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Physical therapy in the rehabilitation of elderly hip surgery patients in the acute setting

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PHYSICAL THERAPY IN THE REHABILITATION OF ELDERLY HIP SURGERY PATIENTS IN THE ACUTE SETTING

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Abstract

This study examines the historical development of the occupation of physical therapy through its recent emergence as a major service provider for the elderly in the acute hospital setting. The implications of this relationship for the professionalization of physical therapy are examined as are the consequences for the elderly. Having described the historical context in which the relationship between the elderly and physical therapy developed, the study turns to the micro-sociological aspects of this relationship by analyzing interactions between hip surgery patients and therapists in three urban acute hospitals. Findings are based on interviews with patients and therapists and on fieldwork methods. Strauss and Glaser's concept of disease trajectory is used. Two types of trajectories are presented: elective and trauma. While posing similar problems from a treatment point of view, these two trajectories differ sharply phenomenologically. The trauma patient often enters her trajectory with a shattered self-concept. Uncertainty and low expectations for the elderly are not replaced with an appropriate recovery philosophy. Under these conditions the elderly trauma patient rarely is able to construct favorable future trajectory. As a result she becomes discouraged and resulting behavior impedes rehabilitation.

Findings suggest that trauma in later life has particularly ominous meanings which physical therapists' approaches to motivation in the acute setting do not address, and which become major barriers to effective rehabilitation. Theoretically, the foregoing study indicates that the process of professionalization and the structural conditions under which that process occurs have consequences for the interaction between patient and practitioner. It further challenges the conceptual distinctions between acute and rehabilitation models of treatment and of static role concepts based on those models. Finally, it suggests that medical dominance may occur in definitions of professional philosophy.

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Introduction

This study explores the development of the occupation of physical therapy as a major service provider for the elderly in the acute hospital setting. The implications of this relationship for the professionalization of physical therapy are examined as are the consequences for the rehabilitation of the elderly.

Studies of health related occupations and professions are limited primarily to examinations of medicine and nursing. Distinctions among "allied health professions" are blurred. Chapter one reviews the relevant sociological literature which includes studies showing that interaction between patient and physical therapist is potentialy significant in shaping patients' illness trajectories. However, existing studies are limited in that they focus on younger patients or custodial settings. Potential structural and interactional problems of physical therapy carrying out its work in acute settings are discussed. A major issue is the contradiction between acute and rehabilitation treatment models. Adoption of one model as opposed to the other has implications for the organization of work and development of the occupation as well as for interaction with the patient. This chapter suggests examining these issues by combining macro-sociological analysis of the occupation with micro-

sociological research on patient therapist interaction in the acute setting.

Chapter Two discusses the research process with emphasis on fieldwork strategies. The fieldwork was conducted in three urban acute care hospitals as part of a larger study of discharge planning. The inductive approach to qualitative data which was used is described in detail. Special problems of interviewing the ill elderly are addressed in this chapter.

The development of physical therapy as an occupation is explored in chapter three. Beginning as assistants to orthopedists, the occupation is traced through its involvement in providing rehabilitation to victims of epidemics and wars. Beginning with youthful patients physical therapists organized to expand and develop their occupational domain. Relationships to other health professions are discussed with emphasis on medicine, by which it has been most heavily influenced.

Currently the acute hospital is the primary workplace of physical therapists. Chapter four shows how changes in the nature of the patient population, national health policy and medical technology converged to create the emergence of the elderly as a major proportion of the physical therapist's clientele in this setting. Having described the historical context in which the relationship between physi-

cal therapy and the elderly developed, the next chapter analyses the resulting interactions.

Two types of trajectories are presented in chapter five. One is that of the elective hip replacement patient. The other is the fracture patient who enters the trajectory as the result of trauma. While posing similar problems from a medical point of view, these two experiences differ sharply phenomenologically. The former trajectory unfolds in a socially constructed context of optimism buttressed by a recovery philosophy of acute care which is systematically conveyed to the patient through patient education and reinforced by a variety of structural conditions. In contrast, the fracture patient enters her trajectory with a shattered self. The context in which rehabilitation is initiated is one of uncertainty. Low expectations of and for the elderly, and particularly for hip fracture patients by physicians and therapists promote and maintain a context of uncertainty. Outdated and incorrect lay definitions of proper responses to discomfort and the meaning of a hip fracture are not replaced with an appropriate recovery philosophy. Under these conditions construction of a potentially favorable future trajectory is not supported. As a result patients become discouraged and their resulting behavior impedes rehabilitation.

Findings presented in this chapter suggest that trauma in later life has particularly ominous meanings which

physical therapists' concepts of motivation do not address. Lack of attention to this issue and to social-psychological issues in general is a major barrier to effective rehabilitation of the elderly.

Chapter six concludes by suggesting that as an emerging profession, physical therapy faces a choice. It can use the quasi-monopoly over rehabilitation that it has attained to justify lack of attention to the special needs of the elderly. The current professional definitions do this by attributing success or failure in rehabilitation to individual motivation. An alternative approach that is open to physical therapy is to recognize that formidable social-psychological barriers to rehabilitation are created when old age and disability intersect; these are exacerbated by current emphasis on acute care treatment models. Therefore, physical therapy has an opportunity to expand its definitions of expertise to reduce the magnitude of these barriers through attention to the patients meaning systems, thus strengthening its claim to legitimation and increasing the effectiveness and job satisfaction of its practitioners.

Theoretically, the foregoing study indicates that the process of professionalization and the structural conditions under which that process occurs have consequences for the interaction between patient and practitioner. It further challenges the viability of conceptual distinctions between acute and rehabilitation models of treatment and of static

role concepts based on those models. Finally, it suggests that medical dominance may occur along a dimension not identified by d by Freidson, namely in definitions of professional philosophy.

Chapter One

PHYSICAL THERAPY FROM A SOCIOLOGICAL PERSPECTIVE

Medical sociologists who have well developed theoretical perspectives on health related occupations and professions customarily give considerable attention to medicine and nursing and they see the major issues in the field illustrated therein. There is very little sociological analysis of other occupations and professions found in hospital settings. Even less attention has been paid to the interaction between patients and other health care workers. However, the challenges to medicine resulting from technological developments and economic strains on society arising out of current methods of federal financing of health care make relationships among health related occupations and patients increasingly relevant.

The need for an analysis of the hospital and the world of health care which gives attention to roles other than nursing and medicine became clear to me while doing field work on a study of discharge planning and post-hospital adjustment of older patients. This project required that I observe and interview orthopedic patients in three acute metropolitan hospitals over a period of several months. It quickly became apparent that often the member of the health

care team who engaged in the most prolonged and frequent interactions with the patients was often the physical therapist. Not only were these interactions repeated and lengthy but they were clearly important in defining the patients' identities and shaping their illness trajectories.

The social-psychological significance to the patient of the physical therapists' role was striking, as was the theoretical relevance of the fact that physical therapists seemed to be acting as unrecognized gate-keepers of hospital and home care. They often could be seen extending, and sometimes were instrumental in restricting, access to hospitalization. In the immediate post-discharge period, the physical therapist was often the sole representative of the medical system in contact with the isolated and dependent home bound persons.

There are few analyses of physical therapists' contributions to health care and their relationships to other members of the health care system in the medical sociological literature. Those few which do exist do not reflect important recent developments in government regulation and health care organization which have created many recent changes. Nevertheless, studies which have given attention to physical therapy provide a valuable background and raise some of the issues which will be discussed in later chapters.

In this chapter I will briefly discuss some of the sociological works which are most relevant to physical therapy. Some of them contribute to our understanding of how physical therapy shapes and defines the patient's experience. Others focus on the social organization of the occupation. I will begin by discussing some studies which provide general analyses of settings and processes in which physical therapists are important. Then I will look briefly at some of the issues that arise out of the distinctions between acute illness and disability or rehabilitation. Finally, I will look at the literature on the sociology of health professions and occupations for an indication of the major issues which must be confronted in discussing physical therapy as a occupation. I will reserve for a later chapter a review and analysis of the specific challenges posed by physical therapy for the elderly.

Physical Therapists at Work

One of the earliest studies in medical sociology to contain extended references to physical therapy was Passage Through Crisis: Polio Victims and Their Families (Davis, 1963). This work shows the importance of physical therapy in the illness careers of polio victims during the epidemic of the mid-fifties, which was an important period in the development of the discipline. Davis notes that the physical therapist's intimate knowledge of the child's condition and daily contact with the child made the physical therapist

the parents' major source of information about the child's condition. This relationship was somewhat limited, however, by the subordinate position of the physical therapist to the physician:

> Although physiotherapy is widely accepted nowadays as a legitimate adjunct to the medical treatment of certain illnesses, in many treatment centers a delicate and sometimes uneasy modus vivendi characterizes the relations between doctor and physiotherapist. Precise definitions of respective spheres of therapeutic competence and authority are still in the process of being worked out with the medical profession. (Davis, 1963:60)

Davis describes the content of the physical therapy regimen in a way that may partially explain its compatibility with the larger culture:

> ...its very design faithfully captures the essence of the Protestant ideology of achievement in our culture - namely, low, patient and regularly applied effort in pursuit of a long-range goal - has built into it, as it were, its own prophecy of success. (Davis, 1963:71)

The prophecy was not always fulfilled, however, and Davis describes for the more seriously handicapped children a circle from "the crisis-born faith in the great healing power of the modern doctor to the convalescence-inspired hope in physiotherapy back to the doctor" (Davis, 1963:103). While not attempting to evaluate the claims of physical therapists with regard to polio, he points out that rarely did they feel they were given sufficient time and professional assistance to work with the child as extensively as they would

have liked. In the 1950's there was, as Davis points out, a dearth of trained practitioners and it was during this period that physical therapy assistants first became widely used. This was the beginning of an occupational hierarchy around physical therapy which has become even more complex today. There was also at this time a chronic shortage of hospital beds which led to the early discharging of polio victims generally bringing the period of intense therapy to an end.

The implications of the Davis study for rehabilitation philosophy may have particular relevance for physical therapy today, specifically for elderly patients. Davis (1963:106) argued that physical handicaps or chronic illnesses involve changes in the whole life situation of the person, not just physical changes:

> "Rehabilitation must therefore be addressed to the whole breadth and complexity of the person's life situation so that his mind and body may be made to serve each other, rather than nullify each other."

Davis (1963:173) was arguing for a broader definition of therapeutic activity by treatment personnel.

> Such a definition would not be confined to the routine neatly bounded tasks of diagnosis, prescription, and physical treatment but would seek to embrace in addition many problematic issues of communication, motivation, and the social circumstances that also play a part in the state of the patient's health and in the meaning of his illness for him and his family.

Davis emphasized that such a definition would require changes in the education of all treatment staff members, including doctors, nurses, physical therapists and occupational therapists. He (1963:174) also pointed out that not only improved training, but lighter work loads and integration of medical and psychiatric social workers and family counselors into the hospital structure would make for a more humane definition of the therapeutic task and "help to ameliorate at least some of the secondary social stresses and disruptions now occasioned by serious illness and hospitalization."

These are all issues that are as relevant for the elderly clients of today's physical therapists as they were for the young polio patients of twenty-five years ago. And it is with these issues in mind that we will look for changes and improvements in the relationship of physical therapy to its elderly patients.

Five years after Passage Through Crisis was published, Roth and Eddy (1967) published another monograph in which physical therapy received significant attention. The setting for this study was a large public chronic disease hospital whose patients were "aged, poverty stricken, chronically ill, and within a few years of death..." (1967:10). This custodial facility was known as the "dumping ground of the city hospital system" (1967:10). The study examines the rehabilitation programs within the long-term care hospital

for which a minority of these patients qualified.

Both Roth and Eddy describe the rehabilitation team as headed by rehabilitation physicians (physiatrists), and "its several supporting occupations." They say that

> It is clear that the discipline most crucial to the physicians and most central to the rehabilitation (rehab) program is physical therapy (PT). Despite talk and writing about rehabilitation as a team effort concerned with the total patient, to a great extent rehab is PT (1967:66).

They even suggest that physical therapists sometimes seemed more essential than the physicians in charge (1967:5).

At the time this study was conducted, according to the authors (1967:4-5), physiatry was "a relatively new medical specialty" which "self-consciously defined itself as a salvage operation." Among the rehabilitation disciplines, the role of physical therapist was the one most closely linked to physiatry.

Beyond illustrating the central role of the physical therapist in rehabilitation, Roth and Eddy noted that the ideal rehabilitation patient in that setting was a man or woman in good health, a member of a stable family who is seriously disabled as the result of an accident or sudden illness, but who could be expected to return home to a family whose members want him or her back. They also emphasize that youth was a weighty factor in defining a patient as a desirable candidate for rehab (1967:12). Since physicians

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were responsible for selecting patients for rehabilitation in their study, it was the physicians' values regarding patients on which they were commenting. Even though physiatry self-consciously defines itself as a salvage operation, as the authors point out, within any given treatment context some human beings are more salvageable than others. There is some evidence (Spence and Feigenbaum, 1968) that medical education increases negative views of the elderly and finds them particularly undesirable as patients; a view common to all major health disciplines to some extent (Robinson, 1981). Whether or not physical therapists share these values is not clear and will be given some attention in this study.

Roth and Eddy raise the issue of the social context in which rehabilitation in general (or physical therapy in particular) can be effective. They point out that rehabilitation disciplines are often expected to help the patient transcend impossible social obstacles to independence and recovery. The problem faced by the rehabilitation unit at "Farewell Hospital" was that they had a goal of retraining "inmates" to a society which did not really want them. The authors argue that active therapy and rehabilitation under these conditions is difficult or impossible. When therapists must spend much time working with clients whom they do not consider worth it, their major function becomes convincing these patients they are not rehabilitation material.

