence was possibly associated with the application of needles and infliction of pain. The patients seemed to want to "forget" or not be reminded of their illness. The doctor, therefore, seemed to remain a frightening figure but distant as time progressed.

The relationship of the patients with the nursing staff was of a different nature because of the availability of the latter and because the patients were more able to use them. In general, they seem to play a role as mother-substitutes in the cases observed. This was illustrated by the patient's calling for the nurse after crying repeatedly for his mother who did not appear. It was difficult to know whether the patients distinguished the nurse as different from the student nurse and the aide. In two of the three cases, the patients seemed to be more responsive to the aides who had the least to do with medical procedures but played significant parts in taking care of the patient's bodily needs such as feeding, changing of clothes, giving bedpans, and so forth. Generally speaking, the authors felt that the relationship of the patients with the nursing staff depended on the kind of medical procedures they administered (whether they involved pain and provoked fear and anxiety), the number of social contacts, and the willingness on the part of the nursing staff to involve themselves in play with the patients, in other words, their availability at times when the children needed comfort and reasurrance.

The authors noted reactions of grief because of loss of parents, as manifested in the patient's crying for his mother or father. The parents' revisiting on the second day was of significance in helping

the children cope with their hospital experience. Although they showed disappointment at separation, constructive behavior was demonstrated after the parents' departure. Toys brought by the parents were used as a means of comfort and of drawing attention and stimulating interaction with other patients on the ward.

In summary, all three children initially displayed a very passive-compliant attitude towards hospitalization and appeared to withdraw into themselves. Gradually, however, each child in his own way, began to open up, and became more involved in his surroundings. This was seen in the way in which they all seemed to go through what appeared to be a "settling in process." The first stage in this process was when they began to explore the environment. This was followed by an involvement in their own bodies and in their toys. Then they began to show an active interest in what was going on in the ward. Next they became really active in their play and began to show interest in other patients and staff members. The final stage that was apparent during the three days observed, and that Judy never reached, was the initiating of interaction with other people.

APPENDIX A: 1. Procedure for Observation

Children's Project
Boston City Hospital

Reasons for use of observation technique:

Observation of spontaneous behavior is a necessary supplement to the more detached, reflective information gained from personal interview with the mother. The predicted behavior she describes may be supported or may be considerably different from the patient's response in an actual stress situation. Also, behavior noted in observation may pass unnoticed by those actively involved with the patient, may be taken for granted and therefore not mentioned, or may be information which the parent does not wish to discuss. Although we face the limitation of not being able to observe certain tests and treatment procedures—events of considerable consequence in the patient's adjustment—we will attempt to offset this lack through our continuous observation at all other times during the two-day period beginning the patient's hospitalization.

Purpose of observation:

Through observation we wish to discover, during the two days immediately following admission, from whom support and interpretation comes. Who explains the reason for hospitalization? Who interprets the illness, the procedures and purpose of treatment? Who supports the patient as he enters this new environment? Who explains hospital routines and rules? Who befriends, comforts, cheers? Who demonstrates concern for his adjustment to the situation?

Since the purpose is so all-inclusive, we cannot predict all that will occur, and not even the best observer can expect to provide a complete record. Events will sometimes move rapidly, loaded with tension or emotion, and you will wish that you could write more rapidly and concisely. You will find your observation becoming more specific and concise as you become familiar with the situation and the subject of observation, however. Since accurate recording will require speed, a code is provided for ease of identifying the persons who will conceivable enter the picture.

The focus of observation is the patient. The observer is to note all factors, human and environmental, which influence the patient's behavior, and the patient's response to these influences. You must be especially careful to separate objective information from interpretive comment, interpreting only when observation is not understandable without comment or does not reflect the circumstances completely.

The following points for observation are intended as guide, anticipating the content of your observation as much as is possible prior to the actual event:

1) The patient and those persons with whom he comes in contact

2) The consequences of this contact, interaction
   -include verbal expression verbatim, if possible, also describing facial expression, bodily movement and contact
   -descriptive language is most helpful (eg., "patient clung to mother, whimpering..")

3) The means used in the interaction
   -talk? physical contact? use of toys?
   -were means appropriate? other means available but unused?

4) The initiating event
-what arouses interaction? a cry for help? invitation of patient or one else? result of scheduled treatment or ward routine?

5) The incentive or factors maintaining the situation
-interest? compulsion? routine? need?

6) Constraints imposed
-rules or routine? physical limitation (eg., bedrest)? individuals incompatible?

7) The context
-what is the setting at the time of the incident (not only location, if not on the ward, but the situation which may or may not appear to influence the patient)?

8) The regularities and recurrences
-are certain reactions repeated? unique? (eg., crying at every approach of a white uniform, a needle)

9) The length of time for which it lasts
-quick? or lengthy? clear-cut? or merging into other situations? (eg., does withdrawal follow treatment, or does patient appear to recover quickly and involve himself in other activity?)

10) Significant omissions
-may not engage in expected activity; may not mention or react to conspicuous events (eg., no reaction to separation or painful treatment visible)

11) Deviation from what is usual
-may disregard constraints, norms; may manifest unusual amounts of emotional intensity, general activity, interaction (eg., extreme reaction to treatment, physical restraint)

12) Inconsistencies
-response may vary or change; may say one thing and act in another way (eg., professing no fear of approaching test, but exhibiting behavior which is erratic, compulsive)

Recording the observation:

Each patient will have one face sheet in his record, followed by pages with the heading of the date, name of the observer, and the page number. All pages will be divided identically as to time, observation, and comment.

Observation is to be recorded in blocks of time, 15 minutes in length, with the recording of pure observation material in the center column, followed by brief comment, when necessary, in the comment column. Observation directly regards the child, and is to be as complete as possible. You will need to develop your own speed which does not require such attention to writing that observation is incomplete. It is especially important to limit and clearly define any interpretation of behavior in the interest of validity, interpreting in the event of discreet movements and objective conditions not reflected completely in observation of the patient alone (eg., ward activity which may or may not be reflected in the patient's behavior).

Observation material will be used "as is", so try to write accordingly/

Relationship of the observer to the observed:

The ward staff has been prepared as to the purpose and procedure of our observation, and will expect your presence. You, in turn, will want to place yourself so as to avoid interfering with the ward procedure in any way. The observation is not to be discussed with anyone, and if you are queried as to your activity, explain quietly and briefly. If asked by a child, smile and motion for quiet, or simply say "This is writing I have to do..." You are not to engage in conversation with anyone.

