

1960

A rehabilitation study of seven patients with above knee amputation for cancer

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BOSTON UNIVERSITY
SCHOOL OF SOCIAL WORK

A REHABILITATION STUDY OF SEVEN PATIENTS WITH
ABOVE KNEE AMPUTATION FOR CANCER

A thesis

Submitted by

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(A.B., Brown University, 1952)

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TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION. .	
Purpose.	1
Method of Procedure.	2
Limitations of the Study	3
Rehabilitation of the Cancer-Amputee	4
II. THE MASSACHUSETTS MEMORIAL HOSPITALS	
Massachusetts Memorial Hospitals	9
Department of Rehabilitation and Physical Medicine	10
Industrial Rehabilitation Department	12
The Social Service Department	13
III. GENERAL PERSONAL AND SOCIAL CHARACTERISTICS	
Personal and Social Characteristics	15
Sources of Family Income	17
Type of Employment	20
IV. MEDICAL TREATMENT AND CLINIC EVALUATION	
Delay in Seeking Treatment	22
Patients' Awareness of the Diagnosis	24
History of Hospitalization and Medical Treatment.	24
Course of Rehabilitation	28
Results of Treatment	32
V. SOCIAL SERVICE CONTACTS	
Reason Referred	35
Frequency and Timing of Contacts	35
Social Work Activity and Results	36
VI. PATIENTS' ATTITUDES AND ACTIVITIES	
Reaction of Patient to Interviewer	40
Patients' Attitudes Towards Staff, Treatment and Prosthesis	41
Patients' Recommendations for Improving Total Treatment Program	43
Social and Religious Activities	45
Major Problems as Expressed by the Patients.	49
Attitude Toward the Future	52
Significant Emotional Features Observed	53
Family Cooperation as Expressed by the Patients	58

TABLE OF CONTENTS

(Continued)

CHAPTER	PAGE
VII. SUMMARY AND CONCLUSIONS	61
APPENDICES	
SCHEDULE A	70
SCHEDULE B	73
BIBLIOGRAPHY	77

LIST OF TABLES

TABLE	PAGE
1. Personal and Social Characteristics	15.
2. Sources of Family Income	18.
3. Type of Employment	20.
4. Delay in Seeking Treatment	23.
5. History of Hospitalization and Medical Treatment.	25.
6. Course of Rehabilitation	29.
7. Results of Treatment	33.
8. Patients' Attitude Toward Staff, Treatment and Prosthesis	42.
9. Social and Religious Activities	46.

CHAPTER I
INTRODUCTION

Purpose

A total of seven patients with an above knee amputation have participated in the clinic rehabilitation program offered by the Department of Rehabilitation and Physical Medicine at the Massachusetts Memorial Hospitals. This exploratory study was undertaken to learn about the characteristics and problems exhibited by this group in the course of their rehabilitation and how their illness and disability have affected their personal, family, social and economic adjustments. With a better understanding of this group and of the underlying factors involved, it is hoped that the clinic team will be able to more effectively meet the social, emotional, medical and rehabilitative needs of these patients and of other patients with a similar medical condition who may be referred to the clinic in the future.

It was hoped that this study might provide some answers to the following questions:

1. What is the emotional meaning of this illness and disability to the patient and to the family?
2. What adjustment problems have been precipitated by their illness and disability?
3. How have the patients handled these problems?
4. How and to what extent do the patients' problems and

attitudes affect the rehabilitative process?

5. What treatment goals have been attained by the patients?

It is planned that these seven patients will be seen on a regular basis of from three to six months by the clinic staff for on-going evaluation over a period of five years. A research study will then be conducted at the end of this five year period to analyze and evaluate the data.

Method of Procedure

The selection of the seven patients for this study was made on the basis of their diagnosis and disability: above knee amputations as a result of cancer. This group constituted the total population of patients with this diagnosis and disability referred to this clinic since its establishment in 1956. Three patients were hospitalized for amputation at the Massachusetts Memorial Hospitals, associated with the clinic, and their records were made easily accessible to the writer. Four of the seven patients were referred to this clinic from other hospitals and their hospital records were not available. Their pertinent hospital data were obtained from the medical summaries sent to the clinic from the referring hospital.

Medical and social service data and vital statistics were collected from the seven patients' hospital, clinic and social service records, and from telephone calls with the referring physicians. Evaluations of the patients' activities and attitudes while active in clinic treatment were obtained through

interviews with the clinic staff. Medical and social service information was obtained in some cases by contacting a social worker by phone. In order to obtain information not included in the hospital records and information regarding the patients' awareness of and reaction to their diagnosis, the writer contacted five of the seven referring physicians; two physicians had left the state. These data were recorded on Schedule A (see Appendix).

The writer conducted home visits with six of the seven patients. Because of the specific nature of the data desired, the home interviews with the patients were focused and semi-structured. Appointments for the home interviews were made by telephone and by letter. The writer experienced little difficulty in gaining the acceptance and cooperation of the patients in the home interview. The interview data were recorded in Schedule B (see Appendix).

Limitations of the Study

One patient was not interviewed for this study. This patient, Miss D, was hospitalized for surgery on her thigh stump on January 17, 1960. It was felt by the writer and the clinic director that a personal interview was contra-indicated since it might have increased her anxiety over her condition and negatively affected the course of her post-operative adjustment. Since the writer had had social service contact for a two month period with this patient during the period of

her treatment program, it was felt that for purposes of this study, a home interview was not essential.

The patients were seen by the writer only once. This meant that because of the complexity of factors involved and the patients' resistance to discussing in the interview those areas felt to be most threatening to them, much relevant material could not be obtained and studied. Because of the incompleteness of the hospital records, information regarding the patients' hospital adjustments and reactions was not always available. In an exploratory study such as this, the size of the group was small and data were inadequate for a complete analysis of the factors influencing the course of the patients' rehabilitation. It is hoped, however, that the findings of this study will contribute towards a better understanding of the rehabilitation problems faced by the cancer-amputee patient.

Rehabilitation of the Cancer-Amputee

The full restoration of the cancer-amputee patient requires a treatment plan where the physician, nurses, physical therapists, social workers, and all ancillary workers integrate their services in a combined, unified effort towards helping the patient attain the optimum level of functioning of which he is capable. In working with a patient with this diagnosis, it is important for the worker to familiarize himself with the nature of cancer and amputation, the possibilities for treatment, and the evidences of curability of cancer.

Because of the misconceptions and distortions about cancer which prevail in the community, despite educational attempts to clarify the situation, the worker should examine his personal fears, biases, lack of information and values in order to see the cancer-amputee patient "not as a pitiable victim of a hopeless situation but rather as an individual who is faced by a life situation threatening his security, happiness and comfort."¹ The diagnosis of cancer does not always imply imminent death or incapacity in the near future. Years of useful productivity are available in many cases and should be planned for.

It cannot be minimized that the double medical problem faced by the patient, cancer and amputation, is a serious one. The medical and rehabilitative prognosis, however, is by no means poor for all cancer-amputee patients. The rehabilitation of such patients therefore demands an understanding and consideration of both areas in order to work for and with the patient towards attaining the maximum rehabilitation goals.

Sutherland, et al., say that "Management must begin in the pre-operative period. Psychological preparation should be as much a part of the preparation for surgery as the optimum physical status."² Psychological treatment should continue

¹Eleanor Cockerill, "The Social Worker Looks at Cancer," p.193.

²Arthur M. Sutherland, Charles E. Orbach, Ruth B. Dyk, Morton Bard, "The Psychological Impact of Cancer and Cancer Surgery," Cancer, vol. 5 (September, 1952), p. 871.

to be an ongoing part of the total treatment program. The diagnosis of cancer, coupled with the necessary surgery, may activate pre-conceived fallacious ideas about the condition, and because of emotional, strain and bodily changes and limitations, create pressures and changes that impose considerable hardships on both patient and family. Unless psychological treatment is initiated early and is maintained throughout the total treatment program, these fears and anxieties, distortions and misconceptions, and the patient's defenses against these threats, may tend to become increasingly reinforced and imbedded. Later attempts to initiate psychological treatment will therefore tend to require greater therapeutic effort and be faced with stronger resistance in the patient to change, then if initiated at the beginning phases of the total treatment program.

It is important to evaluate carefully how well the patient has accepted his status as a cancer-amputee.

The specific personal meaning of his condition is often incorrectly though never consciously, derived from some other similarly affected person that the patient knows. His identification with and feelings towards this person can cause the patient much anxiety, especially if the patient has held hostile feelings towards this person.³

He may devalue himself because of his own previous attitudes toward the disabled. The amputee feels not only a physical but

³Leopold Bellak and Florence Haselkorn, "Psychological Aspects of Cardiac Illness and Rehabilitation," Social Casework, vol. 37 (December, 1956), p.484.

a psychological loss, and the meaning of this loss determines how well the patient adjusts to his new situation. Bellak stresses the almost universal reaction of loss of self esteem following the amputation of limbs,⁴ and says that "Pride is an important factor in the independence and productivity that motivates work."⁵ It has been remarked by several authors⁶ that the reactions of women to amputation are more severe than men. The loss of a limb is seen not only as a threat to their feminine attractiveness, but "may tend to confirm her deeper inner feelings of being defective."⁷ For women and particularly for men, amputation may be seen as a masturbatory punishment, regardless of the site of the amputation.