Furthermore, they pointed out that the rehabilitation they studied was part of a larger institutional setting which had requirements of its own for efficient maintenance which were contrary to some of the programs and principles of rehabilitation. For example, the staff was often content to allow patients to remain in wheelchairs which are more well adapted to life within the hospital than working toward ambulation with or without crutches (Roth and Eddy, 1967:200).

Roth and Eddy (1967:206) argue that recognizing the larger social realities would make possible some changes which might make life more livable from the "inmates" point of view. In other words, different criteria of success, perhaps with less emphasis on functional therapy and more emphasis on comfort and diversionary activities, while less ambitious, might allow the staff to serve patients better. The implication seems to be that rehabilitation, particularly of the very old, is often not realistic. Or, in their words, the problem is that professional goals applied in this setting "frequently lead the dedicated staff to give the patient something he does not want and cannot use." They suggest that changing this approach would lead to less frustration and turnover among the professional staff. They noted that it was the custodial staff that had become the stable ongoing part of the rehabilitation unit as well as the rest of this particular institution.

Many of the problems Roth and Eddy observed are peculiar to custodial care institutions in which rehabilitation is more pro forma than its central purpose. Nevertheless, these are issues and questions which can be pursued in the acute settings in which this current study is primarily focused.

Both Davis (1963) and Roth and Eddy (1967) found that physical therapy was the discipline most central to rehabilitation and illustrated the importance of physical therapy as a developing profession. Both illustrate that physical therapist - patient relationships are potentially of great significance to the patient in defining his/her current situation and future trajectory. They both recognize the necessity for rehabilitation to address the social context in which physical therapy occurs and the meanings which arise out of interactions within that context. They found a tendency for this dimension to be overlooked, however, due to structural constraints such as the efficient maintenance of the institutional routine and the delicate relations between the physician and the physical therapist. Of particular significance for this study is Roth and Eddy's conclusion that age was a barrier to being defined as a good rehabilitation candidate.

Wessen (1965) has addressed the challenges to rehabilitation faced in an acute setting. While his argument was made with reference to rehabilitation units, it has

implications for physical therapy, even in those instances where it is the sole representative of a rehabilitation philosophy, as in two of the three hospitals in this study. Wessen pointed out that there was not yet a typical organizational pattern for rehabilitation. In fact, rehabilitationists often insisted that rather than being appropriate to any one setting, rehabilitation must take place in a variety of settings. They contended that rehabilitation, to be effective, must be interdisciplinary and "diffuse in organizational embodiment."

Nevertheless, an increasing proportion of rehabilitation facilities were being operated by hospitals (Wessen, 1965:165). While there is much to be said for the presence of rehabilitation units in hospitals, Wessen argued that the major danger was that the rehabilitation center will be absorbed into the acute care program of the hospital; its philosophy "drowned out by the dynamic exposition of the philosophies of surgery and internal medicine" (1965:169). The opposite, he pointed out, could also be the case. The rehabilitation center (or occupation?) can be "an orphan within a hostile institution, isolated spatially and socially from the larger organization." In this case it becomes a dumping ground for the chronically ill patients that the rest of the staff no longer want to deal with.

These dangers stem from the differences between the medical and rehabilitation models of treatment. The

rehabilitation model contrasts sharply with the medical model which holds that patients recover as a result of proper diagnosis and treatment applied through a hierarchical clinical chain of command. Rehabilitation, on the other hand, deals with "chronic handicaps which if they respond to treatment at all do so only over a relatively long period of care." (Wessen, 1965:173). Patients are no longer defined as passive recipients of care. They are defined as

> persons whose motivation to master their handicap must be enlisted in what is a joint endeavor of patients and staff to achieve maximal benefits for the former (Wessen, 1965:173).

Therefore, in place of a hierarchical organization which regards the patient as object, the rehabilitation model views the various health care personnel as members of a treatment team in which there is leveling of hierarchical distinctions. As a result, Wessen (1965:174) argued that the interactions of the patient and rehabilitation staff, when functioning optimally, more nearly resemble a special school than a hospital ward. This arrangement not only was designed to serve the needs of the patient. The team approach is necessary to sustain effectiveness and morale of rehabilitation personnel in a process that does not yield the immediate gratification in terms of results which is an inherent reward of successful acute care.

The difficulties Wessen saw of implementing a rehabili-

tation model within a classical hospital setting included the tendency of rehabilitation units at that time to be organized according to conventional hospital hierarchy, leading to conflicting role expectations on the part of the staff. He suggested rehabilitation units might have to reeducate their patients to a new concept of their role before progress can be made in the rehabilitation process. Administrators often tended not to understand the implications of the rehabilitation model and thus exerted pressure on rehabilitation workers "to prevent undue departure from the classical hospital care [acute] model" (Wessen, 1965:176).

Olesen (1973:72) has pointed out that there is often a significant difference between what is emphasized for students in their education and what is actually required in the work setting even in the health occupations which believe themselves to be closely attuned with change. These differences require the health workers to go through a process of post-school, or "post-institutional" socialization in which they must redefine both self and work. The process of redefining one's work, Olesen argues, carries implications not only for the person involved, but for the occupation and its structure as well. Examination of the dimensions of this post-institutional socialization will be addressed in a later chapter. We can expect them to be particularly complex for the physical therapist in the acute

setting. We will also consider how well the physical therapist is prepared in her education for work with a predominantly elderly patient population and what redefinitions this change in clientele requires of the physical therapist.

While Wessen (1965) focused primarily on the organizational implications of the distinctions between the acute and rehabilitation mode of treatment, these distinctions have significant social-psychological implications as well. For example, Parsons' formulation of the sick role has been criticized by many as relevant only to the acutely ill.

Parsons (1951, 436-39) contended that illness was a state of disturbance, not only of the organism as a biological system but of personal and social adjustments as well. He originally argued that society had developed a set of institutionalized expectations and corresponding sentiments and sanctions to control this deviance. As restated in 1975, these include: 1) the belief that being in a state of illness is not the sick person's own fault and that he should be regarded as the victim of forces beyond his control; 2) the claim of exemption from ordinary daily obligations and expectations; 3) the expectation of seeking help from some kind of institutionalized health service agency.

A wide range of criticisms has been levied against this formulation. Some of the major criticisms include the argument that the sick role applies mainly to modern industrial

societies, to what is considered major illness, and that the assignment of a stigma results in the withholding of legitimacy in many types of illnesses (Freidson, 1970a:228). A primary criticism of the sick role has always been its limitation in accurately describing empirical reality with regard to the range of illnesses including chronic illnesses and disability.

Safilios-Rothschild (1970:74-78) sees the major inadequacies of Parson's model of the sick role as: a) assuming that everyone, regardless of type of illness, socio-psychological characteristics, and values about health will behave in a similar manner, and b) the fact that it represents the physician's point of view. The disabled person, according to Safilios-Rothschild (1970:74-78), is faced with an entirely different and often quite opposite set of expectations than an acutely ill person. These expectations arise among physicians and rehabilitation personnel after the acute stage of the illness or accident. They require that the patient make a "relatively rapid shift from a state of almost total dependence to a state of relative independence and self reliance."

Safilios-Rothschild (1970:74-78) outlines four expectations that physicians and rehabilitation personnel would like the disabled individual to meet. They are:

1. He should accept his disability and start learning how

to "live with it."

2. The disabled person is expected to "pull himself together" and start carrying on his normal social roles by utilizing to the utmost his capacities and abilities within the restrictions set by the physical impairment.

3. Once the disability is stabilized and no further improvement can be expected, the disabled's motivation must be geared toward effective utilization of remaining abilities in order to resume as many of the normal social roles as possible.

4. The disabled person with a stabilized degree of physical impairment is not legitimately exempted from the performance of his social roles, tasks, and activities -- especially when he is ambulatory.

5. Finally, the disabled person is expected to avail himself of rehabilitation, if such services are indicated, and to cooperate with every rehabilitative effort aimed at returning him to gainful employment and to a satisfactory level of performance in the other social roles.

There are several qualifications and criticisms Safilios-Rothschild makes of the disabled role which explain variations from it. One of the major problems she sees with it is that the disabled person often is unable to obtain from physicians and other medical personnel the exact extent

of his/her abilities and disabilities. This, she explains, is a result of the fact that they often do not know themselves, and when they do, they often do not want to take the time to explain to patients in detail, particularly if the patients are lower class and/or uneducated.

The major value in making explicit expectations of the disabled is in clarifying the extent to which disabled status requires adjustment on the part of the patient from the acute phase of illness or accident.

A theoretical distinction which Safilios-Rothschild (1970:78) makes which is also relevant to this study is the distinction between the disabled role and the "rehabilitative role." The latter involves temporary and conditional exemption from the performance of normal social roles and activities as a consequence of temporary institutionalization. It also ideally involves the patient as an agent of change rather than a passive object in the hands of the rehabilitation team. Controversy exists around the extent to which agency versus compliance is actually most desirable in the eyes of rehabilitation workers. Social class differences may also give middle and upper middle class disabled people an advantage because of the degree of mastery they are accustomed to exercising over their lives according to Safilios-Rothschild (1970:80). She emphasizes that there is very scant information on the definitional processes of physical disability, including very little empirical validation

of either the disabled or rehabilitant role.

Whether we are discussing the sick role, the disabled role or the rehabilitant role, it should be clear that the concept of "role" refers to normative expectations. Disclaimers notwithstanding, the concept of role does not illuminate the dynamic process of coping in which ill or disabled people engage on a day to day basis. What appears from the physician's or observer's view to be conformity to expectations, may be seen from the patient's perspective as a series of strategies to manage an illness or disability while preserving one's identity and social relations in the process.

For example, Strauss and Glaser's (1975) studies of the chronically ill have always rejected the static nature of the concept of role in general, and "the sick role" in particular. Instead they have looked at chronic illness as a process in which the ill face a number of problems of daily living, which they are forced to manage themselves or with the help of families, because health personnel often fail to consider them. These include: prevention of medical crises; control of symptoms; problems of carrying out prescribed regimens; prevention of, or living with social isolation; adjustment to changes in the course of the disease; attempts at normalizing interactions and life style; and "funding" or economic problems. These are all problems which, if not handled adequately, can have medical as well as emotional

consequences.

None of these issues are adequately dealt with by Parsons' restatement of the sick role in which he argues that, with respect to chronic illness, "the role of being sick is not temporary, it becomes a part time, but not totally absorbing role, except in very severe cases." He also argues that he did not intend, nor is it correct, to consider the role of the patient who is positively related to health care agencies as that of a purely passive object of manipulation or "treatment", but restates the patient's stance as one of "active participation" with the level of activity being minimized for the acutely ill, particularly when hospitalized. "The less acute the immediate situation, the more likely it is that the participation will be substantial" (Parsons, 1975:270).

Parson's attempt to clarify the applicability of the sick role with reference to chronic illness does not facilitate analysis of the complexity or processual nature of the patient's experience. To clarify the processual nature of chronic illness Strauss has used the concept of "disease trajectory." This refers to the course of the disease as defined by the participants to it. Trajectories may be uncertain or predictable. They often have downward phases which may plunge sharply or plateau. They may end in death or have other more positive courses and resolutions.

The flexibility implicit in the use of a process model, as opposed to considering disability and rehabilitation as a role, is particularly relevant when the disabled persons are the elderly. This is because the normative expectations of the elderly ill and disabled are often different than for the rest of the adult population. Vocational rehabilitation, for example, has been the backbone of the rehabilitation movement and a central concern in its philosophy and literature. This is also where the social legitimacy and economic resources have been based. Yet, elderly patients, even though they make up a substantial proportion of physical therapy patients, even in the acute setting, are not candidates for vocational rehabilitation. Safilios-Rothschild has noted that there is mixed evidence on the possibilities for successful rehabilitation in advanced age. She suggests that:

> the rehabilitation team may not be equally interested and 'motivated' to intensify its efforts and rehabilitate the older disabled person. This differential attitude could account at least in part for the lower rehabilitation success found among the older disabled (1970:78).

The trajectory framework allows us to explore questions such as this empirically, as opposed to assuming what the expectations of the rehabilitation personnel are as the "role" concept does.

Physical Therapy as a Occupation

A final issue that may provide a useful background for this study is the status of physical therapy in the hierarchy of health related professions. Is physical therapy a semi-profession, a paraprofession or a quasi- or marginal profession? Or, is there sociological justification for referring to it as its members do, without any qualifiers, as a profession? To some extent this is a moot question, because the answer depends on one's definitions.

Goode (1960:903) has identified the two core characteristics of professions as "a prolonged specialized training in a body of abstract knowledge and a collectivity or service orientation." He lists a number of other "derived characteristics" in addition. Freidson (1970:78) has shown that the first attribute does not hold up because it is never specified how prolonged, how specialized, or how abstract. Furthermore, Goode excludes some occupations such as nursing, which on the basis of the training, fall in the range of established professions. Training, according to Freidson, is not useful as a criteria since any occupation can provide prolonged training in order to show that they are a profession.

Freidson argues (1970:82) that collectivity and service orientation cannot be supported empirically as a reliable criteria and may have more to do with ideology than prac-

tice. It is a tactic to get the society to grant support to the profession's autonomy. He maintains that the only truly important criteria distinguishing occupations from professions is autonomy - "a position of legitimate control over work."

Freidson lumps a wide range of occupations from nursing to laboratory technicians under the rubric of "paramedical professions" and makes a number of generalizations about them collectively. Freidson's (1970:114) major point is that these medical "paraprofessions" represent a sociologically distinct form of occupational organization, part of a division of labor organized around and controlled by a central profession. The dominance of medicine is demonstrated in limitations on the responsibility, authority and autonomy of the other occupations and professions as well as in the prestige they are assigned.