Since you are to record, as accurately and completely as possible, all that you observe, you will want to be close enough to see and hear the patient wherever he is. However, when he is taken to the treatment room, you can follow only to the door, and then will wait at the doctor's desk outside the door, recording what you hear from the room. When the patient leaves the ward for a test, accompany him to the elevator and then wait on the ward for his return. While the patient is in the ward, take your place across the ward so that you can see and hear, but remain relatively inconspicuous. The patient and the ward will soon become accustomed to your presence.

Schedule of observation:

Observation will begin when the head nurse notifies us of the patient's arrival on the ward. We will work in two teams of three, pacing each other throughout the patient's waking hours during his first two days of hospitalization. During the hours when a team member is not observing, he or she will gather community data, additional medical data, or other necessary information for a complete observation.

Although some adjustment may be made depending on the age and condition of the child, factors which can affect the number of waking hours (eg. if the child is age 2, he may be asleep by 6:30, especially if the day has been long and exhausting), the general schedule will be as follows (team members designated by A, B, and C.):

A's work day will be 7 A.M. to 3 P.M. A will observe from 7 until 10 A.M., and will spend the rest of the day working on the patient's community study, gathering data and writing the report. A will check with the night nurse on the patient's behavior before going on the ward at 7 A.M.

B's work day will be 10 A.M. to 6 P.M. B will observe from 10 A.M. to 1 P.M. and from 4 P.M. to 6 P.M. The intervening hours will be spent in reading

C's work day will be 1 P.M. to 9 P.M. C will observe from L P.M. to 4 P.M., and from 6 P.M. to 9 P.M. The intervening hours will be spend in reading

The seventh person on the staff will relieve the observers if and when this should be necessary due to a shift in hours. This person will also gather individual information on the patient from the mother through an interview, using the form composed for this purpose. The interviewer of the mother will also gather information from the doctor, nurse, and medical record.

APPENDIX A: 2. Guide for Interview with Mother

Children's Project
Boston City Hospital

Date _____

Worker _____

Name _____

Sex _____

Age _____

Grade _____

Race _____

Religion _____

Address _____

Date of Admission _____

Medical Diagnosis _____

Mother's Birthdate _____ Occupation _____ Education _____

Father's Birthdate _____ Occupation _____ Education _____

Wedding Date _____

Family Income _____

Number of Siblings:

Name	Age	Sex	Medical, Mental Problem, Physical handicap
1.			
2.			
3.			
4.			
5.			
6.			

Mother's own history, including her family:

Father's history, including his family:

Number of hospitalizations (Patient):

	Diagnosis	Age	Length	Reaction
1.				
2.				
3.				
4.				

Number of hospitalizations of family members:

	Name	Diagnosis	Age	Length	Reaction
1.					
2.					
3.					
4.					
5.					
6.					

History of present illness:

Was the patient prepared for this hospitalization?

Did the patient know the reason for this hospitalization?

Who did the preparation and explanation?

Mother's report of patient's expected reaction to:

Illness	Doctor	Nurse	Medical Nursing Procedure

Mother's expectation of patient's reaction to hospitalization, during the first three days:

Family members' attitude toward:

Illness	Doctor	Nurse	Medical Nursing Procedure

Mother's description of patient's personality:

Development History given by mother:

Birthweight_____ Height_____

Health:

Childhood diseases:

Feeding, food habits, allergies:

Sleeping:

Toileting:

Language:

Motor Development:

Social Development

Mental Development

Schooling:

Any nervous habits:

Behavior or discipline problem:

Relationships with family members:

Relationships outside the family:

Teacher Children Neighbor Relatives

Number of separations from mother and family:

	Reason	Date, length	Who took care of p.	Reaction
1.				
2.				
3.				
4.				

Any illness, accident, birth, death, moving, separation occured during the past six wee

	Event	Date	Reaction
1.			
2.			
3.			
4.			

Did anyone inform the family about visiting hours?

How often does mother think she will be able to visit patient?

Which family member the patient is closest to?

Mother's attitude toward Boston City Hospital:

List the medical procedures given to the patient during the first two days of hospitalization:

1.
2.
3.
4.
5.
6.
7.
8.

Any medical restriction:

Doctor's comment of patient

Illness:

Treatment:

Prognosis:

Comments:

APPENDIX A: 3. Guide for Community Study

Children's Project
Boston City Hospital

Observing a Neighborhood

Name of Observer

Name of Patient

Address of Patient

Date

Before going on this trip, study the outline carefully and ask questions about anything that is not clear. You will need to have it firmly in mind, for you won't be able to read it and write notes continuously as you observe. Try not to be conspicuous. You will be able to sit down (in a drugstore over a coke, or on the steps of a church, for example) and fill in most of the outline form from memory, if you are careful to learn in advance what to look for. Use public transportation to go from Boston City Hospital to the patient's neighborhood. When you get there, first of all find the patient's house. When the questionnaire asks "where?" locate the facility in relation to the patient's house.

Outline

I. What can you see?

A. About space

1. How wide is the street? How straight? In what repair?

2. Are there trees for shade? Which way do the buildings cast shadows?

3. Is there a playground nearby? How near? What equipment?

4. Is there vacant land? From razed buildings? Undeveloped? Tidy or littered?

5. How much traffic is there? What kind? How is it controlled? By lights? Policeman?

B. About buildings

1. Dwellings

a. How close together are the houses? How tall? How wide? Of what material? In what repair? How clean? Can you guess how old?

b. Do they seem to be used for single family or multiple dwelling? Which do you think they were built for?

2. Public buildings

a. Where are the churches? What denominations? What sort of buildings?

b. Where are the schools? For what grades? How old are the buildings?

c. Are there any general meeting halls? What kind? (K. of C., Masons, IOOF, general social, bowling alleys, pool halls, etc.)

3. Services

a. Describe transportation: how many changes from B. C. H.? how often do buses run? how near is bus stop? about how long does the trip take?

b. How near is the shopping area? What kinds of stores are there? What sorts of goods are displayed?

C. About people

1. What sort of people are on the street?

a. Mixed races? What ethnic groups?

b. What ages? Is there an especially large proportion of old people or of children?

c. How are they dressed?

d. Do you see any groups who seem to be families? Other groups?

e. What are the people doing?