The effect of the psyche on the soma is still in many instances an unknown quantity. Abrams and Finesinger felt that the course of cancer cannot be altered by the understanding of the personality and its adjustment.⁸ Blunberg, et al, state, however, that "long standing, intense emotional stress may exert a profoundly stimulating effect on the growth rate of an established cancer in man."⁹ These authors felt that in the patient

⁴Leopold Bellak, Psychology of Physical Illness, p. 66.

⁵Ibid.

⁶Leopold Bellak, Psychology of Physical Illness, p.66; Joseph J. Michaels, "Psychiatric Implications of Surgery," Journal of Social Casework, vol. 10 (February, 1943), p. 368; Paul Schilder, Psychotherapy, p. 36.

⁷Joseph J. Michaels, "Psychiatric Implications of Surgery," Journal of Social Casework, vol. 10 (February, 1943), p.368.

⁸Ibid.

⁹Ruth D. Abrams and Jacob E. Finesinger, "Guilt Reactions in Patients with Cancer," Cancer, vol.6 (May, 1953), 6:474-482.

with rapid growth of his neoplasm:

They were noted to be consistently serious, over-cooperative, over-nice, over-anxious, painfully sensitive, passive, apologetic personalities, and, as far as could be ascertained from family, friends, and previous records, they had suffered from this pitiful lack of self-expression and self-realization all their lives. Those patients who seemed to possess exceptional resistance to growth of their neoplasms were successful in either avoiding or reducing excessive emotional stress.¹⁰

Since it appears that there is a need for the cancer-amputee patient to express and work out his feelings, a need for him to return to community and employment activities as soon as possible, a rehabilitation worker may be tempted to stress "activity" and "enthusiasm" beyond the limits of the patient. Bellak, however, offers a note of caution. "All severe, incapacitating illnesses increase the need to be loved and cared for. Enforced activity, in turn, adds to the wish to return to the dependent state."¹¹ This points out the need for the rehabilitation worker to proceed only at the speed of which the patient is capable and ready. When the cancer-amputee is able to realize that he has many abilities left, and that the emphasis is on ability rather than disability and unfortunateness, he may see himself as equal to, or even better than, many other persons. He may discover that he has abilities and strengths he had not previously considered.

¹⁰Eugene M. Blunberg, Philip M. West, and Frank W. Ellis, "A Possible Relationship Between Psychological Factors and Human Cancer," Psychosomatic Medicine, vol. 16 (July-August, 1954), p. 285.

¹¹Leopold Bellak, Psychology of Physical Illness, p. 4.

CHAPTER II

THE MASSACHUSETTS MEMORIAL HOSPITALS

Massachusetts Memorial Hospitals¹²

The Massachusetts Memorial Hospitals, incorporated in 1855, consist of four memorial units; for research, the Evans Memorial; for out-patient care, the Talbot Memorial; for ward and private bed care, the Robinson and Collamore Memorials. A fifth unit, the Haynes Memorial for contagious diseases was recently closed because of the decreasing need for this service. The hospital is a voluntary, non-profit institution supported by income from patients, endowments, contributions from friends and the United Fund and grants from industrial and governmental agencies. Briefly, the purposes of the Massachusetts Memorial Hospitals are: (1) to give care to the sick, (2) to add to the body of scientific knowledge of health and disease through research, (3) to provide opportunity for teaching.

Hospital and medical care is available for acute medical, surgical and obstetrical conditions. Thirty-three Out-patient Clinics are held regularly, and in cooperation with the Boston

¹²This information was obtained from a pamphlet published by the Massachusetts Memorial Hospitals, The Story of the Massachusetts Memorial Hospitals, and from a personal interview with Miss Deborah Barus, Chief Social Worker of the Hospital's Social Service Department.

University School of Medicine, with whom the hospital has affiliation, a Home Medicine Service provides medical care in the home to the indigent sick in a large area of Boston's South End. Although the great majority of patients pay established charges, care is rendered regardless of financial status. More than one hundred doctors, technicians and assisting personnel devote all or a major portion of their time to research investigation being carried on in such fields as cardiovascular disease, cancer, hematology, infectious diseases, etc. Educational programs to meet the ever growing demands for qualified members of the health professions are provided by the hospital. Effective preparation for careers in medicine and allied fields combines study in the classroom and the laboratory as well as observation and supervised experience. The hospital provides for the education of physicians, conducts a school of nursing, offers courses for medical and x-ray technologists as well as field work affiliations for social workers, dietitians, hospital administrators, ministers, vocational counselors and physical and occupational therapists.

Department of Rehabilitation and Physical Medicine

In 1955, funds were made available to the hospital by grants from Boston University and the Office of Vocational Rehabilitation to establish a Department of Rehabilitation and Physical Medicine designed to provide out-patient medical and paramedical care for patients, to stimulate research in the

field of rehabilitation and physical medicine, and to provide training for the clinic personnel in a multi-discipline team setting. At the opening of the clinic on July 1, 1956, the clinic staff was comprised of the medical director, two physical therapists and a consultant medical social worker. In the fall of 1956, an occupational therapist was added to the staff. At the present time, the clinic personnel consist of the medical director, two occupational therapists, four physical therapists, one social worker, two student social workers, one consultant for speech and hearing, one vocational counselor, one coordinator-secretary and one receptionist-secretary. Using a team approach, with weekly team conferences, the clinic personnel apply their individual skills and techniques towards "restoring the patient to the fullest physical, mental, social, vocational, and economic usefulness of which he is capable."¹³

Services that can be extended to a patient referred to the clinic are the medical services of the medical director, social work service, physical-therapy and gait-training, occupational therapy, and vocational counseling and guidance. The clinic's services and personnel are also utilized by the hospital's Industrial Rehabilitation Department. Close cooperation is maintained with other community medical, social services, and rehabilitation agencies.

¹³Francis A. Harding, "Vocational Rehabilitation, Introduction," Commonwealth, vol. 7 (March-April, 1959), p. 3.

Future plans include adding a speech and hearing specialist to the clinic team, and combining the out-patient services of the clinic with the in-patient services of the Industrial Rehabilitation Department, housing the two units in one building. It is felt that the unification of services will eliminate duplication and overlapping and result in better service and facilities for rehabilitation of handicapped patients.

Industrial Rehabilitation Department

The Industrial Rehabilitation Department was founded in 1955 as a centralized in-patient unit for the concentration of services needed by patients with complex long-term disabilities and severely limiting physical handicaps to return them to maximal independence and self care and, wherever possible, to work ability.

Patients may be referred to the Department by any responsible physician, hospital, clinic, agency, Industrial Accident Board or insurance company for treatment, evaluation or consultation.

The Department includes private rooms and a ward, as well as facilities for therapy, exercise and recreation, all designed for the needs of severely disabled patients.¹⁴

Services available to the patients include neurosurgery, internal medicine, orthopedic surgery, urology, plastic surgery, psychiatry and physical medicine. Also available is physical therapy and ambulation, nursing care, occupational therapy, dietetics, and chaplain, counseling, and social services.

¹⁴Massachusetts Memorial Hospitals, A New Dimension for Total Care, p. 1.

The Social Service Department

The Social Service Department was instituted in June, 1909, following the development of the Outpatient Department. A graduate of the School of Nursing, who was interested in social work and had taken courses in the field, functioned in the capacity as caseworker. In 1914 a trained social worker was obtained, and in 1919 a director of the Social Service Department was appointed. By 1928 the staff included a case supervisor, research worker, five case workers, and the executive. The department has continued to expand to meet the medical and social needs of its patients.

This year there were ten workers in the Out-patient Department including the Director of Social Service, and one worker in the main hospital. Five of the case workers in the Out-patient Department also function as supervisors for seven graduate students and one undergraduate student, from three different schools of social work assigned for their field training.

The medical social workers and student social workers offer services both within and outside the hospital in the form of casework services, direct services, or cooperation with other public and private agencies. Close collaboration is maintained with the doctors and patients, interpreting the social situation of the patient to the doctor, and the doctor's diagnosis and recommendations for treatment to the patient. Close contact is maintained with the patient when he attends

clinic, when he is an in-patient in the hospital, or by visits to his home when that is indicated. The services of the case-workers are also made available to members of the patient's family when indicated.

CHAPTER III

GENERAL PERSONAL AND SOCIAL CHARACTERISTICS

Personal and Social Characteristics

In order to give the reader a picture of the background of the patients in the study group, the writer will present some of the general personal and social characteristics of the seven patients under study.

TABLE I

PERSONAL AND SOCIAL CHARACTERISTICS

Pt.	Sex	Age	Marital Status	Economic Status	No. of Dependent Children	Religion	School Grade Completed
A	Fem.	62	Common-law marriage	Dependent on spouse	0	Catholic	4th
B	Fem.	27	Married	Dependent on spouse	1	Jewish	16th
C	Fem.	46	Married	Dependent on spouse	1	Catholic	8th
D	Fem.	30	Single	Independent of parents	0	Catholic	12th
E	Male	17	Single	Dependent on parents	0	Protestant	10th
F	Male	56	Married	Supported spouse and family	1	Catholic	8th
G	Male	42	Married	Supported spouse and family	3	Protestant	8th

Age and Sex

In the group of patients studied, there were three males and four females. The ages ranged from seventeen to sixty-two years and were quite evenly distributed.

Marital and Economic Status

The table shows that two patients were single, four were married, and one lived in common-law marriage. The latter patient was formerly divorced. Both single patients were living in their parents' homes.