Freidson's position has some important weaknesses. The major weakness is merely that it oversimplifies some of the theoretically important processes in the sociology of medical occupations. Freidson (1970a:xvii) considers the sociological task to be analyzing how a profession's self-direction or autonomy is developed, organized, and maintained and the relation of the profession's knowledge and procedures to professional organization as such and to the lay world. However, if this is the goal, looking at the medical field as made up of medicine and

"paraprofessionals," or even medicine, nursing, and other paraprofessionals, leads to far too static and simplistic a picture, as this work will demonstrate. It does not consider struggles over domain among health occupations other than medicine and nursing. Nor does it explain differential development among "paraprofessions."

None of this is to detract from Freidson's contributions, but merely to argue that such analysis must continue to develop. In the few years since his work on medical dominance (Freidson, 1970a, 1970b), there have been some significant changes in the medical system which have had significant consequences for professional relationships and patient care.

The major changes have been related to government attempts to control costs. These have resulted in Professional Standards Review Organization (PSRO) legislation which requires hospital review of Medicare and Medicaid admissions and extended stays (Gertman, et al, 1979:96). As a result of these changes, hospitals may no longer be assured reimbursement for patient stays solely on the basis of discretion of the admitting physician. So, while it is true that PSRO's represent a strategy on the part of the medical profession for self-regulation, the individual physician has, nevertheless, lost some autonomy. For example, as a result of review of hospitalized patients' records in 1976, 69,000 patients were judged by the utilization review

process not to need continued hospitalization and had their health benefits terminated (Gertman, et al, 1979:96). In such cases, the attending physician's opinion is overruled and the patient is discharged unless a source of funding other than Medicare or Medicaid is available, or the hospital must absorb the cost. Furthermore, hospitals may and do limit or terminate the physician's admitting privileges, as a result of utilization review violations.

Given these changes, it seems fair to say that the point of the power pyramid which physicians have occupied for so long is being flattened somewhat by government attempts to curb rapidly escalating costs, at least in those cases where government pays the bills. Not only have individual physicians lost some of their discretionary power in determining length of hospital stays, but the role of the physical therapist has taken on new significance with regard to the timing of discharge. The need for an objective basis on which utilization reviewers can base their decisions has led to increasing attention being given to physical therapists' evaluations as documented in medical chart notes:

> The physical therapist must objectively document through the medical record what physical changes have occurred in the patient as a result of physical therapy. Examples of positive changes are an increase in ROM or muscle strength or improvement in the patient's level of physical functioning...If changes in the ability of the patient to function physically are negligible and if the treatment program is not adapted or discontinued, payment of services will not be considered (Inaba and Jones, 1977:793).

Physical therapy is a major component of acute care of orthopedic patients after surgery. Therefore, it becomes the focus of utilization review decisions regarding appropriate length of stay. When physical therapy is no longer deemed appropriate to achieve a minimal level of independence, the hospital cannot continue to be reimbursed for costs of the patient's stay. PSRO and utilization review have increased the power of hospital administration and administration is turning to physical therapy for documentation and measurement of patient progress and level of functioning, rather than solely to the opinion of individual physicians.

This increased role of physical therapy is one of the major processes that will be explored at length in the following chapters.

These administrative limitations on physician authority represent only one aspect of the process by which others in the hospital exert control over the patient's trajectory. While it is true that physical therapy fits Freidson's definition of a paraprofession in that its work is organized around tasks of healing and ultimately controlled by the authority of physicians (1970:114), the extent to which this is true is changing. As one observes the workings of the hospital closely, one frequently sees nurses and physical therapists instructing physicians as to what are the appropriate orders for a given patient and tactfully

questioning, challenging, and changing other orders. While it is true that the power of these health care workers is rooted more deeply in their diplomacy than in formal authority, its consequences are nevertheless real. The observations in this study will show that nurses and physical therapists derive some of their power from bureaucratic demands of the hospital and government regulations, of which they are often more aware than physicians. One can argue that the M.D.'s don't have to know the regulations because they have more important things to consider, and they have subordinates to carry them out for them; nevertheless, the other health care workers can use their knowledge in their own or the patient's interest, often circumventing the preferences of the physicians. Again, the consequences are that nurses and physical therapists often direct the patient's process much more heavily than many of the descriptions and analyses of hospitals, even as recently as ten years ago, would indicate.

The point is that while it may be correct to say that physical therapy fits Freidson's definition of a "paramedical profession" in that its work is ultimately controlled by the authority of the physician, this has less meaning, even in the acute setting, than appears on the surface. In a later chapter I will also briefly discuss home health care, which has become a void few physicians have been filling, but into which physical therapists and nurses have moved,

assuming more than traditional levels of autonomy.

One way in which control by medicine is manifested in the case of social workers, according to Freidson, is that much of the technical knowledge learned by paramedical workers in the course of their training tends to be discovered, enlarged upon, and approved by physicians. Physical therapy, however, has its own therapeutic tradition which to a significant extent is independent of, and in some respects even contrary to, the larger body of accepted medical doctrine. This will be discussed in greater detail in Chapter Three.

It is true that the tasks performed by physical therapists tend to assist, rather than directly replace, the focal tasks of diagnosis and treatment. But medical diagnosis and treatment are different processes than physical therapy diagnosis and treatment, which can, and often do, occur independently of each other. Physical therapists in recent years have begun moving into private practice, adopting a model of practice that more clearly fits the pattern of a full professional, as that term is defined in sociological literature.

It is in the area of functional autonomy that the relationship of Physical Therapy to Medicine is most complex. Freidson defines this as

"the degree to which work can be carried on

> independently of organizational or medical supervision and to which it can be sustained by attracting its clientele independently of organizational referral or referral by other occupations including the physician."

This is the area in which Freidson finds the greatest basis for conflict with medicine. He predicts it will be greatest the more autonomous the occupation and the greater the overlap with that of physicians. Physical therapy has achieved a remarkable degree of functional autonomy, particularly given its dependent origins. We have an opportunity by examining its development as a profession to see how this movement toward autonomy unfolds and to test Freidson's proposition that the most interesting conflicts occur within the paramedical division of labor during the growth of new occupations.

Freidson's final conjecture that in present day U.S. the pyramid of the health care system seems to be changing into a less clear-cut structure, with physicians beginning to share their position at the top with other relatively autonomous, but consulting and cooperating new professionals is no doubt correct. And while physical therapy is certainly not comparable to medicine in its location on the pyramid, it has changed its position dramatically in recent years. The question remains, "What are the dynamics of an emerging profession in the current health care arena?" This work will provide some answers by examining the case of phy-

sical therapy in depth.

Freidson (1970:118) has said

> "we have a severely limited view of paramedical as well as medical work. Among studies of hospital personnel, the nurse in the general hospital is the most frequent subject, and the attendant or aide in the mental hospital ranks second. We have little systematic empirical information about virtually all other paramedical workers.

Freidson recognizes the potential for change in the medical division of labor, yet there remains a dearth of sociological writings by him or others on occupations other than medicine and nursing where the process of change is analyzed substantively or theoretically. As Strauss, et al (1963) explained,

> Students of formal organization tend to underplay the process of internal change as well as overestimate the more stable features of organizations - including its rules and its hierarchical statuses.

The scheme for analyses which would fill this gap was outlined by Bucher and Strauss (1961:325-324). They remind us that professions are not necessarily as homogeneous as functionalist analyses have led us to believe. In fact, within an occupational group moving toward professionalization we can expect to find many identities, values and interests often in conflict. Looking at an emerging profession as a "loose amalgam of segments pursuing different objectives in different manners" seems to be particularly appropriate to

physical therapy as indicated by some of the previously discussed diversity in work settings. It is also clear that as Strauss (1963) demonstrated, the hospital can be viewed as a site in which the multiplicity of professions in a rapidly evolving institution necessitates constant negotiation among staff and between staff and patient.

Following this approach we are sensitized to how work roles are forged and developed within the various work settings. In the case of physical therapy we would ask if there is a different sense of mission among those who work in an acute setting than among those who work in the homes of clients through home care agencies, and whether this differs from the ideologies of those who work in private practice. Which missions are most likely to be supported by medicine and other occupations and organization in the health care arena and which are more likely to be perceived as a threat?

Bucher and Strauss (1961) urge attention to the core activity and range of work activities and how they contribute to the process of professionalization. Are there differences in methodologies and techniques within physical therapy? Some work, for example, in a division of labor that includes occupational therapy and some do not. Where physical therapists are the only rehabilitation personnel, does their work expand? How does closeness to medical supervision affect differences in methods and techniques?

Who are the clients, and how do patient-physical therapy relationships compare to patient-MD relationships. How do relationships vary by settings and client characteristics? To what extent is there a colleagueship among physical therapists? Is there identification with the profession or merely with one's own segment? Do the physical therapists who work in an acute setting have a greater sense of alliance with other occupations found in that setting than with physical therapists working for home health agencies in the community? Which physical therapists' interests are being served most directly by the professional associations? Which segment's interests are represented in the code of ethics and by the major professional associations? Who composes the leadership of the profession? What are its strategies and how are they related to the fates and fortunes of the various segments within the profession? These are all questions which are suggested by Bucher and Strauss's (1961) processual approach to studying professions and which we will attempt to answer with regard to physical therapy.

A processual approach is particularly important, not only because the subject matter is undergoing rapid change but also because the conditions of professional work, as Larson (1979:xviii) argues, no longer fit the ideal-type of the free practitioner in a market of services, but have moved in the direction of the salaried specialist in a large organization. The formal model of a profession which

emphasizes collectivity orientation and power based purely on expertise as opposed to political processes has become ideology which merely obscures actual social structural processes. This makes studies empirically grounded in the day-to-day interactions of emerging professions such as physical therapy particularly salient.

Summary

The sociological literature discussed above raises a number of issues related to the development of physical therapy in the acute setting, to the relationship between physical therapists and patients, and the contributions of physical therapy to the patients' rehabilitation trajectories. This literature suggests that this relationship cannot be understood independently of the relationship of the therapist to the physician and other health workers, or the institutional context in which the interacton occurs.

Both Roth and Eddy (1967) and Davis (1963) show that rehabilitation cannot take place without attention to the breadth and complexity of persons lives and the meaning of the disability which is constructed in that context.

Drawing on the literature reviewed in this chapter the following chapters will explore the relationship between physical therapy and elderly hip surgery patients in the acute setting. Does physical therapy have the importance to the illness career of an elderly hip surgery patient that

Davis found it had for polio victims and their families? Does the therapist encourage mind and body to serve each other? Is this relationship limited by the subordinate position of the physical therapist vis-a-vis the physician? Is the practice of physical therapy as congruent with the larger society's ideology of achievement when the patients are elderly? Has the occupational hierarchy Davis found emerging with the use of physical therapy assistants continued to develop? The central question raised by Davis (1963) and Roth and Eddy (1967) is whether there is a need for a broader definition of therapeutic activity by treatment personnel. If so, would such a broader definition which addresses the breadth and complexity of the person life require changes in the education of all health care personnel?

Wessen (1965) emphasized the structural conditions, particularly the dangers of attempting to maintain a rehabilitation philosophy in an acute setting. Rehabilitation philosophy, in contrast to acute care philosophy, he points out, requires the patient to be subject, not object in the process. This is explicated in more detail by Safilios-Rothschild's (1970) analysis of rehabilitation and disability roles which are contrasted to Parsons' (1951, 1975) sick role. The conflict between medical and rehabilitation models of treatment explicated by Wessen (1965) suggests potential strains relative to the physical therapist working

with elderly hip surgery patients. In addition to structural pressures which may interfere we will look for how the physical therapist is prepared by her education to define self and work to cope with these contradictions of providing rehabilitation to the elderly with chronic problems in an acute setting.

Are patients expected to be the passive recipients of intervention? To what extent are the expectations of the disabled or rehabilitation roles inculcated as opposed to traditional sick role expectations? Finally how are work roles forged in the acute setting and what are their implications for the professionalization of physical therapy?

This study, then, is a study of two processes, each of which illuminates the other. The first is the professionalization of physical therapy. The second is the illness career of a major group of physical therapy clients, elderly hip surgery patients. The next chapter will describe the research process with emphasis on the relationships between physical therapists and these clients. This will be followed by two chapters on the development of physical therapy and its increasingly elderly clientele which will provide the background for analysis of present day interactions.

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Chapter Two

THE RESEARCH PROCESS

This study of physical therapy and the elderly grew out of a larger study of linkages between health care provided in the acute hospital setting and care provided outside that setting. The goal of the larger study, the Post-Hospital Support Study (PSS), as it is called, was to discover how the discharge system of the hospital, formal supportive services, and informal supports, influence recovery and adjustment processes of older patients following hospitalization.

My employment as a research associate on the PSS staff provided the opportunity for this dissertation research. The principal investigator, co-principle investigator, and project director all encouraged graduate students on the staff of the PSS to find some aspect of the larger study, or some related issue or process for theses and dissertation topics. It was in this context that this dissertation was researched and written.

In this chapter I will first describe the goals and methods of the PSS. Without this background the research strategies of this dissertation cannot be fully understood. The selection of the dissertation topic was itself grounded in the early stages of field work for the larger study.

After briefly describing the PSS I will discuss the assumptions, methods, and strategies of this dissertation. Some of them are issues of particular relevance to medical sociology and the sociology of aging.