II. What can you learn through questions? A settlement house is a good source of information. (South End Union, Dorchester House, or Roxbury Neighborhood House, according to which district you are observing.)

A. Socio-Economic Status

1. Do most of the tenants own or rent their living space? What is the approximate average rent or rent equivalent?

2. What sorts of jobs do the men have? At what approximate wage?

3. Do many women work? At what?

4. Is there a nursery school or day care center? Under whose auspices? If not, where do working mothers' children stay? Is there an after-school program for older children?

5. Does anybody go on a summer vacation? What kind?

6. Is there much unemployment? Are many people receiving public assistance?

B. Cultural-Spiritual Status

1. Is relocation likely, owing to urban renewal plans? How does this affect the population.

2. Are there neighborhood feuds between ethnic groups or gangs?

3. Are the churches an important part of the people's daily life?

4. Is there much crime? What sort? Perpetrated by whom?

5. What are the neighborhood's assets?

   a. Practical (such as good transportation, job opportunities, low cost housing, good school system)

   b. Social (good beach, park, organized groups for recreation, and/or adult education, scouts, Y, groups within community center)

6. What activities are popular within the center?

C. Does the agency know this particular family? Is it free to divulge any information about them which might help us to understand _____ better?

APPENDIX B

SAMPLE OF OBSERVATION

Name: Timmy Age: 3½ Ward: Ch. 5

Diagnosis: Pneumonia Date and Time of Admission: 11/23/62 - 6:00p.m.

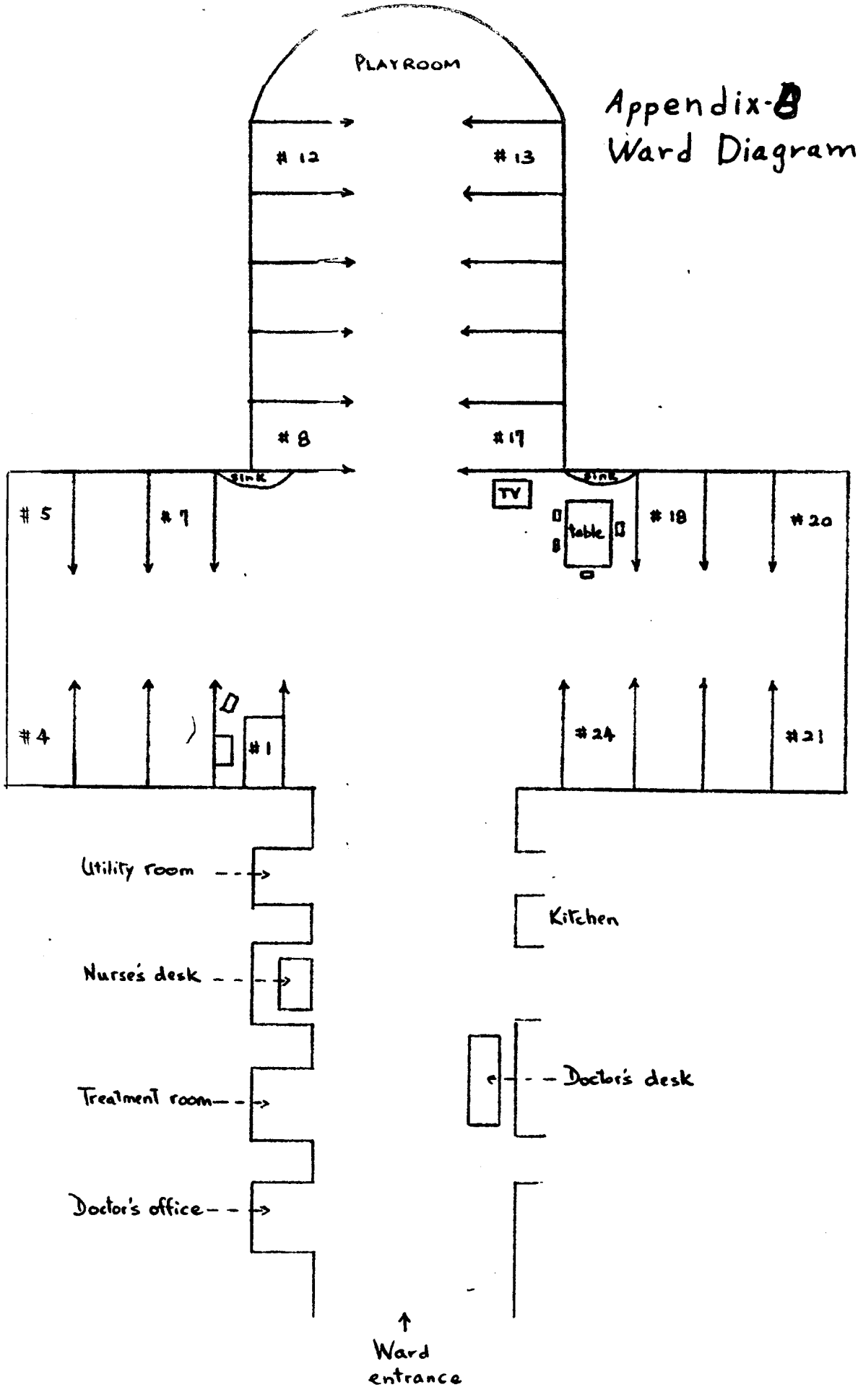
Date of Observation: 11/23/62 Name of Observer: S. Savage

Time	Observation	Comments
1:30	P coughs but does not stir as SN continues to talk to other SN. SN then gives P a small cup of medicine which he takes willingly. P and SN then talk. SN - "Y our daddy wanted you to spit it up at home?" P looks away and then at SN approaching. SN plays with stick, P. asks for stick. SN says, "What are you going to do with it?" SN moves P's legs. SN does something on P's bed table. P looks down and then looks toward radio. SN asks P something and he talks too softly, to hear. SN undoes P's johnny and pulls it off his back. P then watches as SN puts salve on stick. SN puts salve on P's arms. Holding arm with one hand and stick in other. P still holds medicine cup and stick. SN re-	SN in background dances to radio with one of the other patients

Key: D - doctor
N - nurse
A - attendant
L - lab technician
O - orderly
F - father
M - mother
P - patient