Two married patients were dependent on their husbands. Two married patients had wives and children who were dependent on them. One single patient was dependent upon his parents; the other single patient was financially independent of her parents.

The economic status of the patients were as indicated in the table both before hospitalization and at the time of the study. Mrs. B terminated her employment a few months prior to her hospital admission. She was admitted to the hospital for the delivery of her child (at which time the diagnosis of cancer was made) with plans to return to her home as a housewife and not return to work in active employment. She has therefore been included in the table as being dependent on her spouse.

Number of Dependent Children

Three patients had one dependent child and another had

three dependent children. Mrs. A had two grown children whose whereabouts were unknown. Mr. F had two married daughters who were living outside the home.

Religious Affiliation

Four patients were Catholic; two were Protestant; one was Jewish. All the spouses of the married patients were of the same religious faith.

School Grade Completed

The educational level ranged from the fourth grade to completion of grade sixteen. Three patients had completed eighth grade; one patient had graduated from high school; and one was still in school and planned to complete high school and enter college.

Sources of Family Income

Table 2 describes the sources of each patient's family income prior to hospitalization, during the patient's hospitalization and convalescence, and at the time of the study.

TABLE 2
SOURCES OF FAMILY INCOME

Pt.	Prior to Hospitalization	In Hospital and Convalescence	At Time of Study
Mrs. A	Salary of spouse	Salary of spouse and Department of Public Welfare	Salary of spouse and Department of Public Welfare
Mrs. B	Salary of spouse	Salary of spouse	Salary of spouse
Mrs. C	Salary of spouse	Salary of spouse	Salary of spouse
Miss D	Pt.'s, sister's and father's salary	Sister's and father's salary, pt.'s sick benefits and Dept. of Public Welfare	Pt.'s salary and father's pension
Mr. E	Department of Public Welfare	Department of Public Welfare	Department of Public Welfare
Mr. F	Salary of pt.	Department of Public Welfare	Salary of pt.
Mr. G	Salary of pt.	Workman's Compensation	Salary of pt.

It is seen that the spouse was the sole source of income prior to hospitalization for patients A, B and C. This situation was unchanged for patients B and C during their hospitalization and convalescence and at the time of the study. The salary of Mrs. A's spouse was supplemented by Department of Public Welfare funds during her hospitalization and convalescence and at the time of the study.

Miss D, who was working prior to her hospitalization, paid room and board to her family, as did her sister who was also working, thus supplementing their father's salary. During her hospitalization and convalescence she received sick benefits and financial assistance from the Department of Public Welfare. At the time of the study, she was again paying room and board, her sister was unemployed and her father had been forced to retire from active employment because of illness and was receiving a pension.

Mr. E continued to be dependent upon Department of Public Welfare funds throughout the course of his medical condition. The salaries of patients F and G were the only source of family income prior to hospitalization and at the time of the study. During hospitalization and convalescence, Mr.F received financial help from the Department of Public Welfare and Mr.G received Workman's Compensation benefits.

The only major changes in family income prior to the patients' hospitalization and at the time of the study occurred in the families of patients A and D. The family income of patients A, D, E and F was insufficient to meet the financial needs during hospitalization and convalescence, and financial assistance had to be obtained from the Department of Public Welfare. Mr.G, who received Workman's Compensation benefits and was financially independent, did not find this necessary.

Type of Employment

Table 3 indicates the type of employment of each patient prior to hospital admission and at the time of this study.

TABLE 3
TYPE OF EMPLOYMENT

Patient	Prior to Hospital Admission	At Time of Study
Mrs. A	Housewife	Housewife
Mrs. B	Housewife	Housewife
Mrs. C	Housewife	Housewife
Miss D	Office-clerical work	Office-clerical work
Mr. E	Student (unemployed)	Student (unemployed)
Mr. F	Traveling kitchen appliance repairman	Benchwork repairing phonograph record machines
Mr. G	Self-employed building contractor	Self-employed building contractor

Table 3 shows that four patients were not employed, three housewives and one student. Except for Mr. F, no changes in employment took place.

Three patients were employed. Two were working at sedentary jobs, clerical and bench work. The other patient's job demands as a building contractor called for rather strenuous activity. Of the three employed patients, Miss D and Mr. G

returned to their former occupations, Mr. F returned to work for his former employer and hoped to regain his former position as traveling kitchen appliance repairman in the near future. One patient, Mr.G, was self-employed, the other two patients, Miss D and Mr.F, had had jobs held open for them by their employers for their eventual return.

CHAPTER IV

MEDICAL TREATMENT AND CLINIC EVALUATION

Attention in this chapter will be focused on the medical treatment and clinic evaluation of the individual patients as reported in their medical records and evaluations by the clinic staff.

Some factors were common to all seven patients. All of the amputations were performed within the last three years. All of the amputations were performed within thirty days after the diagnosis of malignancy was made by the attending physician. No metastasis was evident in any of the patients at time of discharge. None of the patients refused to give permission for the surgeon to operate after the recommendation was made. All the patients lived within fifteen miles of the clinic and no acute transportation problems existed which delayed or negatively affected treatment progress. All the patients attended and were punctual for all scheduled clinic appointments. Some resistance was shown, however, by some of the patients in regard to making follow-up clinic appointments. This area will be discussed later in this chapter.

Delay in Seeking Treatment

Table 4 shows the amount of time, as reported to the attending physician, each patient delayed seeking treatment after symptoms were noticed by the patient.

TABLE 4
 DELAY IN SEEKING TREATMENT

Patient	Delay
Mrs. A	1½ years
Mrs. B	no delay
Mrs. C	1½ years
Miss D	unknown
Mr. E	no delay
Mr. F	3 months
Mr. G	3 months

The medical records reported that patients A and C suffered symptoms of pain for one and one-half years before seeking medical assistance, patients F and G waited three months. There was no delay in the case of patients B and E. The time lapse for Miss D was unknown.

It was reported in the medical records that patients C, E, F and G attributed the pain they were experiencing to an accidental fall or injury. When the pain became severe they made contact with a physician. In the case of Mrs. B, cancer was detected while she was hospitalized for the delivery of her baby. Information regarding the reasons for delay for patients A and D was not available.

Patients' Awareness of the Diagnosis

The writer contacted five of the attending physicians for the seven patients of the study group. He was told by the physicians that patients C, D, F and G had been informed of the diagnosis of cancer. Mrs. B had been told that her condition was due to a "simple tumor". Her depression and her statements describing her hopelessness (i.e., "Why bother with all this; I won't be around long anyway") brought out to the clinic staff and to the writer, however, that she was aware of the factor of malignancy related to her condition. Mr. E was never directly informed of his diagnosis. During the course of his medical treatment with x-ray and chemotherapy, his mother gave such explanations to him as, "The x-rays are supposed to kill it (the tumor)". It was therefore inferred by the writer that this patient was aware of his diagnosis.

History of Hospitalization and Medical Treatment

The data for the following table were taken from the patients' hospital and clinic records.

TABLE 5

HISTORY OF HOSPITALIZATION AND MEDICAL TREATMENT

Pt.	No. of mos. operation performed prior to 12/31/59	No. of mos. hospitalized	Ambulatory with crutches at time of discharge	No. of mos. from discharge to date prosthesis received	Re-hospitalizations prior to 12/31/59	No. of weeks between date prosthesis received and gait training initiated	Duration of gait training program	No. of gait training sessions
Mrs. A	25	3 $\frac{1}{2}$	no	*2	Radical groin dissection	8	6 weeks	15
Mrs. B	11	1 $\frac{1}{2}$	yes	7	none	1	3 weeks	23
Mrs. C	10	$\frac{1}{2}$	yes	4	none	1	6 weeks	21
Miss D	16	1	yes	8	**none	1	7 weeks	19

TABLE 5
(Continued)

Mr. E	36	$3\frac{1}{2}$	yes	4	Minor biopsy, X-ray and chemotherapy	4	6 weeks	10
Mr. F		$\frac{1}{2}$	yes	$2\frac{1}{2}$	none	$\frac{1}{2}$	4 weeks	13
Mr. G		$1\frac{1}{2}$	yes	2	*** hip disarticulation	$\frac{1}{2}$	3 weeks	23

*Mrs. A first received a preparatory prosthesis with which she was given gait-training treatment. Ten months later she received a permanent prosthesis. One month later gait-training for this permanent prosthesis was initiated for a period of eleven days with five sessions. Treatment was interrupted by re-hospitalization, after which Mrs. A did not return.

**Miss D was re-hospitalized 1/17/60 for amputation of a portion of her thigh stump.

***Mr. G's medical and clinic data relates only to his first amputation. He did not return to the clinic for additional gait-training exercises after hospital discharge for his second amputation.

The number of months hospitalized ranged from one-half month in patients C and F to three and one-half months in patients A and D. All were ambulatory at time of discharge except Mrs. A, who was referred to the Industrial Rehabilitation Department for in-patient, intensive crutch training over a period of nineteen days. The number of months between hospital discharge and the date the prosthesis was received ranged from two months to eight months. Patients A, E and G were re-hospitalized prior to the date of this study, 12/31/59. Mrs. A underwent a radical groin dissection; Mr. E was briefly hospitalized on a few occasions for a biopsy and for x-ray treatment and chemotherapy. Mr. G, who was not using his prosthetic device, stated that he was dissatisfied with the fitting of his new prosthesis and would not wear it because of the discomfort and pain involved. It was felt by the medical staff that there were no medical reasons why these procedures should affect the patients' utilization of their prosthetic devices.