The Post Hospital Support Study

The subjects of the PSS were San Francisco residents age 65 and over hospitalized for hip surgery or heart problems. The study design required collection of data during the patients' stay in the acute hospital setting and again two months post-discharge when the patient had returned to the community.

During the hospitalization, or pre-discharge period this researcher and five other research associates and assistants did interviewing and field research inside hospitals. This included formal interviews with patients which focused on the patients' functional status and former lifestyles including social supports and networks. Researchers also looked carefully at planning for the return home or elsewhere in the community. The field research aspect of the study included attendance at patient management, social service, or discharge planning rounds, as they were called in different hospitals.

There were three hospitals which participated in the study; a university hospital, a community hospital and a pre-paid health plan hospital. In each setting researchers

collected field notes regarding hosital systems and processes as well as on individual patients.

Data were gathered from medical charts and other records as well. This included information on patients' medical conditions, progress in physical therapy, and nursing and social service notes which provided evidence of the patients' coping strategies, or responses to the acute episode, as well as the presence and the nature of the patients' social supports.

Observations of hosital processes and interactions were recorded by all researchers and became part of the extensive data files from which qualitative as well as quantitative analysis could be made. These include observations on interactions between patients and staff, as well as among staff members. Informal interviewing of hospital care providers was focused on questions which arose in field notes or in-office analysis sessions on the discharge planning process.

The post-hospital follow-up of patients occurred approximately two months after discharge. At this time each patient was contacted by the same field researcher who interviewed him/her in the hospital. The post-hospital interview was, with rare exceptions, conducted in the patient's home. This interview was designed to assess state of health, physical function, cognition, socio-economic

status, social networks and social supports and coping strategies since release from the hospital.

The PSS proposal, which was funded by NIMH through the Center on Aging (Grant No.R01 MH 32731), states that the study will test the null hypothesis that patient characteristics before discharge -"specifically, functional, cognitive, affective statuses, which are repeated as the dependent outcome variables - will account for almost all the variation in outcome." The authors of the PSS grant application were and are committed to both mental and physical services to the elderly and have made their desire to reject this hypothesis clear to NIMH.

The original intent of the authors of the proposal was to examine a large enough number of cases that quantitative analysis of various factors in outcome could be measured using multiple regression as the method of choice. Recognizing the limitations of purely quantitative analyses the authors of the grant proposal planned to use qualitative methods as well:

> If we must accept Ho, given the multiple regression model, we shall look for clues to the significant variables in the data gathering procedures, and in those natural events which surround collection of both structured and unstructured data. We and our assistants will, in the course of collecting data, observe; reflect on our observations; set up tentative coding categories; collect more data through observation and interview; test the coding categories, and if they prove non-inclusive revise them; repeat the process; construct working hypotheses; test them by the same process. In

> short, we shall follow the grounded theory approach set forth by Glaser and Strauss (1973).

While conditions were not optimal for the purest applications of either multiple regression analysis or the development of grounded theory, it was hoped that both approaches could be used simultaneously with minimal compromises to either approach.

The Post Hospital Support Study originally had as its goal interviews with three hundred hip surgery patients and three hundred heart patients, or approximately one hundred of each type of patient from each hospital. The project began training research assistants and associates March, 1981. Entry into the research setting initially involved only observation and chart reviews. Pretesting of interview schedules began in July, 1980. Observations by this author were begun in the university hospital in July, 1980; the community hospital in September, and the prepaid health plan hospital in December.

Interviewing of pretest patients began in the university hospital in August. The pretesting was officially concluded and actual sampling was begun on September 1,1980. The rate at which orthopedic patients fitting study criteria were admitted and interviewed proved to be slower than anticipated primarily due to the rate of admissions. Cardiac patients, on the other hand were admitted at a rate which required random sampling rather than interviewing of every

patient.

Fieldwork Begins

Those of us who participated in the PSS as interviewers and field researchers were expected to spend many hours at the bedsides of elderly people, nearly all of whom were experiencing physical pain or discomfort and emotional trauma. Their futures were uncertain. It was this very uncertainty that gave our work its importance. We were to enter their lives briefly, in this time of crisis, note their responses, and resources, or lack of them. We were not, however, to provide any significant help or support, but simply to observe and record. This prospect was uncomfortable, but only mildly so. Being voyeurs at heart, as all good sociologists must be, and with a sense of mission which arose out of our optimism regarding the power of competent research to influence social policy, we began.

The responses required of the researcher in this context contrast sharply with what might be considered appropriate responses to the layman. The sociologist's presence in the hospital setting is distinctly different from others in that setting because most others are attempting to make a direct contribution to the patient's well-being. Furthermore, the situation is complicated by the fact that the best sociological understandings come not from distance, but from empathy, or intersubjectivity. For these

reasons I will depart from the usual third person mode to discuss the personal experience of doing such research. I do this in the hope that it will alert those doing similar research to some of the difficulties it entails and to some possible strategies of coping with them. It seems to me that the problem is not merely one of maintaining professional distance, but also of maintaining one's nonprofessional sensibilities in order to escape the greatest occupational hazard of the sociologist: becoming a full time observer, as opposed to a participant in life.

The field work for the PSS began with three months of training of research assistants and associates. This included the study of the physiology and pathology of the cardio-vascular system and the muscular-skeletal system with emphasis on the hip joints. Hours and days were spent in medical records departments studying patient charts and learning to decipher nearly illegible physicians' progress notes and orders.

Next we donned white coats and nametags, required by the hospital administrations to help identify us, and observed the physical and social organization of the hospital wards on which our respondents would be located. A pretest period of one month gave us our first opportunities to see medical charts being constructed through daily entries, and to connect these records with actual persons.

The first three months of training provided all the comforts of school. Senior staff exerted themselves teaching while we merely absorbed the new information. This was a familiar and satisfying process. Donning our white jackets and entering the hosital setting was not difficult. We quickly began to understand the ward dynamics, and blended into the hospital scene. Our earliest strategy was what Schatzman and Strauss (1973:60)) refer to as "passive presence." We did not enter into interaction with hospital personnel. Our attendance at rounds initially made us conspicuous, and the staff occasionally appeared somewhat self-conscious in our presence. We felt certain we were witnessing some Hawthorne effect. This was most pronounced at the community hospital where we were not permitted to sit through the discussion of all patients discussed in rounds, but were called in to hear only study patients discussed. Eventually our presence became taken-for-granted and we formed informal relationships with staff members who occasionally confided their frustrations and challenges to us. By this point we were engaging in what Schatzman and Strauss (1973:60) refer to as "limited interaction." This allowed us to seek clarification and the meaning of on-going events but did not include directing interaction.

Our hosts and subjects did not always take our presence in the way that we intended, however. Olesen and Whittaker (1967) have referred to the researcher as a sensitive

instrument and source of data. In order to create a livable world reciprocities of fieldwork are constructed. Definitions of one's self must be offered while asking for definitions from others. The difficulty in creating a balance within and between research and life roles which permits effective interaction and discovery is, as they noted, often problematic. For example, knowing out interest in patients we were occasionally asked to give an opinion of the patients' needs in rounds. Yet the purpose of our presence was to assess the effectiveness of rounds in precisely this area. To deny information they knew we had and still expect them to supply us with information when we needed it strained their understandings of reciprocity. My own response was to offer minimal information and reiterate that I did not consider myself equipped to evaluate future needs. At this point a tentative and non-judgmental stance which permitted some participation was selected over total non-participation as a way of preserving personal relationships that made a livable world both personally and in terms of research productivity. This example shows how emphasizing our interest in the patient to put staff at ease can backfire and interfere with, as opposed to facilitating data gathering.

Initially nearly every visit to a hospital ward resulted in copious notes which came to fill volumes of loose leaf notebooks. Field notes were made on all interac-

tions we observed which might be relevant to the concerns of the study. This was done using the method suggested by Schatzman and Strauss (1973) in which notes are organized into "observational notes," "methodological notes" and "theoretical notes." This system encourages the researcher to segregate observations from interpretations and to build theory while gathering data.

Often our note taking was clearly understood. Often, however, incorrect assumptions were made that we were not interested in a particular interaction. It was in these situations that we often gathered particularly salient data. Since it was impossible and often inappropriate to introduce ourselves to everyone in every setting, we often felt like detectives or undercover agents. This illustrates Thorne's (1980:292) point that gatekeepers, or potential gate keepers are more likely to be told about the research project and to realize they have a right to say no than are group members in positions of less authority. We were aware of the potential neglect of a number of ethical issues such as the renewal of consent, the breadth of disclosure about our range of interests and lack of informed consent on the part of members of the nursing, social work and physical therapy staffs as a result of having obtained permission from higher ranking gatekeepers. However, this situation posed little problem for me or the others because we never recorded names of individuals. Our interest was in processes. Where these

processes were ineffective or inadequate we made careful notes. Our position was that this gave us the opportunity to contribute to eventual solutions without threatening usually well meaning staff members who seemed to be caught in an inadequately functioning structure.

In situations where an individual patient seemed to need help that a staff member could easily provide we chose to err methodologically in the direction of intervention. This meant that on several occasions we alerted social workers to specific concerns of patients. We rarely had the experience of seeing problems as failings on the part of individual staff members. Perhaps this was due to our sociological perspectives. On the contrary, what was often remarkable was how so many well intentioned, hard working, dedicated individuals could collectively work so hard, yet so many problems remained unsolved.

The biggest personal challenge of the project came to me and to other interviewers as we began to approach patients for their permission to participate in the study. These encounters provided the first opportunities to talk with the elderly victims of heart attacks, congestive heart failure, degenerative arthritis, or hip fractures.

Obtaining consent was the first major challenge to the interviewing staff. Our initial consent forms were lengthy documents of six paragraphs or approximately 400 words,

which filled a page with rather small print, leaving narrow margins. These papers covered all the topics required by the university Committee on Human Research. Often the patients we approached were unable to read the small print. Sometimes they did not understand the language. It was designed to suit an academic committee rather than a cautious, or even suspicious, elderly person with poor eyesight, who might be confused by the strange environment of the hospital and the numerous strangers involved in their care.

It quickly became apparent that the consent form was a significant barrier to access. Patients would often tell us intimate details of their situation, but refuse to sign. This meant that even if the patient was eager for conversation we could not proceed with the interview. Furthermore, the patients most wary of signing the consent form were often poor blacks, or other minority members whom one suspected had their caution from unscrupulous salesmen, or perhaps had been warned by streetwise relatives not to sign anything.

The consensus among the interviewers was quickly reached that a simpler consent form in larger type was essential to avoid seriously biasing the sample. Eventually a revised form, reduced in length by approximately half, was approved by the Committee on Human Research.

Each of us quickly gained confidence regarding our encounters with patients. At this point our methodological strategy was what Schatzman and Strauss (1973) have called "active control", directing interaction along lines designed to provide relevant information. We learned to time our initial visits to avoid inconveniencing both staff and patients. We learned to present our project simply and clearly. In describing the study we quickly learned to avoid references to age. Patients indicated in various ways that they did not think of themselves as old, or if they did, they did not want to be reminded of it. It seemed likely that the current hospitalization may have been a symbolic confrontation with old age for many of the patients. Our success rates in gaining consent improved when we explained our interest in them as being related to diagnosis and residence in the city and avoided mentioning the additional criteria of age over 65.

I learned that in presenting myself and the project to patients that my success rate improved as I approached patients with more warmth and less officiousness. I also found my own comfort increased as I made it clear to patients that I was seeking their help and would probably be of no help whatsoever to them. Being rather helpless at the time, this idea seemed to have some appeal to most of the patients. They also liked the idea that their cooperation might eventually contribute to easing someone else's

recovery process.

Focusing the Study

Up to this point the context in which this dissertation research was to be carried out was dictated by the PSS. I was fortunate to have the opportunity of carving a smaller research project out of this larger one; one which would contribute to the larger study and yet be my own as well. My sociological training includes the assumption that there is a need for social research aimed at the generation of theory and that a Ph.D. thesis presents both an opportunity and a challenge to make such a contribution. A further assumption is that theory is best derived empirically. The choice of a topic for this thesis is itself grounded in the fieldwork of the PHS. It was selected after three months of reviewing medical charts, observing hosital processes, and after several pretest interviews had been conducted.

The hospital routine was a busy one. Researchers had to work around nursing regimens, meals and baths. This was all expected. However, we had given little thought to a major event in the orthopedic patient's daily routines; physical therapy. Often the patient and the chart were signed out to physical therapy. At the University hospital where our observations began, we found physical therapists participating in patient management rounds. Their comments on patients' progress seemed to be significant in discharge

planning.

A review of medical sociology literature confirmed the suspicion that the role of physical therapists was given very little attention. While many heart patients did not receive physical therapy, many did. In the case of hip surgery patients, however, physical therapists almost without exception had frequent and sustained interactions with patients. Further, patients indicated in a variety of ways that these interactions were significant for them. It seemed this relationship warranted more attention than it had received, not only in medical sociology literature, but in policy and aging literature as well.

The obvious questions, from a sociological perspective, revolved around the consequences of such interactions for both aged patients and for the occupation of physical therapy.

Understanding the contributions and or limitations of physical therapy for the elderly would obviously require focusing more carefully on hip surgery patients than heart patients. The prospect of using hip surgery patients as the main focus had a number of practical advantages which facilitated the research process. Encounters with congestive heart patients whose breathing had to be facilitated through the use of tubes in their noses through which oxygen passed, and for whom each breath was a struggle, made the prospect

of interviewing hip patients particularly attractive. Heart patients were difficult cases for study because the variations in their conditions and lengths of stay were less predictable. Hip fracture and elective hip replacement patients were always in the hospital at least two weeks and seemed to be receptive to visitors. Their pain was greatest prior to, and immediately after surgery, but they could be interviewed some time later just prior to a predictable discharge. Thus the basic questions were posed and the possibilities for answering them presented.