Time	Observation	Comment
	places johnny. P plays with cup and stick slowly. SN then picks up P and gets up and then places him in chair. She takes his blanket and puts it around him and sits him back in chair. She puts teddy bear and dog beside him asking about squeeking. He looks around and away holding medicine cup. SN then takes his bed out in aisle and makes it. P watches. 2 other P's walk around quietly. One takes SN's attention. P looks away and begins playing with telephone. He sets it aside and begins tapping stick inside of cup. SN ties toy for another P and	
1:45	then comments to another SN - finishes P's bed and pushes it back. Then talks quietly to other SN. SN returns to P's bed and straightens table putting away salve. She then trades stick with him. He looks away as N leaves. He stares toward activity as children sit at table 20 feet away and eat snacks. A then comes and gives P a cup of something asking him if its	

Appendix-B
Ward Diagram



APPENDIX C

QUANTITATIVE ANALYSIS OF DATA

DAY	D's	N's	A's	OP's	V'S	TOTALS
FIRST DAY	8	12		1	1	22
SECOND DAY	3	30	29	9	1	72
THIRD DAY	1	18	21	10	2	52
TOTALS	12	60	50	20	4	146

Figure 1 - Total Number of Contacts (Case of Judy)

Key to Figures 1, 2, 3, and 4:

D's - Doctors
N's - Nurses
A's - Aides
OP's - Other patients
V'S - Visitors

PE - Physical exam
T - Temperature
S - Shot
BT - Blood test
BP - Blood pressure
M - Medication
F - Food
BR - Bathroom - bedpans, baths
O - Other - social contacts, changing beds, etc.

Figure 2 - Nature of Contacts (Case of Judy)

DAY	CONT. PER.	PE	T	S	BT	BP	M	F	BR	O	TOTALS
FIRST DAY	D	3		1	2					2	8
	N		2		2	2	2	1		3	12
	A										
	OP									1	
	V									1	
TOTALS		3	2	1	4	2	2	1		7	22
SECOND DAY	D	2								1	3
	N		3				4	9	3	10	29
	A						1	7	9	16	33
	OP									9	9
	V									1	1
TOTALS		2	3				5	16	12	37	75
THIRD DAY	D	1									1
	N		3				2	5	1	8	19
	A							6	9	4	19
	OP									10	10
	V									2	2
TOTALS		1	3				2	11	10	24	51

TIME	PERSON	FIRST DAY	SECOND DAY	THIRD DAY	TOTALS
EARLY MORNING	D		6	1	7
	N		3	5	8
	A				
	OP				
	V				
TOTALS			9	6	15
MID MORNING	D		3	1	4
	N		3	6	9
	A		13	4	17
	OP		2	1	3
	V		21	12	33
TOTALS			21	12	33
MID-DAY	D				
	N		2	4	6
	A		9	9	18
	OP			1	1
	V				
TOTALS			11	14	25
AFTERNOON	D				
	N		5	1	6
	A		3	3	6
	OP		1	1	2
	V			1	1
TOTALS			9	6	15
LATE AFTERNOON	D				
	N		12	5	17
	A		1		1
	OP		4	7	11
	V		1	1	2
TOTALS			18	13	31
EVENING	D	6			6
	N	12	2	1	15
	A				
	OP	1	2	7	10
	V	1			1
TOTALS		22	4	8	34

Figure 3 - Times of Contacts (Case of Judy)

Figure 4 - Nature and Time of Contacts (Case of July)

TIME	FIRST DAY										SECOND DAY										THIRD DAY									
	PE	T	S	BT	BP	M	F	BR	O	TOTAL	PE	T	S	BT	BP	M	F	BR	O	TOTAL	PE	T	S	BT	BP	M	F	BR	O	TOTAL
EARLY MORNING																1	4		4	9							3	2	1	6
MID MORNING											2	1				2	2	6	8	21	1	1					2	1	7	12
MID - DAY												1					3	2	5	11		1				1	5	4	4	15
AFTERNOON																	3	1	5	9							2	2	2	6
LATE AFTERNOON																1	4	3	10	18		1				1		2	9	13
EVENING	3	2	1	4	2	2	1		7	22	1					1			2	4									1	1
TOTALS	3	2	1	4	2	2	1		7	22	2	2				5	16	12	34	72	1	3				2	12	11	24	53

DAY	COUGH	YAWN	MOUTH	NOSE	EYE	PICKS	HEAD	MAST	LIPS	SNEEZE	MISC	TOTALS
FIRST DAY	3		10					1	2		6	22
SECOND DAY	24	18	22	24	14	10	11	8	25	1	14	171
THIRD DAY	125	9	10	20	8	4	6	6	10	1	15	214
TOTALS	152	27	42	44	22	14	17	15	37	2	35	407

Figure 5 - Occurrence of Nervous Habits (Case of Judy)

Key to Figures 5 and 6:

Cough
Yawn
Mouth - Thumb, hand, or fingers in mouth
Nose - Picks or wipes nose with hand
Eye - Rubs eye
Picks - Picks toes or fingers
Head - Rubs or scratches head or ears
Mast - Masturbates
Lips - Licks or wets lips
Sneeze
Misc - Miscellaneous - rocks, rubs or scratches body

DAY AND TIME		COUGH	YAWN	MOUTH	NOSE	EYE	PICK	HEAD	MAST	LIPS	SNEEZE	MISC	TOTAL
FIRST DAY	Early a.m.												
	Mid a.m.												
	Mid-Day												
	After Noon												
	Late After Noon												
	Evening	3		10					1	2		6	22
	Total	3		10					1	2		6	22
SECOND DAY	Early a.m.	7	5										12
	Mid a.m.	4	5	3	4	2	2	1	1	7		3	32
	Mid-Day	1		1	4			1	1	1		1	10
	After Noon	6	6	6	3	4	2	6	1	13	1	5	53
	Late After Noon	4	2	11	13	7	6	3	5	4		4	59
	Evening	2		1		1						1	5
	Total	24	18	22	24	14	10	11	8	25	1	14	171
THIRD DAY	Early a.m.	4	1		3	1	2	2	2		1		16
	Mid a.m.	28		4	9		1		1	1			44
	Mid-Day	55	6	4	4	1		1		7		4	82
	After Noon	11	2	2	2	5		3	2	1		6	34
	Late After Noon	14			2	1	1			1		3	22
	Evening	13							1			2	16
	TOTAL	125	9	10	20	8	4	6	6	10	1	15	214