The number of weeks between the date the prosthesis was received and the date prosthetic gait-training was initiated ranged from one-half week for patients F and G to eight weeks for Mrs. A. The time spent by the patients in their gait-training program ranged from three to seven weeks. The number of gait-training sessions ranged from ten to twenty three.

Course of Rehabilitation

The data for the following table were obtained by the writer from personal contacts with the director of the clinic and the physical therapists who worked with the patients in the gait-training program. The grading scale, constructed by the writer is: Unsat. (Unsatisfactory), Poor, Fair, Good, Exc. (Excellent). Ratings and evaluations were made by the physical therapists and the medical director.

The treatment goals for all seven patients in the study group were similar in most respects in regard to helping each patient become independent in his or her daily living activities, i.e., ambulatory and independent in self care and travel.

TABLE 6
COURSE OF REHABILITATION

Pt.	Treatment goals	How Patient related to staff	Motivation for treatment	Resistance to treatment program	Major Problems	Treatment progress	Evaluation of goals reached at end of treatment	Prognostic outlook
Mrs.A	Return to house-work	Inconsistently friendly, hostile, complaining	Unsat.	Complained of pain, exaggerated difficulties, did not complete treatment	Intellectual limitations, prevented seeing value of treatment; overly dependent; financial problems	Unsat. to poor	Unsat. to poor	Unsat.
Mrs.B	Return to house-work	Defensive, distant	Unsat.	Accepted staff and treatment grudgingly; did not see value of treatment	Fear of extension of cancer; feelings of hopelessness; aesthetic appearance	Unsat.	Unsat.	Poor

TABLE 6
COURSE OF REHABILITATION
(Continued)

Mrs. C	Return to house-work	Friendly and cooperative at first; later indifferent to M.D.	At first good; at close unsat.	Resisted clinics attempts to get her to return for check-ups	Marital problems suspected; fear of extension of cancer	Good at first; Poor at close	Poor to fair	Poor
Miss D	Return to work	Friendly, cooperative to females; guarded, defensive to males	Exc.	None	Lack of normal social contacts, family illnesses and financial problems; fear of extension of cancer; aesthetic appearance	Good	Good	Good to Exc.
Mr. E	Return to school	Friendly, Cooperative	Exc.	None	Anticipate future psychosocial problems	Exc.	Exc.	Exc.

TABLE 6

(Continued)

Mr. F	Return to work	Friendly, Coopera- tive	Exc.	None	Adjustment to job change (minor problem)	Exc.	Exc.	Exc.
Mr. G	Return to work	Friendly, Coopera- tive	Exc.	None	None apparent	Exc.	Exc.	Exc.

Table 6 indicates that the male patients E, F and G were consistently rated and evaluated at a more satisfactory level than patients A, B, C and D. Employed and student patients D, E, F and G were consistently rated at a more satisfactory level than the housewife patients A, B, and C.

It has been said that, "The ability to relate to people is an excellent index for prognosis in rehabilitation".¹⁵ This statement seems to be born out in the case of this study group. Table 6 shows that the prognostic outlook for patients A, B and C, who were reported to have related rather negatively, was rated as unsatisfactory to poor. The prognostic outlook for patients D, E, F and G, who related rather positively, was rated as good to excellent.

It was felt that patients A, B, C and D were facing major problems, as indicated in Table 6, that affected their rehabilitative progress. No major problems were reported to be present for patients F and G. It was felt by the staff that Mr. E faced no major problems at the present, but that future psychosocial problems could be anticipated in such areas as his peer and heterosexual relationships and social activities.

One major difficulty suggested by the medical director and the two physical therapists to be common to patients A, B and C in their effectively utilizing their prosthesis

¹⁵Leopold Bellak, Psychology of Physical Illness, p.4.

concerned the housekeeping and child care demands placed on them. It was felt that since these patients might feel they could do their housework and meet their children's needs with greater speed and more efficiency without the use of the prosthesis, without laboriously practicing for skill and speed with the use of the prosthesis, they would tend to discontinue using the prosthesis.

It was observed that the female patients B, C and D had expressed anxiety over possible extension of cancer. Male patients E, F and G did not express such feelings. The reader could speculate over whether this was due to the females greater anxiety or due to the males inability or difficulty in verbalizing such feelings.

Results of Treatment

The data for the following table were given by the patients during the home interview.

TABLE 7
RESULTS OF TREATMENT

Patient	Amount of Time Prosthesis Used Daily	Activities in which Prosthesis Used
Mrs. A	Little or no time	Practice - if at all
Mrs. B	1-2 hours	Practice
Mrs. C	2 hours	Practice
Miss D	8-10 hours	Work
Mr. E	8-10 hours	School and social activities
Mr. F	12-14 hours	Work and all activities
Mr. G *	None	None

*Mr. G underwent a hip disarticulation, 2/19/59 and had not used his prosthesis since discharge from that hospitalization. Prior to this second amputation, however, he had been wearing his prosthesis eight to ten hours a day for work and all daily activities.

Home visits made with the patients brought out that while patients E, F and G had returned to work and school and were using their prosthesis eight to ten hours a day in daily living, patients B and C used their prosthesis for a few hours during the day for practice only, and Mrs. A made no use of her prosthesis at any time. It was learned that prior

to her recent operation, Miss D had returned to work and presumably used her prosthesis eight to ten hours a day. Thus the prognostic outlook of Table 6 was substantiated.

It is interesting to note that the patients who were given satisfactory evaluations in Table 6, patients D, E, F and G (prior to his second amputation), used their prosthetic devices for a significantly longer period of time daily and for more activities than did patients A, B, and C.

CHAPTER V

SOCIAL SERVICE CONTACTS

Three patients, patients B, C and D, had social service contact with the social workers of the Department of Rehabilitation and Physical Medicine. Mrs. A had been active with her referring hospital's social worker and had also been seen by a social worker from the Out-Patient Department of this hospital for the purpose of psycho-social evaluation. Social service contacts were also made with the spouse of Mrs. A and the mother of Miss D. All of the four patients seen by social service were female; male patients E, F and G were not referred or contacted.

Reason Referred

All four patients were referred for help with transportation and for psycho-social evaluation. Mrs. A was referred also because of her inability to meet the treatment and prosthesis expenses. It was also felt that she needed ongoing interpretation of her treatment program. Mrs. C was also referred for help with her treatment and prosthesis expenses, Miss D for her treatment expenses and because of the financial hardships placed on her due to her loss of wages from employment.

Frequency and Timing of Contacts

Patients B, C and D were seen shortly after admission to the clinic. Mrs. B was seen once. Miss D was seen by the writer on a weekly basis for a period of about two months.

Mrs. C was seen twice. Contact in the form of written correspondence was maintained after this patient had completed her gait-training in helping her return for check-ups.

Mrs. A was seen by an Out-Patient Department social worker at the time when referral to this clinic was being considered, and it was felt she required assistance with the necessary referral arrangements. She had been previously active with the social service department of her referring hospital. They made contact with her when there were any changes in her treatment program and during any emergencies she faced in her daily living. She was also seen by them when she returned to her hospital for clinic visits every three to six months. At point of referral to this clinic she was seen by a social worker from the Out-Patient Department for purposes of evaluation. The social worker of this clinic worked in a "liaison" capacity between the patient's referring hospital, where she was still active, and this clinic to interpret and communicate the treatment program to the necessary personnel.

Social Work Activity and Results

Mrs. A was seen at regular intervals by the social worker at her referring hospital, who had interpreted to the medical treatment program, helped work out transportation to and from the clinic, helped alleviate some of the economic problems (i.e., application for Department of Public Welfare assistance, work toward improving her housing situation), and in general,

offered supportive treatment. It was felt by the patient's social worker, however, that the supportive treatment resulted in little change or progress in her behavior or attitudes. It was also felt that her intellectual limitations and general passivity and dependence were contributing factors retarding her medical treatment and casework progress.

Transportation problems were worked out for patients B, C and D and their financial burdens were decreased to manageable proportions. Mrs. B and Mrs. C were referred to the Massachusetts Rehabilitation Commission who assumed financial responsibility for the purpose of their prosthesis and for the clinic fees for Mrs. C. Miss D, who had been previously given a prosthesis by the Mayor's Fund, was referred to the Department of Public Welfare who assumed financial responsibility for her clinic fees and transportation expenses, and provided Public Welfare funds to help meet her daily living expenses. Supportive casework was offered to and utilized to a slight degree by Miss D. Some discussion of her feelings about her amputation was carried on and the patient seemed to derive some benefit from the supportive treatment that was given in this area. The diagnosis of cancer and the patient's reactions to this were not discussed with any of the patients.

At the time of the study, social service was still active with Mrs. A, but the social worker was seeing her on a more infrequent basis. Patients B, D and C were no longer active with social service. Except for attempts by letter to help

Mrs. C return for check-ups, no contacts were made with these patients after they had completed their gait-training program.

The writer was able to locate only one record of psychiatric or casework contact made with any of the patients prior to their amputation, and none during the period of the hospitalization. Mr. E was seen prior to his amputation by a psychiatrist who felt that Mr. E was "reacting to an inevitable situation with denial, anxiety and depression...was realistically adjusting to the proposed operation...There should be... a chance for the boy to talk, if he wants to."¹⁶ It was recommended that due to his anxiety, Mr. E should not be pushed into a psychologically therapeutic situation. Other than this one psychiatric consultation, Mr. E was not seen again by any psychiatrist or caseworker.