From this point it was clear that the thesis would have to span both the social-psychological and the structural; the personal and the political. If the contribution or limitations of physical therapy in interaction with the elderly could be understood it would clarify options for the future -- both for the occupation and the patient.

Methodological Assumptions

The most basic requirement of any method is that it be adequate to its subject matter. Following the work of Schutz (1962), this assumes the essentials of social life include the common sense constructs and typifications which link our consciousness to other peoples' to a degree which makes social action possible. This suggests that my task, as for any social scientist, is to refer to the subjective points of view of both patients and physical therapists in

an objective manner. As Schutz (1962) has emphasized, there is no contradiction here. The actor's viewpoint is embodied in first order constructs. The sociologist's analysis forms a second order of constructs which are based upon, but not confused with the first order constructs. Constructs formed on the second level are theoretical systems embodying testable general hypotheses. These are the considerations that informed the social-psychological aspects of this project.

The phenomenological perspective of Schutz is both supported and supplemented by the theoretical perspective of symbolic interactionism which has further influenced the methodology of this research. Symbolic interactionism, as developed by George Herbert Mean (1939) and elaborated by Herbert Blumer (1969), provides the theoretical framework for observing not only the world as defined by the actors in it, but the social process of reality construction on which human action is based.

Both the social psychological and structural issues in this thesis were developed systematically using many of the analytic methods developed by Schatzman and Strauss (1973) and Glaser and Strauss (1967). The project began with the fewest possible assumptions. Both concepts and hypotheses were generated from the data and were systematically tested in relation to the data during the course of the research. As Glaser and Strauss have suggested, both quantitative and

qualitative data are suitable for this purpose and both have been used here. For example, the original intent was to analyze the typical hip surgery patients' interaction with the physical therapist within the framework of a trajectory or process model. This plan was based on the ungrounded assumption that hip surgery patients have essentially similar trajectories and that the internal dimensions of the process would be the focus of analysis.

Analysis began with observations, copious taking of field notes, and moved to coding, or noting categories of interactions or events involving the physical therapists and patients. Codes relating to time of initiation and patient responses to therapy revealed therapy could be initiated even prior to surgery and might be welcomed or resisted. The wide range of experiences was explored and efforts to categorize them made little sense until the basically dichotomous form of the data emerged. The dichotomy was between the elective replacement patients and the fracture patients.

These responses at first seemed to be linked to the type of surgery, replacement or repair. Using the constant comparative method which is the heart of grounded theory the important categorical distinction was soon recognized to be not the procedure itself, but the conditions which led to the surgery. In other words, whether it was elective, or the result of trauma. Then it became possible to begin to look for the properties of these two categories which the

data began to yield fairly readily. Attempts were made to compare the future trajectories of fracture and elective surgery patients. Uncertainty existed in both cases. For the elective surgery patients it was minimized and converted to optimism. In contrast, uncertainty was never overcome for the fracture patients. Instead, it emerged as the central social construct not only for fracture patients but for staff as well. Exploration of the dimensions of this uncertainty and the meanings of the fracture revealed that it threatened patient's self-conceptions as independent people. The concept of a "shattered self" resulted from these data.

The definitions of the situation held by the fracture patients contrasted sharply with those held by the elective surgery patients. The latter saw the hip replacement, not as a threat, but as a means of strengthening a sagging self-conception. The surgery provided the possibility of a favorable future trajectory. We noted that this was based on a socially constructed recovery philosophy. In this case it was the philosophy of intervention according to the acute care model.

Theoretical sampling was limited by the methodological requirements of the larger study, but quasi-theoretical sampling was done by looking among those cases in the sample for negative cases. For this purpose we included pretest cases. The negative cases sought were those in which elective surgery patients did not exhibit belief in a favorable

future trajectory, or fracture patients who did not appear to victims of the "shattered self" syndrome. While exceptions to these two patterns were few, three cases were found which seemed to be exceptions, but actually refined the analysis. These included a case in which a replacement patient was so lacking in understanding of medical processes, and so mistrustful of physicians, and completely without social supports to reinforce the dominant recovery philosophy, that she was unable to sustain the optimism replacement patients usually display. Another exception was the case of a hip fracture patient who, with the help of recovery philosophy supplied by her family, and to which she had previously subscribed, could construct a favorable future trajectory. This philosophy was based on wholistic health treatment modalities, which may not have been the most appropriate, but they did provide a recovery philosophy which became the basis for explaining to her why she had a better chance than most people in her position to do well in the future. This enabled the patient to repair her shattered self conception. Furthermore, this philosophy was not inconsistent with her participation in physical therapy. The third exception was a retired physical therapist who had a good understanding of rehabilitation philosophy and used it to build a favorable future trajectory as well as to guide her behavior in the hospital. As a result she was an eager participant in physical therapy and made a remarkably rapid recovery.

These cases helped to clarify the importance of a recovery philosophy or ideology and the need for this to be buttressed by social interactions. Theoretical saturation was assumed to be reached when new interviews collected by all interviewers failed to yield data which challenged this formulation. This analysis was facilitated through the participation of other staff members who met regularly to compare findings and generate theory and hypotheses for the PSS. As understandings of significant processes or new concepts emerged in my own work they were shared with others who were themselves immersed in researching the same processes and settings. This provided a simultaneously informed, critical and supportive check and balance system which constantly refined concepts and analysis. There was an effort made to draw on everyone's field work and interviewing data. All findings had the potential challenge and refine emerging analysis. This process, which Glaser and Strauss (1967) call the "constant comparative method" was used by the PSS as well as in the work toward this thesis.

Interviewing the Ill Aged

When powerless groups are being studied the greatest challenge to the researcher is to interview and interact in such a way that definitions of reality unanticipated by the interviewer are not precluded from being expressed. When the subjects are old people this danger exists. It is com-

pounded when most of the subjects are not only traditionally passive women (Beeson, 1975), but are ill as well.

The interview schedules used by the PSS consisted of 124 questions most of which were closed ended. To supplement the data which could be obtained in the interview it was necessary to spend much more than the minimum time with each patient. I had to encourage digressions, ask additional questions, and allow patients to freely express a variety of observations and concerns. The standard interview took approximately one hour and was completed in an average of two visits. Since the interview was conducted at the patients bedside in the hospital there were frequent interruptions. Often I saw patients four or five times and spent as much as two to three hours with each patient.

The major problem was not that this was time consuming. I eagerly made time and most patients seemed to welcome the attention. The methodological problem that had only vaguely been anticipated was a product of discovering the basic social-psychological process for the patients, particularly for hip fracture patients. To the extent that I provided openings for its expression these patients became quite explicit about their depression and despair. As I became sensitive to their situations they seemed to become freer in expressing their pain. They often shared their ambivalence about continuing to live in the face of the problems created by their injuries. They sometimes told me how their memory

loss and confusion during their hospitalization frightened them. Other times they told me how they preferred "tuning out" to their current reality. Their suffering began to weigh on me. I even questioned whether I was contributing to their bleak outlooks. I was reassured that this was not the case by the contrasting character of my interactions with elective hip replacement patients. I found these patients cheerful and optomistic. Interviews with them were quite pleasant.

The depression of hip fracture patients had to be dealt with analytically. It has become a significant element in the analysis of the patients' disability and rehabilitation trajectories. While the problem could be handled analytically, the difficulty was in handling it personally. The emotional stress of constantly being confronted with despair and depression began to manifest itself in minor but persistent physical problems in me. My responses were not significantly different than those of other interviewers. Other staff members began to show signs of stress including increased absenteeism, dissatisfaction with the job, dissention and general lack of enthusiasm for the project. These problems were nipped in the bud when the Project Director recognized the signs of "burn out". She had witnessed some of the same tensions on an earlier geriatric research project. As a result, and with the support of the Co-Principle investigators, interviewing loads were reduced, work assign-

ments made more varied. Not least important in our coping processes, discussions of the emotional stress of such research were initiated. These discussions provided an opportunity to vent some of our frustrations and renewed the comraderie of the staff which had been strong in the beginning. Once these adjustments had been made analysis again proceeded smoothly.

The senior staff supported my interest in hip patients and physical therapy by assigning to me primarily those patients for interviewing. I interviewed over thirty such patients. Most of these (24) were fracture patients. The remainder were replacement patients. In addition to those patients I personally interviewed, I had access to the interviews done by others on the staff. Their insights and observations were invaluable to me and helped to clarify my own perceptions immensely. While I interviewed heart patients, too, the emphasis on hip patients gave me an opportunity to observe physical therapists at work and to do informal interviewing of physical therapists, physical therapy assistants, occupational therapists, social workers and nurses. Interviews of all three PT chiefs and many PTs were done as well.

To supplement my interviews of physical therapists in the three acute settings, and for comparative purposes, I also interviewed therapists in other settings. These included rehab centers, private practice, home health

programs and university teaching programs. The focus of the interviews evolved as my analysis emerged. Questions were constantly refined on the basis of new understandings.

The historical data for chapter two were gathered primarily through the use of professional journals dating back to WW1. These included physical therapy, medical and nursing journals. Interviews with some physical therapists whose personal experience spanned many years contributed to this analysis as well.

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Chapter Three

PHYSICAL THERAPY: BECOMING A PROFESSION

Physical therapy in the United States emerged and developed primarily as a response to the physical needs of children and young adults which developed out of efforts to prevent and repair muscle damage inflicted as a result of polio. More recently, however, historical changes have taken place which make physical therapy an occupation whose current success and future growth lies in its capacity to effectively serve the needs of the elderly.

This chapter will trace the growth of physical therapy and examine some of the major issues in that process. This examination of the development of physical therapy is necessary to understand its current position in the health care system and its potential for the future. Physical therapy is an occupation which often has been submerged under the term "rehabilitation personnel". However, it has a unique relationship to other health care occupations such as nursing and occupational therapy, and particularly to the dominant occupation, medicine. These relationships will be examined in this chapter. We will also look briefly at other processes in the movement toward professionalization such as the growth of the division of labor within physical

therapy, the integration of men into the occupation, and the development of private practice. These issues will provide background for looking at the development of physical therapy more specifically in terms of implications for the elderly in the next chapter.

The Emergence of Physical Therapy

Disability remained a personal rather than a social problem in the United States throughout the late 19th and early 20th centuries in spite of the high rate of industrial accidents resulting from poor working conditions. However, veterans of wars dating back to the American Revolution did receive government pensions as compensation for their war related disabilities. While acute care was provided, both vocational and physical rehabilitation were unknown (Rubin and Roessler, 1978:23). In the post civil war period charities and private organizations supported some of the earliest efforts in the direction of what is now termed rehabilitation. This took the form of finding employment for the disabled or setting up workrooms in which victims of obvious misfortune could earn some income. The medical care available was rarely sufficient to permit the survival of a severely disabled person until after the turn of the century because asepsis, anesthesia and surgery were in their infancy (Straus, 1965:27).

The passage of the first worker's compensation law in

1910 resulted in statistics which illustrated that civilian living was more dangerous than life in the army during a war (Obermann, 1965:124). In 1917 the first federal vocational training program was enacted to train the large numbers of rural youth who were flocking to the cities and dislocated industrial workers. It was only with World War 1 that the first government program for vocational rehabilitation was initiated for the physically disabled. This was the Soldiers' Rehabilitation Act of 1918 (Oberman, 1966:32).

World War 1 was the first war in this country's history to occur when medical technology was sufficiently advanced to enable large numbers of disabled soldiers to survive. Not only were the soldiers' disabilities conspicuous by virtue of their numbers, but the war created a shortage of skilled labor which could not be adequately solved by existing vocational training programs. Therefor, it soon became apparent that it was in the interests of both management and labor to extend vocational training programs to include vocational rehabilitation for disabled veterans (Straus, 1965:18).

Rehabilitation services to veterans were first supported in this act on the grounds that their disabilities presented a handicap to employment and that employment as a result of vocational rehabilitation was a feasible possibility (Oberman, 1966:21). This legislation combined with a high survival rate due to medical advances created a waiting

list of 4,000 disabled veterans seeking rehabilitation by the end of the program's first year (Rubin and Roessler, 1978:24). By late summer, 1921, nearly 236,000 disabled veterans were being trained for jobs (Obermann, 1965:611).

Prior to the passage of the Soldiers' Rehabilitation Act, physiotherapy, as it was called, was provided privately to most of those who received it, under the auspices of orthopedic surgeons. The northeastern United States suffered a series of outbreaks of poliomyelitis from 1894, with a particularly large epidemic in and around New York City in 1916 (Berg, 1946:14). Overloaded with young patients who were suffering loss of function and deformaties, orthopedists sought assistants in an effort to correct and prevent these problems. Schools of physical education at that time taught massage and corrective exercises , so their graduates were likely candidates for this new role.

> These young women with their basic knowledge of anatomy, kinesiology, physiology, corrective exercise, and teaching methods had an excellent background for this specialized aspect of the physical restoration and prevention of deformaties (Decker, 1966:1176).

The prime mover in the emergence of physical therapy in the United States was Mary (Mollie) McMillan, who, although born in this country, grew up in England where she graduated from Liverpool's College of Physical Culture and Corrective Gymnastics. After going on to study neuroanatomy, neurology

and psychology in London, she returned to the United States to become Director of Massage at the Crippled Children's Hospital in Portland, Maine. In 1918, she was called upon by the Surgeon General's Office to assist in organizing the Women's Auxiliary Medical Aides Department, which was to provide much of the care for disabled soldiers which had been authorized under the Soldier's Rehabilitation Act. In March of 1918, she was promoted to the position of Head Reconstruction Aide. Later in 1918 McMillan received leave to go to Reed College in Portland, Oregon to assist in starting one of the fourteen emergency courses to train young women as "reconstruction aides in physiotherapy", as they were then called, for service with the army. These aides were to become civilian employees of the forty U.S. Army hospitals throughout the United States. McMillan later served as Chief Head Aide in the Department of Physiotherapy at Walter Reed General Hospital, then became Supervisor of Reconstruction Aides in Physiotherapy, Medical Department at Large, Office of the Surgeon General.