Figure 6 - Time Periods During Which Nervous Habits Occurred

(Case of July)

Figure 7

ASKING FOR "NURSE" AND "MOTHER"

Nature of Asking Related to Time, Frequency, and Sequence* (Case of Timmy)

	Nature of Asking	Hours of Second Day						day Total	Hours of Third Day					day Total	TOTAL
		7-10	10-12	12-2	2-4	4-6	6-9		7-10	10-12	12-2	2-4	4-6		
MOTHER	Screaming			14			36	2						0	2
	Crying	5	9	13 10 18	20	23 32	38 40	10	3 7					2	12
	Calling	4		12 15				3	5		19			2	5
	Whining					25	37	2	2 4					2	4
	Mumbling					27		1	1	15			24	3	4
NURSE	Mumbling	2				26 29 31 34		5	6	11 14			23	4	9
	Whining		8			24		2						0	2
	Calling	1 3	6 7	11 17	19 21	28 30 35	39	12	10	12	16 18 17 20	21 22		8	20
	Crying			16		22 33		3	8 9	13			25 26	5	8
	Screaming							0						0	0

*(indicated by consecutive numbering)

Figure 8

TOTAL NUMBER OF CONTACTS

with persons in hospital environment related to content of activity & time

(Case of Timmy)

Key: N = nurse, A = aide, P = other patients, V = visitors, M = mother

Day	second							third						
Hour of Day	7-10	10-12	12-2	2-4	4-6	6-9	...	7-10	10-12	12-2	2-4	4-6	...	...
MEDICAL PROCEDURES														
nosedrops	N		N			2N	4N	N				N	2N	6N
saline	N		N			N	3N	N				N	2N	5N
medicine	2N		N		N		4N		N	N		N	2N	6N
temp & pulse	3N		N		N	N	6N	N		N		N	3N	9N
WARD ROUTINES														
eating	N	3A	A	N	A 2N	N 2M	6A 6N 2M	2A N	2A N	A		3A 3N	8A 5N	14 A 10 N 2 M
toileting	M		A			M	1A 1N 1M	A	A		2A		4A	6 A 1 N 1 M
washing	A					N M	1A 1N 1M	A						2 A 1 N 1 M
changing bed & clothes	3A		A			2N	4A N	2A				N	1N	6 A 2 N
SOCIAL ACTIVITIES														
move to center	N			A			1A 1N	A		N	A		2A 1N	3A 2 N
move to cubicle						M N	1M 1N		A		A	N	2A 1N	2 A 1 M 2 N
talking to Timmy	3A 3N	3A P 2N	4A 3N	5A 2P 5N	A 2N	4M 2N	16A 3P 4M 17N	6A 2P	A 3P 3N	3A 2N	3A P 8N	4A 6N	17A 6P 19N	33 A 9 P 4 M 36 N
playing with				A 2N	A 2P		2A 2P 2N	2A P	3P N	N	A		3A 3P 2N	5 A 5 P 4 N
providing toys			A 2N	A 2P			2A 2P 2N	5A	A N		3A N		9A 2N	11 A 2 P 4 N
holding Timmy	N		A N			2M	1N 2M 2N							1 A 2 M 2 N
comforting activities	A N	A N	3A 3N	N		8M N	5A 8M 7N	A 2N	2A	2A 3N	A		8A 5N	11A 8 M 12 N
TOTALS by TIME	8A 15N	7A 1P 3N	12A 13N	8A 4P 9N	3A 2p 6N	19N 12N	38A 19M 7P 58N	21A 2P 6N	8A 6P 6N	6A 9N	12A 1P 9N	7A 18N	54A 9P 45N	92 A 19 M 16 P 103N