In the interim between hospital discharge and admission for treatment in the Department of Rehabilitation and Physical Medicine, Mrs. A was referred to Social Service and seen by a social worker on a continuing basis.

In summary, one patient, Mr. E, was given psychiatric help prior to amputation, one patient, Mrs. A was given casework help prior to her referral to this clinic, and continued to receive casework services to the date of this study. Three

¹⁶Hospital record of Massachusetts Memorial Hospitals.

patients, B, C and D, were given casework help during the period of their gait-training program in this clinic. Social service contacts were made with family members of two patients, A and D.

Social service contacts were made with the spouse of Mrs. A and the mother of Miss D for purposes of interpreting to them the treatment program of these patients. Little is known of the casework activity with the spouse of Mrs. A. Apparently he was used as a liaison between the patient's hospital and the patient, helping to interpret both the patient's needs to the hospital and the hospital's treatment program to the patient. In the case of the mother of Miss D, it was felt that the opportunity to express her anxiety over the patient's situation and discuss other family problems helped reduce some of her tensions and fears. It was also felt that her propensity to overprotect the patient was somewhat mitigated by the casework activity.

CHAPTER VI

PATIENTS' ATTITUDES AND ACTIVITIES

In this chapter the writer will present the information obtained from the personal interviews conducted with the individual patients.

Reaction of Patient to Interviewer

Of the six patients interviewed for the study, only one patient, Mrs. B, showed any signs of overt suspicion and hostility toward the interviewer. She frequently questioned the interviewer throughout the interview about his reasons for visiting her, what his job was, etc. Her attitude alternated between suspicion and hostility, and friendliness and cooperation. The other patients expressed friendliness and cooperation and attempted to make the interviewer as comfortable as possible in their homes.

The writer felt that Mrs. A looked at the interviewer as "just another social worker" and was not noticeably threatened or resistant in the interview. The writer felt that although patients C, E, F and G, and at times Mrs. B, appeared to be attempting to present as much of an attitude of equanimity to the interviewer as possible, underlying this facade of poise and unconcern lay intense feelings of anxiety and conflict. Patients C, E, F and G particularly seemed over-cooperative, over-nice, and perhaps over-sensitive.

Patients' Attitudes Towards Staff, Treatment and Prosthesis

In the home interview, the patients were given the opportunity to express their attitudes towards staff, treatment, and the use of their prosthesis. Table 8 shows their attitudes as expressed to the worker. The patients' emotional tone while discussing these areas seemed to indicate to the writer that their verbalizations represented a valid self-appraisal of their conscious attitudes.

TABLE 8
 PATIENTS' ATTITUDES TOWARDS STAFF, TREATMENT AND PROSTHESIS

Pt.	Expressed Attitude Toward Staff	Expressed Attitude Toward Treatment	Expressed Attitude Toward Prosthesis
Mrs. A	Felt rejected, given poor care, overworked	Felt treatment was beyond her abilities	Was dissatisfied with its fit, its discomfort
Mrs. B	Complained of lack of warmth in the staff and unfriendliness, felt she was a "number" not a "person"	Felt it was valueless because of her bleak future	"Guesses" she should keep practicing, but saw little value in it for her
Mrs. C	"All were wonderful", appreciative of their efforts	Felt it helped; expressed some guilt over not using the treatment principles she had learned more regularly	Saw advantages of using it; expressed some guilt over not using it more often
Miss D	Appreciative of their efforts	Felt it helped; highly satisfied	Saw advantages of using it
Mr. E	Appreciative of their efforts; expressed friendliness	Felt it helped; highly satisfied	Saw advantages of using it, "glad" he could walk again
Mr. F	Appreciative of their efforts; expressed friendliness	Felt it helped; highly satisfied	Saw advantages of using it; felt "helpless without it"
Mr. G	Appreciative of their efforts; expressed friendliness	Felt it helped; highly satisfied	Saw advantages of using it; made frequent contact with the limbmakers to work out a better fit.

Only two patients, Mrs. A and Mrs. B, expressed unfavorable comments, indicating the dissatisfaction felt in these areas. The other five patients expressed more favorable attitudes. Mrs. C expressed her appreciation toward the staff and satisfaction with her treatment program, but felt guilty over not using her prosthesis more extensively than during her two hour practice session. Patients F and G were quite vocal in praising the staff and the treatment program, spontaneously expressing their appreciation of the staff's friendliness and understanding and of how their treatment had helped them become ambulatory and independent again. Mr. E also expressed indebtedness to the clinic staff's assistance during the treatment program and wished to "be remembered" to the staff.

Miss D (seen by the writer during her gait-training program), particularly near the termination of her treatment program when it became apparent she would return to employment, expressed feelings of gratitude to the staff for the treatment she had received.

Patients' Recommendations for Improving

Total Treatment Program

During the interview, the interviewer asked the patients whether in viewing their treatment course in retrospect, they had any comments, recommendations, or criticisms to make in regard to the total treatment program for amputees.

Mrs. A had no comments to offer.

Mrs. B felt the clinic was too cold, too impersonal; it should be more patient-centered. She felt the clinic's physical environment was too bleak and dreary, and recommended brighter colors and a more cheery setting. She felt a club for amputees would help the members gain courage by comparing their experiences, difficulties and successes. At the time of the study, she and another amputee were in the process of organizing such a club and were attempting to find new members, financial support and guest speakers.

Mrs. C continually commented that she could see no possible way of improving the clinic's services or the treatment she had received during her hospitalization. She felt that one of the most important factors to stress in the rehabilitation of a patient was the need for the patient to live in a home situation that stimulated feelings of optimism and enthusiasm for progress.

Patients E, F and G felt that a visit from an ambulatory amputee to a patient who had just undergone amputation could serve as an encouragement and as a model for the new amputees. When asked by the interviewer whether they would be ready to offer their services, the answer was given in the affirmative. Mr. F, and to lesser degree Mr. E, was quite enthusiastic in offering his services. Mr. G felt that any such visit should be arranged only under the supervision of a physician who would be present throughout the interview to "do all the talking." Mr. G felt there was a danger that the "model"

amputee could say the wrong thing and hurt the patient.

Patients E and F felt that personal contacts with other patients while going through the gait-training program had therapeutic value. Mr. E also felt that the period between hospital discharge and the receiving of his prosthesis was one of boredom and suggested that visits from other amputees would help relieve the boredom and offer encouragement.

In review, it is seen that two patients were critical of the clinic's treatment program, four made favorable comments. Three patients expressed an appreciation of the therapeutic value of group interaction. One patient, Mrs. B, was actively working towards accomplishing her objectives in the improvement of the amputees' rehabilitation. No suggestions were made in reference to the pre-operative period. When asked by the interviewer, none of the patients felt contact with social services would be helpful.

Social and Religious Activities

The loss or lack of interests, hobbies, social activities, travel, and the restriction of personal freedom can often result in discouragement in cancer-amputee patients and contribute towards a retardation of the patients' rehabilitation progress. Table 9 shows the social and religious activities at the time of the study and the changes that took place due to the physical limitations placed on the patients.

TABLE 9
SOCIAL AND RELIGIOUS ACTIVITIES

Pt.	At Time of Study	Changes Due to Physical Limitations
Mrs. A	Little or no social activity; not a member of any clubs or church	Little or none
Mrs. B	Attended church infrequently; visited and was visited by friends and relatives; attended movies, theatre; not a member of any club	Patient reported little change; it is suspected that significant changes had taken place
Mrs. C	Attended church infrequently; visited and was visited by relatives; not a member of any club	Little change indicated; patient reported that after the birth of her child, she and her husband seldom left the home for outside social activities
Miss D	Attended church weekly; some visiting and being visited by friends and relatives; not a member of any club	No longer as active with girl friends; previous social activity was limited, and now limited to greater degree
Mr. E	Attended church weekly; infrequently attended school dances and activities; not a member of any club	Intense athletic activity terminated; drastic curtailment in all social activities is suspected
Mr. F	Attended church weekly; some visiting and was frequently visited by friends and relatives; attended union meetings; short automobile rides	Apparently no radical changes; some curtailment of automobile trips; patient hoped to resume more lengthy auto trips in summer
Mr. G	Interest and activity in golf and bowling; visited and was frequently visited by friends and relatives; attended theatre, movies; active in golf club meetings and activities	Little personal curtailment apparent to interviewer; perhaps some curtailment of public social life of family; more intense activity with golf and bowling

Table 9 indicates that at the time of the study, patients A, B, C, D and E led what might be called an inadequate social life. Of this group, patients A, C and D had had relatively few social outlets prior to their hospitalization. Only two patients, patients F and G appeared to be leading an adequate social life.

Four patients, D, E, F and G attended church regularly; patients B and C attended infrequently, Mrs. A did not attend church services.

From the interviewer's observations, it was felt that Mrs. A seldom left the house both prior to her hospitalization and at the time of the study, had no friends, and expressed no desire to seek out new social opportunities.

Mrs. B reported little change in her social activities but it was the interviewer's impression, due to her youth, her social poise, her intelligence and her description of her apparently social-minded friends, that her social activities had been quite radically curtailed. She expressed a great deal of dissatisfaction with the aesthetic appearance of her prosthesis (bulky at the hips), and also some self-consciousness over her appearance when she did not wear the prosthesis. At the point of the study, she had not resolved this conflict. As described earlier, she was attempting to work with a fellow amputee in forming a club composed of amputee members, similar in design to the Q T colostomy club.