As the war drew to a close, McMillan left the army and returned to practice with an eminent orthopedic surgeon and continued teaching postgraduate courses at Harvard Medical School ("McMillan", 1960).

World War I was thus the impetus for the rapid proliferation of physical therapists, or physiotherapists, as they were called at that time. The formation of the first

national organization came in 1920. In March of 1921, McMillan was elected first president of what was then called the American Women's Physical Therapeutic Association. At that time, the organization had 200 dues paying members. The Physical Therapy Review, precursor to the present day journal, Physical Therapy, was born the same year. The first textbook on physical therapy was published in 1921, authored by McMillan and entitled, Massage and Therapeutic Exercise. In 1922 the name of the national organization was changed to The American Physiotherapy Association, so that men could be admitted.

Once World War I was over, emergency courses in physical therapy were discontinued. A variety of programs were being conducted by private schools, hospitals, equipment companies and even correspondence schools (Decker, 1974:28). In an effort to establish professional standards, the association began surveying and accrediting schools of physical therapy. In 1926 only five schools were accredited by the Association. These included Harvard Medical School, and on the West Coast, Children's Hospital of Los Angeles (Decker, 1974:28).

World War I ended with the rehabilitation movement only beginning to develop. In June, 1920 Congress passed Public Law 236, the Civilian Rehabilitation Act, which extended earlier vocational education benefits for the physically disabled (Rubin and Roessler, 1978:25). While this

legislation was only temporary and required states to match federal funds on a 50-50 basis, it was the beginning of a series of laws through which the federal government assumed increasing economic responsibility for rehabilitation related activities. With the federal Social Security Act of 1935, the state-federal vocational rehabilitation program became permanent and thenceforth, could be discontinued only by congressional action (Rubin and Roessler,1978:27).

While federal support of rehabilitation expanded steadily for the next half century following World War I, the next big stimulus for the growth of physical therapy was World War II. This war had a profound effect on the development of rehabilitation services and occupations generally. It drew twelve million people into the war effort which enabled disabled people to have the opportunity to demonstrate their capabilities in appropriate jobs. It also created many battle casualties which required long term medical management. Furthermore, advances in surgical technique and drug therapy made rehabilitation even more promising than it had been previously (Allan, 1958:8).

The federal government continued to support rehabilitation in the post-war years. The Vocational Rehabilitation Act Amendments of 1954 are often considered a turning point in the history of rehabilitation, because they represent the combined, and successful, efforts of President Eisenhower and congress to make rehabilitation, in all its many

aspects, a matter for national concern and action (Allan,1958:11). These amendments increased the federal share of funding of the state-federal vocational rehabilitation program and supported numerous research and demonstration grants to state and private organizations. They supported construction of medical facilities and also provided substantial support to colleges and universities for rehabilitation related programs (Rubin and Roessler, 1978:33).

Such legislation promoted the development of a number of occupations related to rehabilitation,particularly physical and occupational therapy:.

> "disciplines which were to prove most effective in the physical restoration process and as working tools for the physicians use (and which) standardized the practices and the aims of medical rehabilitation" (Allan, 1958:10).

On reviewing the early years of physical therapy, Decker (1974:30), characterized them, prior to fall, 1939, as the pioneering phase, in which flexibility in training was a necessity. During this period physical therapists whose educational preparation did not meet the American Physical Therapy Association's standards could nevertheless be admitted to the field through qualifying examinations. Decker sees the period between 1929 and 1956 as the middle phase; a time in which rules and regulations were solidified. She chose 1956 as the end of this period because that was the year in which the Bureau of Employment Statistics of

the U.S. Department of Labor granted professional recognition to physical therapy, removing it from the classification of a semi-profession. Decker noted in 1974, that a last hurdle remained, and that was gaining recognition as the primary accrediting agent for educational programs in physical therapy (Decker, 1974:30). Since publication of her analysis some developments have taken place with regard to accreditation which we will discuss below.

The current status of physical therapy reflects considerable development. In 1970 there were 52 accredited educational physical therapy programs offering bachelor's and master's degrees and certificates. In 1970 New York University started the first Ph.D. program in the field (Decker, 1974:30). By 1980 there were 32,000 members of the American Physical Therapy Association (Wortley,1980:1435).

In a 1974 article on forces influencing the future of physical therapy, Johnson (1974:37) cited several major issues in the future of PT. These included 1) the submerging of many PT educational programs in schools of allied health or medicine, 2) the control exerted over physical therapy by organized medicine through the accreditation mechanism. From the emergence of physical therapy in the first three decades of the century we can see signs of an increasingly strained relationship with the profession of medicine.

Medicine and Physical Therapy

Physical therapy has been described by one of its own historians as "the outgrowth of two independent professions, namely, medicine and physical education" (Decker,1974:27). This formulation, while not inaccurate, obscures the subservient position of "physiotherapy" in its early years, a subservience which it has struggled somewhat successfully to overcome. For example, when the national association was founded in 1920, one of its stated purposes was "to offer the medical profession efficiently trained women..." (Elson, 1964:1069). More recent statements refer to the therapists' allegiance to the patient, not the physician . The change in orientation was a gradual one, similar to an offspring gaining experience and maturity and with it, a desire for greater independence.

The complexity of the relationship between medicine and physical therapy is illustrated by the fact that during the first third of this century physicians interested in physical methods of treatment referred to themselves as physical therapists. In 1921, they formed the American Congress of Physical Therapy to facilitate the pursuit of professional interests. In 1924, the AMA organized a Council on Physical Therapy to investigate the efficacy of physical methods of treatment (Hibben, 1936:47).

Various other organizations of physicians interested in

specific aspects of physical therapy existed during this period, as well. The American Electrotherapeutic Association, founded in 1890, and "devoted to the uses of electricity,the x-ray, and other physical agents" became The American Physical Therapy Association in about 1930, and in 1933 merged with the American Congress of Physical Therapy (Physical Therapeutics,1932:147-148). Simultaneously, the journal, Physical Therapeutics, was incorporated into the Archives of Physical Therapy, X-Ray, Radium, the forerunner of today's Archives of Physical Medicine and Rehabilitation.

As discussed above, World War 1 created a tremendous need for "reconstruction aides in physiotherapy" and contributed greatly to the proliferation of such workers as well as to an appreciation among the laity of the benefits of their treatments. Obviously M.D.s with an interest in such therapy could not be produced as quickly nor as cheaply, so they became vastly outnumbered by "physiotherapy aides" who as a result worked in settings where only minimal supervision by physicians occurred. Because physical therapists received referrals from orthopedists, neurologists, internists and other specialists as well as physiatrists, no one specialty was able to control their use and development. The need for, and desire of, these newly trained health workers to use their skills began to threaten the dominance of the physician. For example, one physician commented, in a formal address to his colleagues, in 1927 (Pope,1927:460):

> One of the problems of the day is the physiotherapy aide. With Pickwickian bombasity he, or rather she, has assumed a place and position not deserved. ...Too often the servant knows more than his master, the physician who employs him.

The ability of physicians to martial their numbers to control this method of treatment was apparently hampered by four factors, 1) dramatic advances in surgery and drug therapy; 2) skepticism regarding the efficacy of physical therapy; 3) charlatanism in physical methods; and, 4) a belief that a specialty in physical medicine was not the best way to promote it.

The discovery by Koch, in 1860, that a bacillus causes anthrax opened the way for the elaboration of the germ theory of disease and the development of chemotherapy. At the same time, anesthesia was making new forms of surgery possible and contributing to its efficacy. These events were dramatic and often produced rapid results. They drew the interest and energies of the majority of physicians away from physical methods.

Physical therapy was often a slower process. Furthermore, wild claims were being made by manufacturers and salesmen for hundreds of new machines and gadgets that were often obviously of little value.

In 1927, Pope argued that the "high powered physical therapy salesman" had taken the place of the detail man from

the drug companies. According to one physician who was a supporter of physical methods, it was not only laymen or physiotherapists who were taken in by these claims:

> The frankly ignorant medical man is told "push the button, and the machine does the rest." rushing in where angels fear to tread. Totally ignorant of the physics of these measures, knowing nothing of the physiological action of the various modalities upon the human body, stimulated by the Midas touch of commercial representation, they acquire a limited outfit and with more limited knowledge to the laying on, not of hands, but of electrodes, proceed to "give treatments." (Pope,1027:458).

The promoting of machinery was such a problem that the AMA's Council on Physical Therapy took on the task of evaluating them:

> Since its inception the Council has considered 356 pieces of apparatus of which 191 have been accepted and twenty-two rejected. One hundred and forty-three devices are still under consideration. consideration, since they obviously revealed no therapeutic efficacy.

Apparently rejection in many cases was difficult due to pressure from manufacturers. The report further states that of the 191 devices still under consideration:

> a large number have been investigated and rejected; but when the reports were sent to the respective manufacturers in many instances they requested that the reports be held in abeyance pending further consideration.

Carter (1936:236) laments the lure of the machine:

> Apparently the profession did not have the opportunity to learn that true physical therapy consists chiefly of intelligent application of heat, massage, and exercises and that machines and apparatus, although valuable in their place, play a relatively minor part.

Those physicians who believed physical therapy was of value were divided on the question of whether or not it should be a specialty. Many of its advocates believed physical therapy should not be a specialty anymore than drug or chemical therapy should be a specialty. They felt all physicians should be trained in physical methods of treatment. This was the position taken by the AMA Council on Physical Therapy in 1936 (Carter, 1936:236): Even those physicians who felt there should not be a medical specialty based on physical methods, nevertheless, felt the need to limit the growing autonomy of physiotherapists, to whom they often referred as physical therapy technicians or aides:

> It eventually became evident that like nurses, physical therapy technicians could not be left to work out their own destinies... One of the circumstances that clearly revealed the need for authoritative control of physical therapy technicians was that quite a number of them arrogated themselves the role of independent practitioners... measures were necessary to stem a movement which was sure to grow into what is perhaps best described as another pseudo medical profession. (Smith,1936:620).

Existing histories of physical therapy and physical medicine do not clearly reveal the relative weight of the various factors that led to a major agreement between the

AMA and the American Physiotherapy Association in 1932-34. This agreement provided that the AMA's Council on Medical Education Would undertake inspection of all existing training schools and accredit those deemed suitable. According to the APTA (Decker, 1974:28), this move was made at their request, and clearly it provided them with increased legitimacy and status. On the other hand, medical publications indicate the impetus came from medicine:

> American Congress of Physical Therapy, and its affiliated organizations...met and decided that it was the prerogative and duty of specialists in physical therapy to prescribe the qualifications of their technicians and formulate the relation of the latter to the medical profession (Smith, 1936:619).

This document suggests that chivalry was a motive as well:

> Many complaints reached the public that "massage parlours" and similar undertakings were run for improper purposes. There arose the danger that respectable women devoting their lives to a service of caring for the sick might become tarred with the same brush (Smith, 1936:619).

Opponents of this plan to give the AMA power to accredit schools for physiotherapists apparently questioned these motives:

> Somehow they became possessed of the unworthy idea that the medical body organized to assume control over physical therapy technicians was motivated by a desire to increase its revenues. To what extent this uncalled for assumption still persists among members of the technician's association can, of course, not be determined with exactness: it suffices to know that it still exists (Smith, 1936:620).

These documents further indicate various coercive methods were instituted to insure compliance. Among these was an agreement between the AMA and the American Hospital Association that member hospitals would employ only AMA registered therapists.

While this agreement has elements of power politics it was no doubt consistent with the goals of the leadership of the American Physiotherapy Association. It was, however opposed by those physiotherapists who were venturing out into private practice. The arrangement included the agreement that the APA would define as unethical the treatment of any patient without physician's prescription. As early as 1936, physicians had indicated discomfort with the fact that non-physicians were calling themselves physical therapists and those whom they referred to as technicians or aides were calling themselves physiotherapists. They began to consider terminology which would be more distinctive, as indicated by this comment in a presidential address to the Congress of Physical Therapy, Hibben (1936:48) stated:

> Physical Therapy should properly be renamed Physical Medicine, as this term better expresses its scope and dignity.

It was not until 1944 that this advice was taken, however. That year at the 23rd Annual Session of what was still known as the American Congress of Physical Therapy, its president commented that:

> An important organizational advance has been made in the adoption by the AMA of the term "physical medicine" which includes physical therapy, occupational therapy and spa therapy and rehabilitation.

Not long after this, the Council and the Congress replaced the term "therapy" with medicine in their own names. These changes in name reflect, as changes in names usually do, important changes in identities. This is true for both the disciplines of medicine and physical therapy.

World War II, as mentioned above, created renewed interest in, and demand for physical therapy. While registered physiotherapists worked only on patients for whom physical therapy was prescribed by an M.D., this was becoming more and more a bureaucratic ritual. Often prescription would be for "PT", with the specifics left to the therapist. The physical therapist assumed more and more autonomy in evaluating the patients' needs and planning and implementing the treatment.

This situation contributed to a renewed interest in physical therapy among medical doctors.

> The lack of appreciation and interest on the part of the medical profession has made it possible for less orthodox and indifferently trained groups to become aggressively active in and to monopolize a field of therapy which must be and should always have been under the control of physicians (Piersol,1944:721).