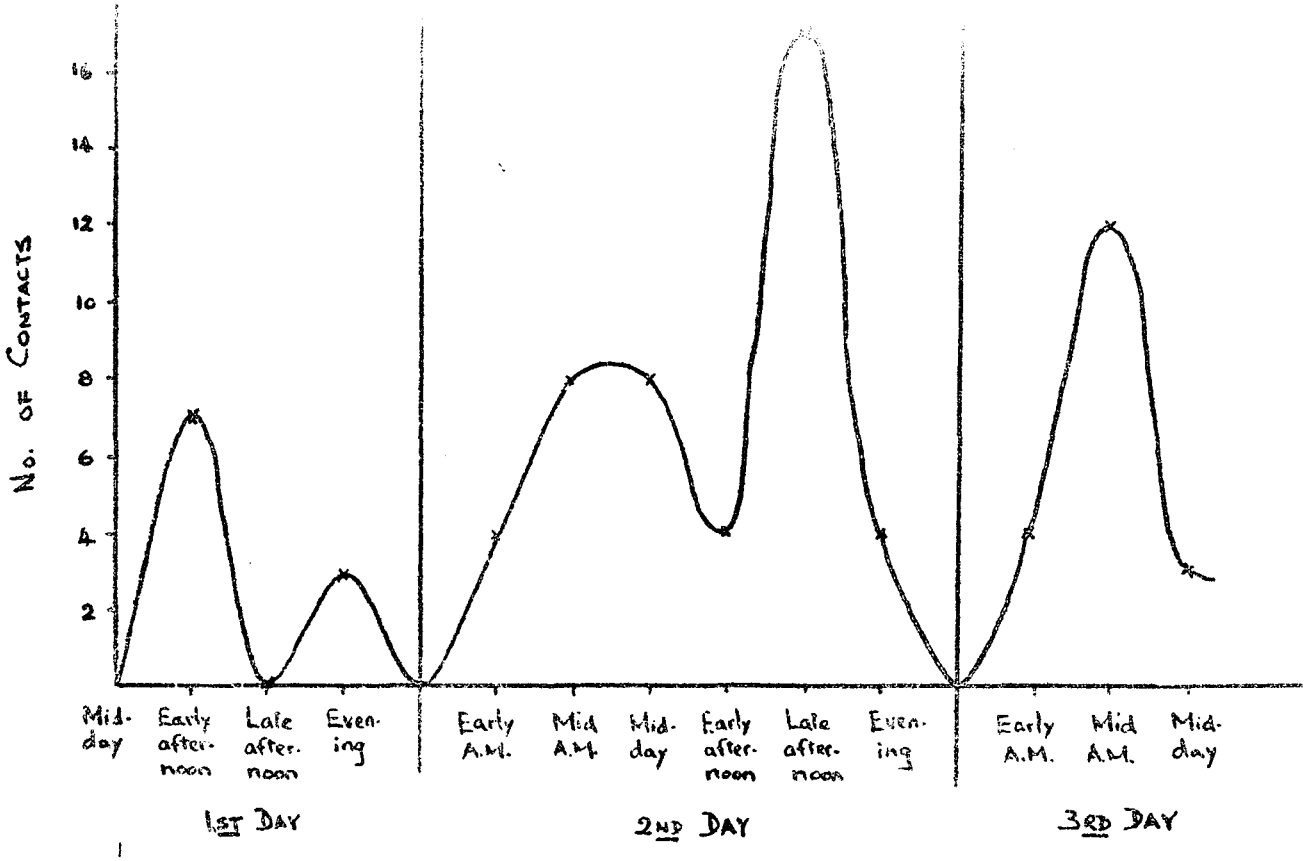


FIGURE 9 NUMBER AND TIME OF CONTACTS WITH OTHER PATIENTS (Case of Melvin)

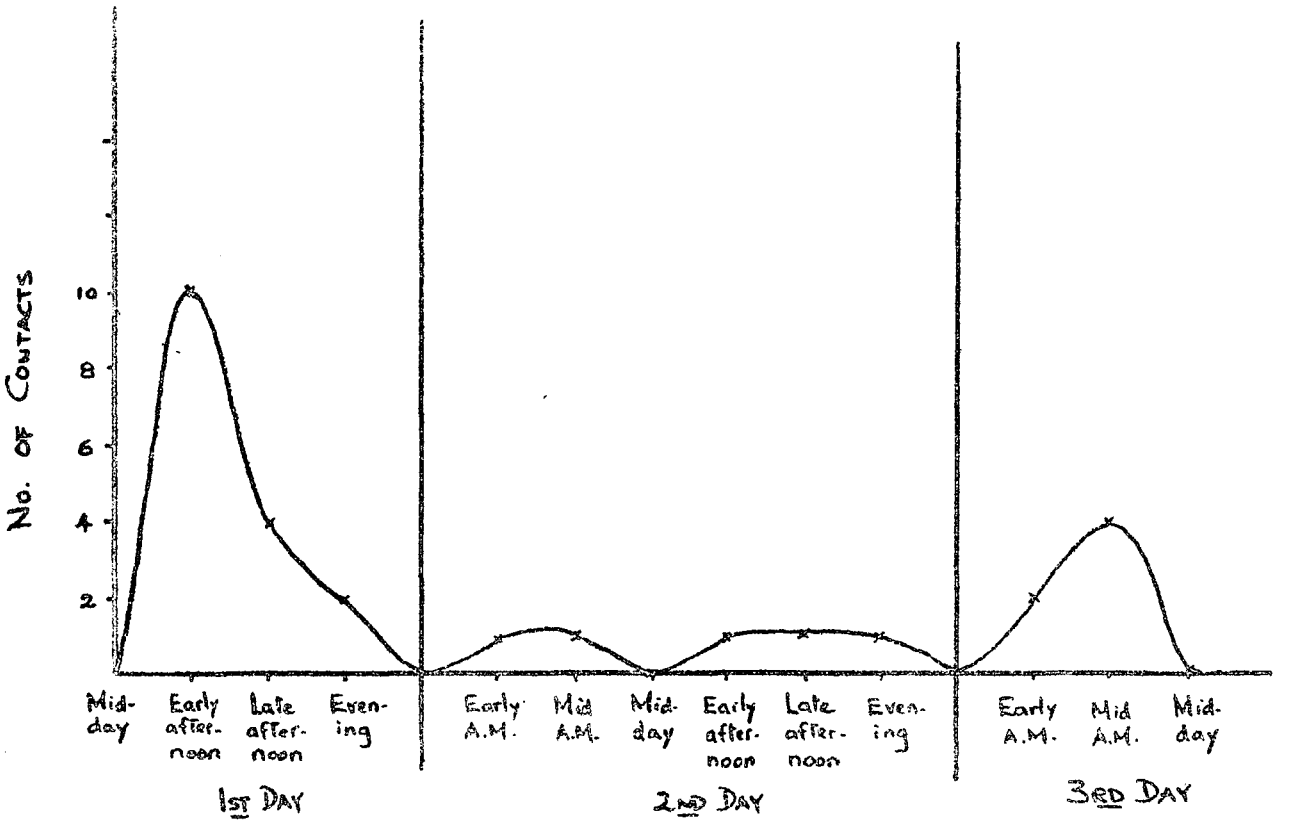


FIGURE 10 NUMBER AND TIME OF CONTACTS WITH THE DOCTOR. (Case of Melvin)