Mrs. C explained that she had an active social life before the birth of her only child, a four year old girl, but upon her birth, she and her husband were content to remain home at night and weekends to play with their daughter, watch television, etc.

It was felt by the clinic staff that Miss D's social life, although perhaps rather narrow and restricted, offered some satisfactions and outlets. It was the clinic staff's opinion that at the point of the study, her social activities were even more restricted.

Mr. E reported to the interviewer that prior to his hospitalization, he had been extremely active in athletics, particularly basketball, and had hoped to obtain a college athletic scholarship. (It must be remembered that Mr. E was fourteen years old at the time of his hospitalization, and this may have been an idealistic goal in retrospect.) Although he attended school social events, i.e., dances, athletic events, because of his scanty descriptions and affect, it was felt by the interviewer, that a drastic curtailment of social opportunities had occurred. He stated he spent a great deal of time at home watching television and listening to phonograph records. He thought he would like to join a school club, but he stated that none "interested" him at the point of the study.

Mr. F, who apparently lived a somewhat quiet, sedentary life prior to his hospitalization, continued to remain fairly

active socially, he felt his automobile trips had been reduced in number and distance, but hoped to resume this pleasure by the summertime.

Mr. G had been quite active socially prior to his hospitalization and apparently experienced no major changes in this area. He did admit some curtailment of individual and family social activities. He developed an intense interest in golf, having participated in golf tournaments for the disabled as far south as Florida. He was chairman of the grounds committee for his golf club, attended all the social functions, and planned to join a toastmasters club for experience in addressing large bodies of people, in which area he felt some self-consciousness.

Four of the seven patients, patients B, E, F and G, indicated an interest in broadening their social opportunities and skills. Miss D refused to discuss this area in any detail, apparently experiencing some threat to her adequacy and self-esteem. Patients A and C expressed no such interests.

Major Problems as Expressed by the Patients

Two patients, A and C, felt their housing difficulties presented major problems, and two patients, D and F, expressed concern over their employment status. Patients A and F expressed concern over their financial condition. Other problems expressed by the patients included those of child rearing problems, fear of extension of cancer, lack of motivation in using

the prosthesis, and the fit of the prosthesis.

Mrs. A felt her main problems centered around her housing and financial conditions. She was living in a two room apartment, kitchen and parlor-bedroom, and the City of Boston was in the process of assuming ownership of the house because of the landlord's back tax non-payments. The small income of her spouse was supplemented by the patient's Disability Assistance, but the total income still appeared to be quite inadequate. Her hospital social worker was attempting to work out an adequate plan with the Disability Assistance social worker.

Mrs. B expressed concern over the problems posed in the areas of child rearing, both in respect to the present and future. Although she gave serious consideration to the future child rearing problems and her future role, she inconsistently also expressed feelings of depression over the thought of her "not being around too long anyway" - this was apparently in relation to her fear of extension of cancer.

Mrs. C would not admit of any problems other than those connected with her housing. She was living in a second floor apartment and felt the obstacle of stair-climbing was too difficult to overcome. She was attempting to find a first floor apartment. She felt that while living with her sister, she was fortunate to live in an environment that encouraged her and promoted a motivating force. The encouragement and

high motivation she had experienced at that time, however, was not maintained upon her return to her own home and she felt her progress was halted, with some "slipping back."

Miss D, although not interviewed for this study, indicated in previous social service interviews that her main concern focused on her return to employment. She expressed resistance and anxiety when discussing her social activities, and it was intimated that this area, although not verbalized, was of major concern to her.

Mr. E did not express recognition of any problems.

Mr. F's main expressed concern was that of being unable to return to his former job, with resultant wage decrease. He hoped, however, to return to this job, and did not display any disabling concern in this area to the interviewer.

Mr. G felt his main problem centered around the fit of his new prosthesis which was fitted after his hip disarticulation of February, 1959. He had not worn this new prosthesis, complaining of its discomfort and tendency to chafe his skin. He admitted to feelings of self-consciousness when appearing in public for business and social reasons without his prosthesis but refused to wear it until a better fit could be obtained. The clinic staff suspected that fear of extension of cancer might have been related to his refusal to wear this new prosthesis.

Attitude Toward the Future

It was the writer's opinion that four patients, D, E, F and G, viewed the future with some positive feelings of optimism, as was evidenced by their future plans. The attitudes of three patients, A, B and C, indicated a greater concern over their present situations, rather than an interest in future plans.

Mr. E apparently had given serious thought to continuing his education through a two year college course in mechanical design. He also planned to seek a summer, part-time job. Mr. F was attempting to regain his former job status, hoped to resume his extensive automobile traveling in the near future, and felt he was "learning new things, new skills every day." Mr. G stated he planned to improve his bowling, take water skiing lessons and improve his public speaking skills by joining a toastmaster club. It was felt by the clinic staff that Mr. G would probably achieve these goals.

Mrs. A did not have any formulated hopes for the future other than improving her immediated housing and economic situation. Although Mrs. B was interested in the formation of an amputee club, her present attitude was described to the interviewer by her as one of "living for today," "no plans for tomorrow." "I may not be here." Mrs. C described no future plans other than trying to use her prosthesis more frequently than at present. Miss D had showed considerable motivation for her return to her former job. At the point of her

completion of the gait-training program and her return to her former job, the clinic staff observed a noticeable increase of self-confidence and optimism toward the future. No information was available about the effect of her recent amputation on her attitude and plans for the future.

Significant Emotional Features Observed

A description of each patient's psycho-dynamics based on evidence presented in the interviews faces obvious limitations, since the time the writer spent with each of the patients was limited to a period of from one to one and one-half hours. Certain significant emotional features presented themselves quite clearly to the interviewer, however, and should be described.

Five patients, A, B, D, F and G, expressed varying amounts of hostility. Mrs. C appeared to feel some hostility toward her husband but was not able to express it. Mr. E expressed no hostility during the interview. Two patients, A and B expressed feelings of depression. Mr. E showed some signs of depression but did not verbalize his feelings, and seemed to mask these feelings by an attitude of optimism.

In comparison with the relative lack of motivation for improvement as observed by the writer in patients A, B and C, four patients, D, E, F and G seemed to look at their disability as a threat to their self-esteem and self-worth, and were making active attempts or plans to improve or compensate for

their situation through the medium of employment, schooling or athletics.

If "denial" can be defined as "the refusal to recognize the full reality of a deeply frustrating situation for the purpose of protection from the threat of realization,"¹⁷ every patient except Mrs. B used this mechanism while discussing the present situation with the interviewer. Only this patient voiced her recognition of her diagnosis and her fears of the extension of cancer to the interviewer. The writer felt that all of the patients were expending considerable energy in controlling their inner tensions and anxieties.

Contrary to information received describing Mrs. A as a woman with intellectual limitations, the writer felt that she reacted to the interview in a manner consistent with that of an individual with average intelligence. She did display an attitude of passivity and listlessness with no show of initiative during the first stages of the interview. This passivity was presumably an integral part of her personality, i.e., she described her daily activities as consisting of sitting by the wood stove, drinking tea, reading second hand magazines her spouse sells, and feeding pieces of wood into the stove. As the interview developed, she became progressively more able

17

Loretta Dixon, "Social and Emotional Problems in the Rehabilitation of Cancer Patients - A Study of Fourteen Patients Age Forty to Forty-nine with Cancer of the Cervix," p. 27.

to express her feelings of hostility towards the clinic staff, the surgeons who amputated her leg, other amputees who were "better off" than she, and, although to a lesser degree, towards her spouse. She also was able to express feelings of guilt over her common-law marriage with her spouse and her history of alcoholism which had resulted in institutionalization at a state hospital. She no longer attended church services because she felt her sins were unpardonable; she was "not worthy" of church membership. She expressed some feelings of hopelessness, i.e., "With everything going wrong, I might as well die." It was the writer's opinion that Mrs. A's feelings of guilt drained off much of her emotional energy and contributed toward her feeling of depression, unworthiness and rejection.

Mrs. B expressed a great deal of hostility and bitterness towards the handling she had received from medical personnel of this clinic and her referring hospital. Some feelings of hostility also appeared to be directed against her husband and her parents. She expressed feelings of hopelessness over her future and would make no plans for the future because she "might not be here tomorrow." Paradoxically, in relation to the rearing of her child and the organization of an amputee club, she showed an interest in the future problems she, her child, and the as-yet un-organized club would be facing.

Mrs. C seemed to use projection and rationalization throughout the interview. She blamed or explained her failure to use her prosthesis for longer periods of time on the stump's shrinkage (which was a common factor for all the patients of the study group), on the clinic doctor's advice not to use her prosthesis for too long a period of time (which was a distortion of the doctor's statements), on her age, and on the lack of encouragement and stimulation in her environment. Her complaints over the fact that she lived in a second floor apartment had a more realistic basis. She exhibited tendencies to over-protect her child and appeared to invest extensive time and energy in caring for this child.

Miss D was quite rigid, guarded and defensive to the interviewer in the social service contacts that took place during her gait-training program. She was hyper-sensitive in regard to any discussion she subjectively considered a threat to her self-esteem and self-worth. As she became more proficient with the use of her prosthesis and as the attainment of her goal of return to employment seemed more likely, she became less guarded and hostile and somewhat more spontaneous. She expressed some concern, asking the writer's opinion, over the aesthetic appearance of the prosthesis. She also expressed some feelings of self-consciousness while wearing her prosthesis in public.