This author also noted that much of the enthusiasm for phy-

sical medicine was a result of problems arising out of World War II:

> It has been said that the last war did much to establish orthopedic surgery as a recognized specialty. This war may do the same for physical medicine (Piersol,1944:722).

Problems arising out of WWII were not the only ones responsible for the emergence of physical medicine as a board certified medical specialty. This occurred in 1947, partly as a result of economic support for education in physical medicine from the National Foundation for Infantile Paralysis. In 1947, its name was changed to the Board of Physical Medicine and Rehabilitation (Allan, 1958:10).

The emergence of physical medicine (or physiatry, as it is often called), was a development that was generally not welcomed by physical therapists. It was from their point of view seen as encroachment, or an attempt to control physical therapy. For example, one historian of physical therapy wrote:

> When this council (on physical medicine) arbitrarily encompassed in its realm of activity the services rendered by several well established professions, physical therapy was one of them. The workers in these specialty fields were dubbed as "technicians" since they were experts who were of service, but not a part of the medical specialty. This tag was undeserved in the first place, and unfortunately has persisted in the minds of many in spite of vigorous efforts on the part of physical therapists to erase it. In far too many instances physical therapy has lost its identity when brought under the all inclusive term of

> rehabilitation or physical medicine (Decker, 1966:1167).

Having begun as assistants to orthopedists, and having outgrown dependency on that relationship, PT suddenly found it's autonomy being limited by an entirely new medical specialty, whose major purpose, many believed, was to control the ascendence of PT.

Perhaps the most overt and angry confrontations between the AMA and the APTA have been on the issue of accreditation of physical therapy programs. Early in its history the APTA recognized the importance of this activity and it accredited the first five programs in 1926. In 1936, at the request of APTA, the AMA Council on Medical Education assumed this responsibility with APTA serving as an advisory group. In 1956, the Committee on Medical Education of the AMA asked APTA to assume a more active role in the site visiting and approval process for these schools of PT. A collaborative plan of accreditation was then developed. Subsequently APTA participated in the process with varying levels of authority until 1975, when APTA's House of Delegates charged its Board of Directors to take necessary actions to explore independent accreditation of PT programs. A petition and appropriate applications were submitted to the U.S. Office of Education and Council of Postsecondary Accreditation (COPA) in December of 1975. Hearings were scheduled for March 1976. The dispute was one regarding the appropriate level of

autonomy for PT. As one APTA president stated in explaining the move for autonomy in accreditation:

> Historically a profession has strived to convince its particular society or community that the profession should have control over its particular area of interest, and that this control may be either formal or informal. The granting of such control is reflected in credentialing and accreditation...(Bartlett, 1978:1327).

There was a recognition of the professionalization process among the leadership of APTA as well as conflict with the AMA over the specifics of accreditation; which were seen by the APTA as attempts by the AMA to regulate the practice of PT through its educational standards.

> At one point in the discussion (of essentials of PT educational programs) a section council representative even suggested that we revert to the concept of having a medical director for PT curricula. That the divergent philosophies between section council representatives and APTA were irreconcilable was apparent (Magistro, 1976: 1234).

Independent accreditation was granted APTA by the Commission on Post-Secondary Accreditation by the Commissioner of Education of the U.S. Office of Education (USOE) in 1979 when they withdrew recognition of the Committee on Allied Health Education and Accreditation, American Medical Association (AMA-CAHEA) in favor of APTA. However, the Council on Post-Secondary Education (COPA) which is heavily funded by the AMA still recognizes both APTA and CAHEA as accrediting

agencies (Bartlett, 1979:1380). In his 1980 address, APTA president Wortley (1980:1432) said that negotiations with the AMA are continuing on a cooperative effort for those institutions that request it. Without elaborating, Wortley assured the membership "cooperative" was the key word and that this did not represent a capitulation (Wortley,1980:1432).

Physical Therapy as an Allied Health Profession

During the period between the turn of the century and the beginning of WW 1, physical therapy was not the only new health occupation to emerge; there were at least 27 others including dental hygienist, dietician, occupational therapist, speech pathologist, radiologic technologist and medical technologist (Nat'l. Comm. on Allied Health Ed., 1980:2). After 1940, new occupations continued to emerge so that by 1970, only one health worker in thirteen was an M.D. (Nat'l. Com., 1980:2). These increases in health workers did not solve the problems of increasing demands for health care, however, and by the mid 1960's the shortage of health workers was a problem of great national concern. In 1966, congress passed the Allied Health Professions Training Act, which provided over $200 million to professions and programs to improve and expand training (Nat'l Com., 1980:3).

During this period the AMA established a Department of Allied Medical Professions and Services which represented a

reorganization and expansion of its Council on Medical Education and Hospitals into Council on Medical Education and its Committee on Allied Health Education and Accreditation.

At the time the Allied Health Professions Training Act was passed, it was offered as a means of solving the "manpower" shortage. There was much to be gained by the various occupational groups covered by it in terms of resources for expansion of training and growth in numbers. The reservations had to do with its implications for professional autonomy. This was addressed frequently by advocates of the bill who explained that the term "allied" did not have the negative connotations of "ancillary" or "paramedical" (Perry, 1968:1116;Nat'l. Com.1980:9-16). The National Commission on Allied Health Education (1980:39-40) defines the term allied health to mean "a patient- or client-focused alliance involving all health practitioners, and not "a low-level worker serving the physician."

> Unfortunately, this image - which has led some of the more influential occupational groups to dissociate themselves entirely from allied health and to adopt an adversary stance toward medicine - is deeply entrenched" (Nat'l Com.,1980:40).

Whether it is only "image" at stake is an interesting question. The APTA, as discussed above, felt their power over the process of accreditation was significantly limited by the AMA. The AMA plays a major role in the accrediting of the "allied health professions," A number of associations

objected to this involvement. APTA has been the most vociferous (Nat'l. Com.,1980:36). The AMA's CAHEA plays a major role in allied health accreditation. This is a role it has played for over fifty years, as the example of PT illustrates. CAHEA's members are appointed by the AMA Board of Trustees, and a majority of its nine members are physicians. The CAHEA and the professional associations collaborate in determining the essentials of the allied occupation or professions' educational programs.

The threat to the professionalization of physical therapy was clearly articulated by an educator in the field in early 1974 . She argued that the classification of PT as "allied health personnel." had negative implications for the future of PT. She argued that PT did not "engage in activities that support, complement, or supplement the professional functions of physicians, dentists and registered nurses." as the official definition of the term allied health professions indicates. This definition is rejected because "it strongly suggests the subservient role of the physical therapist and others classified under Allied Health Manpower." She went on to distinguish PT from other helping occupations by arguing that it emerged in response to the patients as opposed to the needs of physicians and nurses. Her objection to this classification was that training programs supported under the less demanding and less expensive environments encouraged by the Allied Health legislation may

have been an adequate way of providing some workers to support the professional functions of the physician, dentist or registered nurse, but was not adequate for educating a practitioner of physical therapy "whose knowledge, skills and abilities and attributes equip that practitioner to provide a distinct and unique service to society." This position is receive increased support within the leadership of physical therapy.

The position that being classified as an allied health profession was not in the interests of physical therapists was stated strongly in a presidential address in 1978 (Bartlett: 1328):

> In evaluating the profession's direction of the past two decades in regard to professionalization, I am of the opinion that our profession committed drastic errors in allowing ourselves to be classified within a most nonspecific term, allied health... We naively embraced an organizational structure that pretended to represent a vehicle for comprehensive, interdisciplinary care, and interpreted movement away from direct care of patients as "upward mobility."... Because the category provides a convenient structure for those who wish to control, we are certain to encounter great opposition from organizations that have developed around this defined term. In spite of the pessimism of this statement, increasing autonomy has been achieved, particularly with regard to accreditation as discussed above.

Physical Therapy and Nursing

One might imagine that much of what is today defined as

physical therapy could well have been another aspect of nursing, even if, like other nursing specialties, it required specialized training. This was the case in England where the first physiotherapists were all nurses (Ward, 1980:166). The emergence of physical therapy as a distinct occupation in the U.S. is explained primarily by the fact that the conditions which led to the creation of physical therapy also put nurses in extremely short supply. World War I and World War II created an excessive demand for nurses in acute settings. Furthermore, in its early days, rehabilitation often began only after the patient left the acute setting. Thus it made sense to find an entirely new source of personnel for this task. Polio epidemics exacerbated nursing shortages as well.

A second factor in distinguishing physical therapy from nursing, even in the former's formative stages was the often contradictory assumptions of the two occupations. Nurses had been trained to care for patients who were often acutely ill. PT in contrast depended on the patient's willingness to assume an active role in recovery. As an RN explained in a nursing journal of 1948:

> In rehabilitation it is necessary for the nurse to revise her concept of nursing - to try to forget much she has been taught about doing everything for the patient and to learn to teach his to do as much as possible for himself (Jones,1948:76).

Not only was the theory of rehabilitation based on different assumptions than those of acute care nursing, but the realities of day to day care often impeded its implementation:

> It is often much more convenient and timesaving to keep patients in bed than to go through the struggle of getting them up and encouraging them to help themselves (Knocke, 1947:238).

These contradictions between nursing philosophy and practice, which preceded the development of strong rehabilitation nursing, led one nursing educator to suggest that nursing was potentially the weakest link in the chain of progress toward rehabilitation (Knocke, 1947:238).

The nurses role in rehabilitation was still being defined as late as 1949 when one nursing leader in rehabilitation wrote, Nurses who visit our rehabilitation department frequently ask, "What does the nurse do in rehabilitation?" She began her answer with a statement revealing some of the structural distinctions between nursing and rehabilitation:

> Actually we should not have to learn about these things in a rehabilitation center. Rehabilitation does not start at the end of an illness, but at the beginning---. It is true that the nurse must forget some of the things that she has learned --- it is like turning a backward somersault. We cannot rush to the aid of the so-called helpless patient and do everything for him. We must realize that tender loving care is often quite frustrating to the patient - that our compassionate ministrations frequently create in him a feeling of helplessness and dependency (Morrissey, 1949:453).

Evidence of turf battles between nursing and physical therapy appear to be non-existent in the literature on nursing or physical therapy One physical therapy educator reports, however, that in the early years of her physical therapy program in the acute setting there was some conflict around scheduling of therapy. The therapist, for example, might wish to take the patient off to the PT department for treatment during a time when the nurse needed to take care of other of the patient's needs.

> This problem was resolved when we had the PTs meet with the charge nurses first thing every morning to plan the daily schedule. (Gilbert, 1981).

Tension that can be seen between nursing and PT today tends to be the opposite of the usual professional turf battle. Occasionally PTs claim they must be on guard to prevent their use doing work that they consider nursing work, such as merely walking the patient, or assisting in transfers in cases where there is no actual therapy being provided. On the other hand, if a patient needs moving and they are on the unit PTs feel it is appropriate to provide assistance.

The boundaries of the two professions have apparently been more complicated when it comes to teaching than in actual clinical practice as evidenced by the work of the National League of Nursing Education in 1946. They established a subcommittee of the Committee on Curriculum to

study the contribution that might be made to basic professional nursing education by physical therapy. The subcommittee concluded that the potential contribution of the PT to the teaching program was more than a PT responsible for treatments in the hospital would be able to give. Therefore, they determined areas in the broad field of fundamental material not involving actual physical therapy techniques, where the physical therapist might work more with the nursing instructors than in direct teaching. These areas included "principles of body mechanics and posture" which were defined as overlapping areas between orthopedic nursing, structural hygiene and physical therapy. The physical therapist would at all times, the committee determined, be responsible if orientation or demonstration in therapeutic exercise is indicated (Barrett, 1948:337).

Collaborative planning and implementation of patient care programs by nurses and physical therapists are increasing. Such planning is necessary because

> boundaries between who does what shift according to many factors including the availability and training of personnel, needs of the patients, and time and cost considerations (Barrett, J., 1948:347).

The trend is for more tasks formerly done or supervised by physical therapists to be performed by nursing service personnel as nurses increasingly emphasize rehabilitative care (Holley, 1970:1524). This has not been perceived as a

threat to physical therapy, but rather has been seen as enhancing its effectiveness because, as therapists like to explain, "We only have people for a small part of their day. Successful rehabilitation requires reinforcement of gains made in therapy during the rest of the day."

Occupational Therapy

If medicine can be considered a parent of physical therapy, occupational therapy might be accurately described as a sister occupation. While physical therapy was conceived in orthopedic settings, occupational therapy grew out of efforts to treat mental illness.

The first formal school for occupational therapists was opened in Chicago in 1915 by Eleanor Clarke Slagle, who, in a study program under Jane Addams and Julia Lathrop concentrated on "the meaning of curative occupations and recreation as deterrents to the deleterious effects of idleness" (Cromwell, 1977:645). Patients on the back wards of a state mental hospital were the first recipients of her concern.

Occupational therapy has a long and rich theoretical heritage which influenced Slagle and other early leaders. but which has been somewhat submerged in recent years by pressures to adapt to the medical model. An excellent account of the changing identity of occupational therapy appeared in The Journal of the American Occupational Therapy

Association

on the 60th anniversary of the Association (Kielhofner and Burke, 1977). The authors described OT's theoretical heritage as rooted in the humanitarian philosophy of the 18th and 19th centuries and an outgrowth of them, known as "moral treatment." This term referred to society's obligation to help those who had succumbed to external pressures. The treatment involved correction of "faulty habits of living" and the generation of new ones. Education, daily habits, work and play became therapeutic processes for normalizing disorganized behavior.