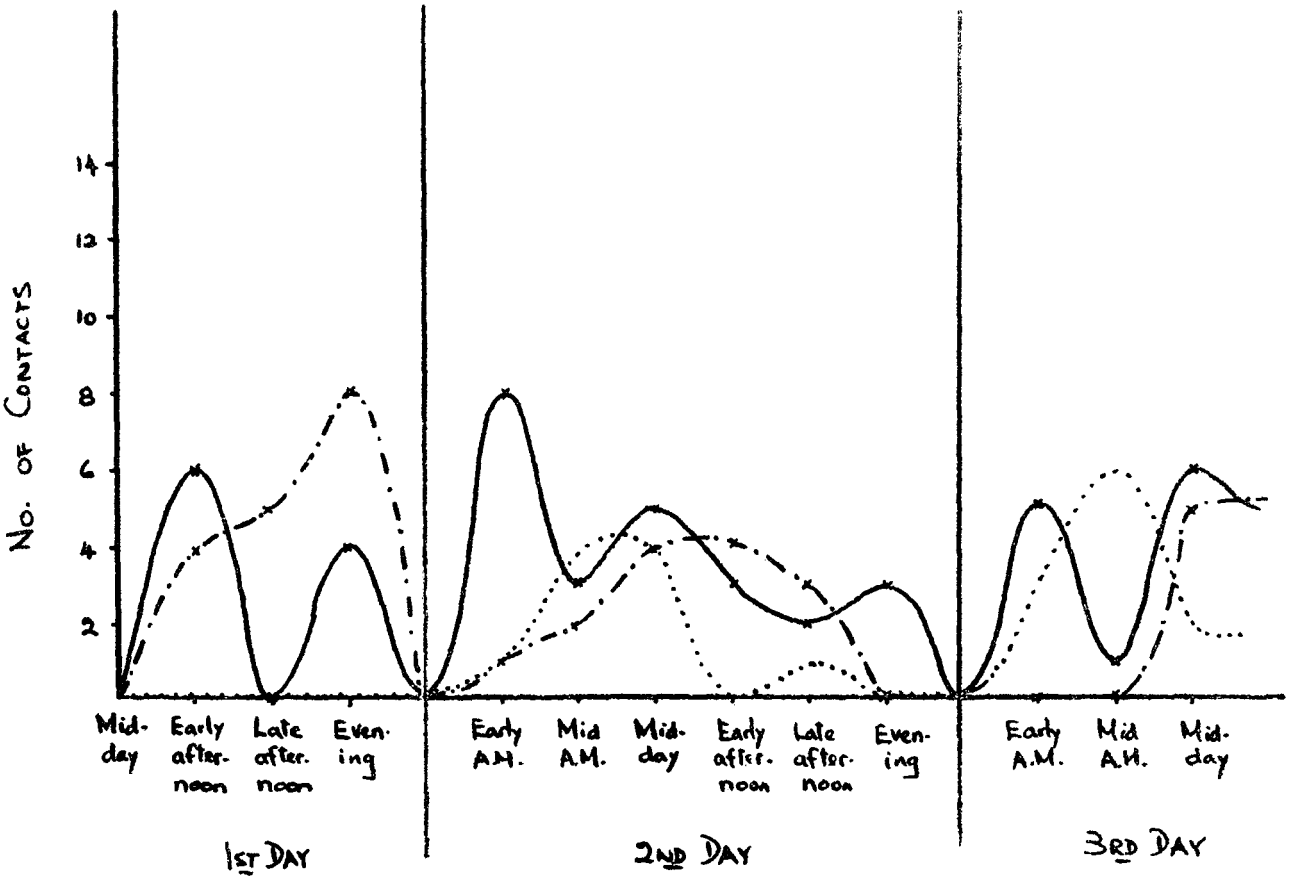


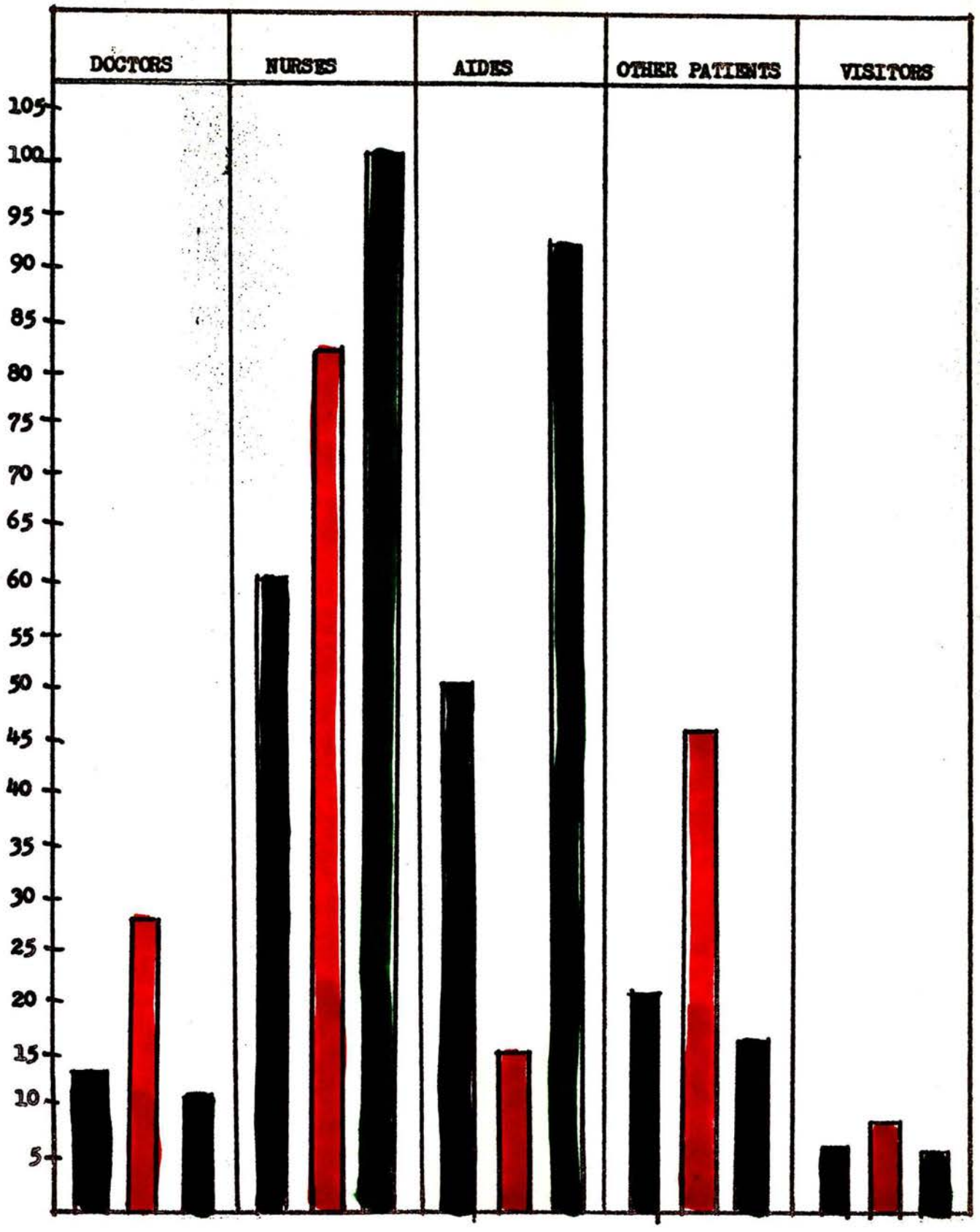
FIGURE 11 NUMBER AND TIME OF CONTACTS WITH THE NURSES, STUDENT NURSES, AND AIDES. (Case of Melvin)

——— Nurse

—·—· Student Nurse

····· Aide

Figure 12 - Number of Interpersonal Contacts of All Three Cases



Key:

Black - Judy
Red - Melvin
Green - Timmy

BIBLIOGRAPHY

Books

Barker, Roger T. Adjustment to Physical Handicap and Illness: A Survey of the Social Psychology of Physique and Disability. New York: Social Science Research Council, 1953.