Mr. E indicated feelings of self-consciousness while wearing his prosthesis in public and expressed some concern

over not being accepted in society as "normal". He appeared to be trying to relate to the interviewer but displayed some inhibition and self-consciousness during the interview. He expressed an interest in expanding his social contacts but did not feel ready to discuss this with any of the clinic personnel at the time this study was conducted. His attempts to camouflage his feelings of depression over his social inactivity and athletic restrictions were not always successful.

Mr. F initially presented an attitude of amiability and serenity. In the later stages of the interview he expressed some resentment and bitterness over his situation, i.e., "No one cares for you; you have to do things for yourself; there's no sense in crying, people will only laugh at you." He expressed some feelings of self pity, i.e., "It's a good thing my mother is not alive to see all this; it would have broken her heart." He attributed his treatment progress to the support of his wife and his own efforts, primarily the latter. He felt he had conquered the concern he felt before becoming active in the gait-training program of not being accepted by society as a "whole man". Presumably, this fear still exists. He appeared to be continually attempting to prove that he was a "good worker; as good as the next man", and had to "plug harder" to prove it.

The major defense mechanism Mr. G appeared to use was that of overcompensation. A previous interest in the sport of golf had expanded to the point where he had traveled as

far south as Florida to participate in golf tournaments for the handicapped. In the interview, he stated he planned to improve his bowling scores and was considering taking up the sport of water skiing. It was the interviewer's impression that his success in golf bolstered his feeling of adequacy and channeled off some of his feelings of anxiety. In relation to this factor, he stated that during the golfing season, when he played almost daily, he was able to sleep soundly; in the "off season", he suffered from insomnia. He appeared to relate and communicate well with people and appeared to be successful financially and socially. The writer attributed his refusal to wear his new prosthesis to the feelings that the chafing of the prosthesis might result in further extension of cancer. This, however, was not verbalized during the interview. He did express some hostility toward the limb-maker, placing some blame on him for being unable to construct a fitting to his satisfaction.

Family Cooperation as Expressed by the Patients

All of the patients verbalized recognition of the supportive contributions made by family members. Four patients, A, B, C and D, however, indicated some dissatisfaction in this area. Miss D., during her gait-training period, expressed some resentment over her mother's attempts at over-protection, but felt her family had been quite supportive for her. Three patients, E and G, expressed with apparently sincere feelings

that the contributions of the family members, the mother and wives, and relatives had been of great help during their hospitalization, convalescence, gait-training, and present situation. Patients E, F and G primarily attributed their achievements, however, to their own efforts and determination, their own "strength of character".

Mrs. A was somewhat critical of her husband's contributions. She felt that although he had helped her in such ways as bringing her to the clinic or the park in good weather, his attitude towards her medical condition was that it was a punishment for her past sins, particularly her past history of alcoholism, for which she must atone. The writer was unable to ascertain whether Mrs. A's description was a valid one, or whether it was a projection of her own guilt over her past deeds. She also expressed feelings of resentment over his condescending air of superiority towards her. Mrs. B lauded her husband's effort to help, but expressed some irritation at the pressures, the "nagging" he applied in his attempts to stimulate her to use her prosthesis more often. Although Mrs. C described her husband as "wonderful" in doing everything he could for her, it was the writer's impression that she felt some dissatisfaction in this area. This was illustrated during the interview when she inadvertently admitted that her sister (with whom she had lived during her convalescence and for a few weeks of gait-training program

in the clinic) had provided more incentive for her to use the prosthesis than had her husband when she returned to her home. Upon her recognition of this confession, she became visibly upset, quickly changed the subject, and subsequently refused to describe her husband in other than glowing terms.

It was observed that only patients B and C expressed appreciation of the effects of the amputation on other family members. Mrs. B discussed the curtailment of the family's automobile trips and how her husband would have to forego this pleasure because of her condition, and also verbalized an awareness of the effect her amputation could have on her child's emotional and social development. Mr. G expressed concern over the embarrassment his wife and children might feel over his missing leg, at such times as when the family appeared in public, i.e., eating in restaurants, swimming activities, etc.. He also admitted that because of the embarrassment he felt in this area, he felt he perhaps had avoided appearing in public as often as he had when he used his prosthesis. He did not make reference to any other emotional impact it may have had on them. He stated that this concern was a recent insight on his part; he had not considered the import of his condition on the family members until recently (almost two years after his first operation).

CHAPTER VII

SUMMARY AND CONCLUSIONS

Seven patients with above knee amputations have been studied to learn about the characteristics and problems exhibited by this group in the course of their rehabilitation, and how their illness and disability have affected their personal, family, social, and economic adjustment. Questions raised in this exploratory study were:

1. What is the emotional meaning of this illness and disability to the patient and to the family?
2. What adjustment problems have been precipitated by their illness and disability?
3. How have the patients handled these problems?
4. How and to what extent do the patients' problems and attitudes affect the rehabilitation process?
5. What treatment goals have been attained by the patients?

Medical and social service data and vital statistics were collected from the patients' hospital, clinic, and social service records, telephone contacts with the patients' referring physicians, and one patient's social worker, personal interviews with the clinic staff and home interviews with six of the seven patients.

The general personal and social characteristics of the patients under study were discussed. Four patients were female, three were male. Four patients were Catholic, two were Protestant, one was Jewish. One patient had complete fourth

grade in school, three had completed eighth grade, one had completed college, one completed high school, and one patient was still in school, in the tenth grade. Three females were married, two of whom had one dependent child each; the single female and single male both lived in their parents' home. Of the two married males, one had one dependent child, the other had three dependent children. It was seen that the only major changes in the family income prior to the patients' hospitalization and at the time of the study occurred in the families of two patients; the income of one family was supplemented by Department of Welfare funds, the income of the other family was changed in that of the three working family members prior to the hospitalization, one was employed (the patient) at the time of the study, one was unemployed and one was unemployed but receiving a pension. The family income of four patients was insufficient to meet the financial needs during hospitalization and convalescence, and financial assistance had to be obtained from the Department of Public Welfare.

The study revealed that the employment status of the patients for the period prior to hospitalization and at the time of the study was unchanged. Four patients were not employed, three housewives, and one student. Of the three employed patients, two returned to their former occupations, the other experienced a job change but was attempting to regain his former position.

All amputations were performed within the last three years. All of the amputations were performed within thirty days after the diagnosis of malignancy was established. No metastasis was evident in any of the patients at time of discharge. All the patients lived within fifteen miles of the clinic and no acute transportation problems existed which delayed or negatively affected treatment progress. All the patients attended and were punctual for all scheduled clinic appointments. Two patients delayed one and one-half years before seeking treatment for symptoms of pain they had observed, two delayed three months, two patients did not delay, and the delay period for one patient was unknown. Four patients had been informed of their diagnosis by the doctor and it was felt by the writer that two patients, although not informed of their diagnosis, were aware of it. The other patient's awareness of it was unknown.

The history of the patients' hospitalization and medical treatment and the course of their rehabilitation was discussed. Prior to 12/31/59, two patients were rehospitalized for additional surgery; one was re-hospitalized for a biopsy and for x-ray treatment and chemotherapy. One patient was re-hospitalized 1/17/60 for additional surgery. It was noted that the clinic staff consistently rated and evaluated the male patients at a more satisfactory level than the female patients, and rated the employed and student patients at a more satisfactory

level than the three housewife patients. It was observed that those who received a more satisfactory rating consistently used their prosthesis for a longer period of time and for more activities. One explanation of this observation was offered by the clinic staff who felt that the employed patients, because of their anticipated and eventual exposure to the competition of the employment world, were strongly motivated to use their prosthesis. The housewives, however, were less motivated in this respect, and because of the housekeeping and child care demands placed upon them, would choose to perform their duties without using their prosthesis, preferring the greater speed, efficiency, and safety from falling that they could achieve by using their crutches and canes.

The major problem of the four female patients, as observed by the clinic staff, was discussed. These included: their fear of extension of cancer, the concern expressed by two patients over the aesthetic appearance of the prosthesis, the financial problems of two patients, and the housing difficulties of two patients. No major problems were observed with the two male married patients. It was felt by the clinic staff that the student male patient might experience psychosocial problems in the future in regard to his social and heterosexual relationships. None of the male patients expressed a fear of extension of cancer to the staff.

Social service contacts were made with the four female

patients. One patient was given casework help prior to her referral to this clinic and continued to receive casework services to the date of this study. Three patients were given casework help during the period of the gait-training program in this clinic. No social service contacts were made with the male patients. One male patient, however, was given psychiatric help prior to his amputation. Social service contact were made with the family members of two of the female patients.

Home visits with six of the seven patients were conducted. The patient who was not interviewed for the study because of a recent hospitalization had been seen by this writer for a two month period during her gait-training program and much relevant data were available for study. Except for one patient, the reaction of the patients to the home interview was one of friendliness and cooperation. The writer felt, however, that in most cases, underlying their attitudes of equanimity lay intense feelings of anxiety and conflict. Only the one patient mentioned showed any signs of overt suspicion and hostility towards the interviewer. Four patients expressed feelings of friendliness toward the clinic staff and appreciation of the help they had received while in the treatment program; two expressed feelings of dissatisfaction with the clinic staff and were openly critical of the treatment program. The major problems as expressed by the patients were discussed in the study. Two patients expressed concern over their housing, two over

their employment situation and two over their financial position. Other problems discussed included those of child rearing, fear of extension of cancer, lack of motivation in using the prosthesis and the fitting of the prosthesis.

The writer observed that of the seven patients, five could be considered to leading inadequate social lives and two satisfactory lives. The writer felt that three of the patients had lived rather inadequate social lives prior to their amputation. Four patients attended church regularly, two infrequently and one did not attend church services.

All the patients verbalized a recognition of the contributions their family members had made in the course of the hospitalization and rehabilitation. The four female patients, however, indicated some feelings of dissatisfaction in this area. Of the seven patients, only one male patient and one female patient expressed an attempt to understand the import of their condition on the family members. The three male patients primarily attributed their achievements to their achievements to their own efforts and determination, their own "strength of character".

Four patients expressed an optimism toward their future and described their plans to the writer. It was observed that the three patients who expressed little or no optimism toward the future were housewives. Five patients expressed hostility during the interview. This hostility in various cases was

directed toward the clinic staff, their doctors, toward the limbmaker, the social worker, and in three cases, towards the world in general. Signs of feelings of depression were observed in three of the patients. Only one patient voiced a recognition of the diagnosis and fear of extension of cancer to the interviewer. None of the patients discussed their concept of "cancer" with the interviewer; their discussion of their medical condition focused on their amputation and use of their prosthesis.

Of the six patients interviewed in their home, four patients, three males and one female, offered suggestions for improving the total treatment program. The three males felt that visits from an ambulatory amputee to a patient who had just undergone amputation could serve as an encouragement to the new amputee. They also felt that group meetings of the patients while in the gait-training program could help serve as an incentive and as a therapeutic tool in the rehabilitative process. The female patient felt that group meetings for amputees could be therapeutic but was working on the formation of such a club outside the clinic, rather than as a part of the treatment program. None of the patients felt the services of a social worker would have been helpful to them.

Although the size of the group was small and data were inadequate for a complete analysis of the factors influencing the course of the patients' rehabilitation, the writer feels

that this exploratory study suggests that male patients utilize clinic facilities and achieve greater success in rehabilitation than do the female patients. It also suggests that because of their incentive to return to their place of employment, the formerly employed amputee will seek to utilize the clinic's facilities and prosthesis more actively than the unemployed or housewife patients. It is suggested that the success achieved by the continued use of the prosthesis reinforces the patient's motivation to improve his ambulatory skills. Conversely, the lack of achievement through the continued disuse of the prosthesis, decreases the patient's motivation towards improving his ambulatory skills with the prosthesis. Such areas as this require further research with larger populations studied before more accurate judgments can be formed.

Despite the fact that none of the patients felt they would have been helped by social services, this writer feels that in many, if not all, cases social services could have been beneficial in helping the patient accept and work through the problems presented during the pre-operative period, hospitalization, and throughout the course of the rehabilitation process. Particularly in the area of helping the family adjust to this new situation, it would seem the caseworker could be of great assistance. Although the defenses and attitudes of the patients may leave these patients less amenable to casework assistance, the writer concurs with the clinic staff's plan to offer follow-

up casework services. It is also suggested that the feasibility of utilizing a supervised group work experience for the cancer-amputee might be instituted to see whether such an experiment would strengthen the clinic's treatment program so that the depressed patients can hear the reactions and enthusiasms of those who have achieved greater rehabilitation successes. In order to evaluate the implications of cancer in the rehabilitation of the cancer-amputee, further research comparing the cancer and non-cancer patients with above knee amputation could be conducted.

*Accepted 5-23-60
Katherine Spencer*

SCHEDULE A

Part 1

Medical and Clinic Data

(Gathered from the patients' hospital records and clinic staff interviews)

A. Identifying data

- | | |
|----------------------------|--|
| 1. Identifying case number | 6. Race |
| 2. Date of birth | 7. Nationality |
| 3. Place of birth | 8. Religion |
| 4. Sex | 9. Residence |
| 5. Martial status | 10. Distance from the hospital (miles) |

B. Medical History Prior to Rehabilitation Clinic

1. Date of first medical contact for this illness
2. With whom
3. Patient's reason for seeking medical attention
4. Was there delay in seeking medical attention?
If so, how long and reason?
5. Date of diagnosis
6. Diagnosis
7. Who has been told of diagnosis
8. Reaction of patient and/or family to diagnosis
9. Any other major illness or disability, past or concurrent (describe)
10. Where hospitalized for amputation
11. Referred by whom
12. Date of amputation

13. Post-operative complications
14. Date of discharge
15. Condition at time of discharge
 - a) Ability to ambulate
 - b) Evidence of metastasis
16. Rehabilitation program prescribed at discharge
17. Was there any re-hospitalization? If so, why?
Give dates
18. What was patient's adjustment to illness and hospital as indicated by medical personnel

Part 2

Rehabilitation Program

A. Referral

1. Date admitted to clinic
2. Who referred
3. How did patient accept the referral
4. Rehabilitative training prior to admittance to this clinic
5. Evaluation of patient's use of previous rehabilitative training
6. Financing of treatment expenses and prosthesis

B. Treatment program in this clinic

1. Pre-prosthetic training program
 - a) Number of gait-training sessions
 - b) Duration
2. Evaluation of Patient's use of pre-prosthetic training
3. Date prosthesis obtained
4. Gait-training program
 - a) Duration
 - b) Number of gait-training sessions completed as of Dec. 31, 1959

5. Appointment punctuality and regularity
6. Who accompanied patient to clinic
7. Forms of transportation used
8. Goals of treatment program
9. Evaluation of patient's use of rehabilitation services
10. Treatment progress - describe
Circle one (unsatisfactory, poor, good, excellent)

C. Clinic Observation

1. Presence of pain, discomfort, weakness, etc. as determined by medical personnel
2. Patient's attitude towards pain, discomfort, weakness, etc.
3. Attitudes and feelings of patient toward clinic staff and treatment
4. Emotion responses observed
 - a) Signs of emotion, i.e., tears, nervousness, bravado, etc.
 - b) Signs of regression, dependency, denial, or projection
5. Evaluation of patient's motivation
6. Changes in stump and prosthesis (give dates)
7. Major problems as clinic staff sees them (i.e., personal, family, social, vocational, rehabilitative, economic)
8. Prognosis for rehabilitation

SCHEDULE B

Part 1

Interview with Patient

The topics listed in this schedule will be discussed with the patient, but not necessarily in the sequence as listed.

A. Rehabilitative

1. Present health
2. Daily Activities
3. How long each day and for what activities is the prosthetic appliance worn
4. What are present restrictions from physical standpoint that patient considers important
5. Attitude and feelings toward clinic staff, treatment plan and prosthesis

B. Economic-Vocational

1. Employment
 - a) Present and past employment status
 - b) Type of employment
 - c) Plans and goals
2. Family Economy
 - a) Expenses
 - b) Income and Occupation
 1. of patient
 2. of spouse and other family members
 3. other means of support
3. Financial difficulties
4. Housing
 - a) Date of occupancy
 - b) Attitude towards home and neighborhood
5. Transportation difficulties or arrangements
6. Assisting agencies (as indicated)
7. Discussion of future plans and goals

C. Social Activities

1. Religious affiliations
2. Organizations, lodges, clubs, etc.
3. Social activities and leisure time
Discussion of changes in social activities -
at home and/or outside of home

D. Family

1. Family data
 - a) Family members in household (before and after hospitalization)
 - b) Date of marriage(s)
 - c) Children Sex Age Marital Status School
 - d) Whereabouts of children
 - e) Care of children
 - f) Whereabouts of parents
 - g) Care of parents or other relatives
 - h) Patient and family cultural background
 - i) Education of patient and spouse
2. Role of family
 - a) During illness
 - b) After hospitalization
 - c) How family felt about, reacted to illness
 - d) Role changes of family members
3. Family strengths or problem areas

E. Medical (As indicated)

1. Discussion of other present and past diseases of patient and patient's handling of them
2. How patient and family felt about and handled diseases in others
3. Patient's attitudes toward cancer, amputation as seen in others
4. Patient's attitudes and feelings about initial symptoms, hospitalization, final diagnosis, cancer, amputation

Part 2

Areas of Observation in Interview with Patient

- A. Description of housing
 - 1. Description of neighboring locale
 - 2. Type of home
 - 3. Number of rooms
 - 4. Attitude towards home and neighborhood
- B. Who is present during interview
- C. Attitude toward interview and interviewer as verbalized to interviewer
- D. Attitude toward interview and interviewer as seen by interviewer
- E. Major problems as patient sees them
- F. Appearance - physical, dress, cleanliness, etc.
- G. Personality description
- H. Signs of emotion - tears, nervousness, bravado, twitching, etc.
- I. Expressions of feelings - spontaneous, withdrawn, verbal or non-verbal, much or little affect
- J. Areas patient showed a reluctance to discuss - how avoided
- K. Areas in which patient questioned worker
- L. What are patient's capacities, strengths, potential - as he sees them, as interviewer sees them
- M. Signs of secondary gain
 - Avoiding responsibility, controlling and tyrannizing the family, capitalizing on, exploiting illness
- N. Patient's feelings and attitudes towards change in status, role, relationships
- O. Patient's goals - are they realistic or unrealistic
- P. Patient's feelings of loss of independence, love, goals financial security

Q. How does patient relate to others

R. Formation of such behavior patterns and mechanisms as regression, overcompensation, guilt, denial, anxiety, etc.

Other comments

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