Burling, Temple, Lentz, Edith M., and Wilson, Robert N. The Give and Take in Hospitals. New York: G.P. Putnam's Sons, 1956.

Erikson, Erik H. Childhood and Society. New York: W.W. Norton & Company, Inc., 1950.

Field, Minna. Patients Are People. New York: Columbia University Press, 1950

Robertson, James. Young Children in Hospitals. London: Tavistock Publications, Ltd., 1958.

Journal Articles

Albee, Constance I. "Group Work in a Children's Hospital," Children, vol. 2 (November-December, 1955), pp. 217-221.

Edelston, H. "Separation Anxiety in Young Children: A Study of Hospital Cases," Genetic Psychological Monographs, vol. 28 (August, 1943) pp. 1-95.

Godfrey, Anne E. "A Study of Nursing Care Designed to Assist Hospitalized Children and Their Parents in Their Separation, "Nursing Research, vol. 4 (October, 1955), pp. 52-70.

Gofman, Helen, Buckman, Wilman, and Schade, George H. "The Child's Emotional Response to Hospitalization," American Medical Association Journal of Diseases of Children, vol. 93 (February, 1957), pp. 157-163.

Hattwick, Berta W. "Mental Hygiene Considerations in the Care of Convalescent Children," Mental Hygiene, vol. 21 (April, 1937), pp. 263-270. Reviewed in Barker, Roger T., Adjustment to Physical Handicaps and Illness: A Survey of the Social Psychology of Physique and Disability, New York: Social Science Research Council, 1953.

Illingsworth, R.S., and Holt, K.S. "Children in Hospitals: Some Observations on Their Reactions with Special Reference to Daily Visiting," Lancet, vol. 2 (December 17, 1955), pp. 1257-1262.

Impallaria, C. "Group Work with Hospitalized Children," Children, vol. 2 (November-December, 1952), pp. 217-221.

Jackson, Edith B. "Treatment of the Young Child in the Hospital," American Journal of Orthopsychiatry, vol. 12 (January, 1942), pp. 56-67.

Jackson, Katherine, Winkley, Ruth, Faust, Otto R., and Cermak, Ethel G. "Problem of Emotional Trauma in Hospital Treatment of Children," Journal of American Medical Association, vol. 149 (August, 1952), pp. 1536-1538.

Kassowitz, Karl E. "Psychodynamic Reactions of Children to the Use of Hypodermic Needles," American Medical Association Journal of Diseases of Children, vol. 95 (January-June, 1958), pp. 253-258.

Langford, William. "The Child in the Pediatric Hospital: Adaptation to Illness and Hospitalization," American Journal of Orthopsychiatry, vol. 31 (October, 1961), pp. 667-682.

Prugh, Dane G., Staub, Elizabeth M., Sands, Harriet H., Kirschbaum, Ruth M., and Lenihan, Eleanor A. "A Study of the Emotional Reactions of Children and Families to Hospitalization and Illness," American Journal of Orthopsychiatry, vol. 23 (January, 1953), pp. 70-104.

Shaffer, H.R., and Callender, W.M. "Psychologic Effects of Hospitalization in Infancy," Pediatrics, vol. 24 (October, 1959), pp. 528-539.

Sutton, Helen A., Falstein, Eugene I., and Judes, Ilse. "Emotional Reactions to Medical Procedures and Illness in a Child Psychiatric Unit." American Journal of Orthopsychiatry, vol. 28 (January, 1958), pp. 180-187.

Rapoport, Lydia. "The Concept of Prevention in Social Work," Social Work, vol. 6 (January, 1961), pp. 3-12.

Wallace, Mildred, and Feinauer, Violet. "Understanding a Sick Child's Behavior," American Journal of Nursing, vol. 48 (August, 1948), pp. 517-522.

Weiner, Hyman. "Group Work in the Medical Setting," The Group, vol. 17 (April, 1955), pp. 3-6.

Woodruff, Robert. "Group Work in a Children's Hospital," Social Work, vol. 2 (July, 1957), pp. 56-61.

Articles in a Collection

Bergman, Paul, and Escalona, Sybille K. "Unusual Sensitivities in Very Young Children," Psychoanalytic Study of the Child, Vol. III-IV. New York: International Universities Press, 1949. Pp. 333-352.

Freud, Anna. "The Role of Bodily Illness in the Mental Life of Children," Psychoanalytic Study of the Child, Vol. III. New York: International Universities Press, 1952. Pp. 69-82.

Prugh, Dane G. "Investigations Dealing with the Reactions of Children and Families to Hospitalizations and Illness: Problems and Potentialities," in Emotional Problems of Early Childhood, Gerald Caplan (ed.). New York: Basic Books, Inc., 1956. Pp 307-321.

Reports, Pamphlets, and Public Documents

Faust, O.A. "Recurring Emotional Trauma in Hospitalized Children: A Study of Psychosomatic Pediatrics," Reducing Emotional Trauma in Hospitalized Children. Albany, New York: Department of Pediatrics and Anesthesiology, Albany Medical College, 1952.

Upham, Frances. "A Dynamic Approach to Illness, A Social Work Guide." New York: Family Service Association of America, 1949.

Unpublished Material

Chuan, Marion. "A Summary of Children's Group Work Project at Boston City Hospital." (Typewritten.) Summer, 1961.

Frey, Louise. "Social Group Work in the Medical Setting: Responsibilities and Methods." Paper presented at the National Conference on Social Welfare, San Francisco, 1959.

Goldman, Shelia, Montesi, Audrey, and Bailey, Judy. "Exploratory Study of Children's Reactions to Hospitalization and Illness". Three unpublished Master's theses, Boston University School of Social Work, 1962.

Mutter, Arthur. "Psychological and Emotional Effects of Hospitalization and Illness in Children." Lecture presented at weekly Pediatric-Psychiatric Conference, Boston City Hospital, March 20, 1963.