These ideas re-emerged among those who called themselves occupational therapists in the early 20th century. The formed a national association in 1917, three years before the founding of the APTA. The APTA grew more rapidly, however. It was more easily integrated into the medical model because of its emphasis on treating symptoms. Further, its more specific foci of treatment lent themselves more readily to quantification and measurement.

The broad goals of occupational therapy to re-establish the patient in productive and satisfying roles included attention to the patient's aesthetic, playful, creative and reflective aspects. The ascendence of the medical emphasis on purely physical phenomena placed occupational therapy under pressure to do the same. The interactive aspects of the patient and social and physical environment were de-

emphasized. The tasks of occupational therapy became redefined as closer to those of physical therapy - physical restoration through exercise.

> The paradigm of reductionism replaced the original paradigm of occupation and was accepted during the 1950's and 1960s when medicine dominated the hospital and clinic dictating rehabilitation efforts to reduce deficit states... Problems were defined as deficits and therapy was designed around the reduction or alleviation of deficit states.
>
> The direct result of the decision to accept the reductionist paradigm is an impressive technology for the treatment of a wide range of disabilities. The indirect result is that the philosophical base underlying the field has faded out and role confusion exists among therapists. (Kielhofner and Burke,1977:684).

The process which has been referred to as "accepting the reductionist paradigm has caused the distinctions between physical and occupational therapy to become blurred. Patients in occupational therapy departments are increasingly engaging in exercises, as opposed to activities which require the use of particular muscles. Occupational Therapy looks more and more like Physical Therapy. The distinction is no longer in the nature of the therapy, but the part of the body which receives the attention. Because most OT activities involved sitting and used the upper extremities, the upper limbs are increasingly seen as the territory of the OT, with the PT's retaining control over the lower limbs.

Given the blurring of the distinctions between occupa-

tional and physical therapy it is not surprising that in his 1980 Presidential Address to the American Physical Therapy Association Wortley (1980, 1433-34) suggested a merger of the two occupations:

> Our colleagues, the occupational therapists, are obviously the closest of our bedfellows in the non-medical health care field. I believe the time has come to start thinking seriously about a closer relationship between OTs and PTs.
>
> There are many areas of overlapping interests in the two professions. Instead of battling over turf, we might consider some sort of mutually beneficial arrangements that could dramatically increase our numbers and therefore our impact on Washington. At the same time, this could serve to defuse the overlap issue. There could be some knotty problems with things like licensure and professional identity, but maybe it is not too far-fetched to start thinking about ideas such as equivalency testing somewhere down the road.
>
> Perhaps we could open up the two associations to one another or merge the two together - a coalescence or a union.
>
> Occupational therapist want to advance, just as we want to advance. It need not be seen as a case of giving up something. Done properly, a truly cooperative effort could be a good thing for all of us.

The possibility of a merger between occupational and physical therapy remains one which could potentially benefit both groups. It has particularly interesting implications for services to the elderly. In this context occupational therapy's less technical and more holistic or functional approach could potentially increase the sensitivity of physical therapists to the more complex rehabilitation problems faced by the frail elderly. In the meantime, physical

therapy has taken other steps to solve its personnel shortages.

The Division of Labor Expands

A central issue in the sociology of health professions as discussed in chapter one, is the authority and autonomy which medicine maintains in comparison with other health occupations. The division of labor has been the most significant expression of this.

Physical therapy has come a long way from the days when the therapist was called a technician and functioned as an assistant to the orthopedist. There has emerged a division of labor in which the physical therapist, for all practical purposes, is at the head, directing and overseeing the work of physical therapy assistance and aides.

Physical therapists have been in short supply for most of their history. The shortage was particularly apparent during the polio epidemic of the 1950's and again after the passage of Medicare and Medicaid in 1965. During these periods various arrangements developed to provide personnel to assist the physical therapist.

The first successful attempt to formalize this practice occurred in 1965 when The Ad Hoc Committee to Study the Utilization and Training of Nonprofessional Assistants was

formed as a result of a resolution introduced into the APTA House of Delegates by the Northern California Chapter. In 1967, the House of Delegates adopted its policy statement on the Training and Utilization of the PT Assistant which approved and chartered the development of the occupational category "physical therapy assistants". The following points were made in the policy statement:

> 1) that APTA was to establish the standards for the program, which also meant an attendant process of some form of accreditation; 2) that a supervisory relationship should exist between the physical therapist and the assistant; 3) that the functions of the assistant should be identified; 4) that mandatory licensure or registration, incorporated into existing physical therapy laws, should be encouraged; and, 5) that a category of membership be established in APTA for the physical therapy assistant (White, 1970:675).

The assistant category was created with the idea that the assistant would be a skilled technical worker who would perform under the direction of the physical therapist allowing the RPT to do more evaluation, supervision, administrating and consultation. It was the hope of the leadership for physical therapy that research might be encouraged by releasing senior therapists from the pressure of heavy clinical workloads. The RPT would still be leagally and professionally responsible for the quality of care.

Preparation for physical therapy assistants (PTAs) now includes a two year college program leading to an Associate of Arts degree in physical therapy. Fifty-one two year pro-

grams in community and junior colleges were accredited by 1977-78. These programs produced 776 graduates that year.

Meanwhile, the education of RPTs was expanding both to keep up with growing knowledge, and as a result of a self-conscious move toward professionalization. In 1977-78 there were 17 accredited masters degree programs providing advanced training in physical therapy and three doctoral programs (USC, NYU and Indiana University). A Ph.D. in neurophysiological physical therapy is now being offered jointly by the physiology and physical therapy departments of the Medical College of Virginia (Newsline). According to a 1978 survey 16% of the APTA's membership held some type of advanced degree (U.S. Dept. of Health, Education and Welfare, 1980,XI-11). In 1981 four specialty areas were recommended to the House of Delegates for approval. These are the first areas in which special certification will be given. They are pediatric physical therapy, orthopedic physical therapy, cardio-pulmonary physical therapy and sports physical therapy. The specialty with the largest section membership is orthopedics with 3,816 members (APTA Annual Report, 1981:27).

From a Female Occupation to a Male Profession

Physical therapy began as an exclusively female occupation. As it has moved toward professionalization it has

become increasingly integrated in terms of gender and leadership positions have been disproportionately assumed by men. Originally named The American Women's Physical Therapeutic Association, The organizations name was changed only one year later in 1922, to The American Physiotherapy Association so that men could be admitted.

In 1950 there were 150 physical therapists serving on active duty in the United States Army. These were all women. They were officers in the newly established Women's Medical Specialist Corps which included occupation therapists and dieticians as well as PTs (Women's Specialist Medical Corps,1950:52). It was not until the mid-1950's that men could be commissioned as army physical therapists. (Hultgren, 1981).

Until 1967 the leadership of the APTA was predominantly female. The first male president was elected that year and since then all association presidents have been men. In 1978, in speaking to the Association on leadership patterns and problems one physical therapy educator pointed out:

> There are now two women for every man among the active membership, yet forty-seven percent of our educational programs are directed or chaired by men. In our professional activities, fifty-six percent of our APTA chapter presidents and fifty-four percent of our section chairmen are male, as are seven out of fifteen board members... The APTA headquarters staff reflects the increasing male activity; 56 percent of the professional staff in 1977-78 were men, and beginning in July, 1978, the figure will be 66 percent (Moore 1978: 1343).

A recent study indicated 71 percent of the PT's in the U.S. are women (APTA Membership Profile Survey, 1979). This study also found that more women than men leave the field of PT. By 1969 168 or 32 percent of the 1961 graduates were no longer employed in physical therapy. Only nine of these were male. Eighty-eight percent of the females who left gave marriage and children as their reason. Eleven went into other health care fields (Worthington, 1969).

Ten years later another major study confirmed the persistence of salary and status differences between men and women in physical therapy. Findings included the following:

1) Women PT's who were the principle wage earners in their households earned 20 percent less than did male PT principle wage earners. (This includes self-employed therapists.)

2) Women who had practiced PT for more than 11 years earned 28% less than did men with similar numbers of years experience.

3) Female chief PT's earned 25% less than did male therapists (Kemp, et al, 1979). The authors concluded:

> The salary discrepancy we found for sexes in the group employed full time approximates the 38% salary difference between men and women listed in the 1970 U.S. Census Report for all professions.

The disproportionate attrition of women from the physical therapy work force may be indirectly related to the above mentioned salary differences and limited job satisfaction as well as the explicit reason given by respondents. Kemp, et al. (1979) found that a significant majority of female PT's believed that the relationship between male physicians and female health workers parallels the dominant-subordinate model.

Private Practice

An area in which both sex differences and the professionalization process is demonstrated is private practice. Since 1955 physical therapists in California have been licensed to practice privately. These therapists may enter into subcontractual agreements with other contracting medical services such as convalescent hospitals. They may also establish offices in which to receive patients referred by physicians and other licensed medical practitioners. Often therapists in private practice combine the two methods of creating business. This arrangement is particularly well developed in the western United States where there the shortages of physiatrists and other physicians has been greatest. These practices are dependent on referral from physicians and usually require a large number of referring physicians to be successful.

Prior to 1968 in California there were both licensed and registered physical therapists. The major differences were that registered physical therapists had graduated from an approved school and could only offer treatment under the supervision and direction of a physician. Licensed physical therapists did not have to be graduates of approved schools, nor were they required to have the supervision or direction of a physician. In 1968 the law was changed and the two classifications were merged. As a result all physical therapists were from that time allowed to practice without supervision and direction by a physician (Gorder, 1980).

The primary barrier to development of private practice by physical therapists today is the Code of Ethics of The APTA which states:

> Regardless of the provisions of the law of any state, the physical therapist shall require a referral by a licensed practitioner within a practice area recognized by the APTA. The Association recognized medical doctors, dentists, osteopaths and podiatrists as qualified to refer patients for physical therapy...Treatments must be limited to the conditions or areas of the body for which the referring practitioner is trained and legally authorized to diagnose and treat.

This requirement for referral is based on the fact that the California Physical Therapy Practice Act, like many other state statutes, prohibits PTs from making a diagnosis, while permitting evaluation, treatment planning and specific methods of treatment. The barriers which exist in California are essentially the same as in other states with minor

variations.

The debate on this issue within physical therapy finds leadership divided. Some physical therapy educators would like to distinguish a medical diagnosis from a physical therapy diagnosis. Others feel this is a spurious distinction. Lines seem to be drawn, not on the basis of education or location in the profession, but appear roughly correlated with age. It is among the younger physical therapy educators that the most aggressive stance toward promotion of physical therapy as independent practitioners is taken. Their relative youth apparently makes this break with tradition more plausible than it appears to those who have participated in an historically symbiotic and dependent relationship with the profession of medicine.

It appears that physical therapy is moving inexorably toward independence from medicine in this as well as other respects. A resolution on this topic was recently passed by the APTA House of Delegates which reinforces this conclusion. It states:

> That the House of Delegates adopt the policy that, in a jurisdiction in which it is legally permissible, a physical therapist ethically may treat patients, within the limits of his/her knowledge, experience and expertise without practitioner referral...The physical therapist must refer patients to other health practitioners if symptoms are present for which physical therapy is contraindicated, or which are indicative of conditions for which treatment is outside the scope of his/her knowledge with the proviso that this policy not take effect until the plan for development

> of physical therapy practice independent of practitioner referral (RC42-78) is approved by the House of Delegates.

The proviso at the end of the above statement prevents this amendment from taking place immediately, but nevertheless points clearly in the direction of increasing autonomy.

The APTA established a section on self-employment and initially required three years experience as an employee prior to membership as a self-employed therapist. By February 1970 that requirement was reduced to one year (Dicus, 1970). This change was made to accommodate the fact that private practice is becoming increasingly viable and attractive to increasing numbers of physical therapists, who are making this transition earlier in their careers. By 1979 twenty-four percent of a stratified random sample of male PTs were full-time self-employed as compared to 3% of female PTs. The average yearly income reported by those who were self-employed was ($33,000, SD=$12,000) twice that reported by the full-time salaried respondents ($16,5000, SD=$5,700). The development of private practice is one of the clearest examples pf physical therapy's developing autonomy and professionalization. In addition, it provides patients with a new point of entry into the social world of health care.

The professional solution to the problem of access to clientele is, as Freidson (1970) emphasized, found in having a professional identity institutionalized through the grant-

ing of a quasi-monopoly over the right to do a particular type of work. This quasi-monopoly has been granted physical therapy through state laws. For example, California state law defines physical therapy as:

> Physical therapy means the art and science of physical or corrective rehabilitation or of physical or corrective treatment of any bodily or mental condition of any person by the use of physical, chemical, and other properties of heat, light, water, electricity, sound, massage, and active, passive, and resistive exercise, and shall include physical therapy evaluation, treatment planning, instruction and consultative services.

This act protects the domain of physical therapy by granting a quasi-monopoly:

> It is unlawful for any person or persons to practice, or offer to practice, physical therapy in this state for compensation received or expected, or to hold himself out as a physical therapist, unless at the time of so doing such person holds a valid unexpired and unrevoked license issued under this chapter.

As Bucher and Strauss (1961) have emphasized, professions are constantly undergoing change. These changes come not only from the different interests of various factions within the profession but reflect changes in the larger social context including competing interests with other professions.

One potential threat to PT's quasi-monoploy over its

work is a recent move by California chiropractors. A bill before the California legislature (AB 868) would expand the practice of chiropractic into a number of areas including physical therapy. Specifically it redefines the scope of practice of chiropractic:

> This bill would define the scope of practice of chiropractic as including the utilization of specified diagnostic and treatment procedures, including the utilization of specified diagnostic and treatment procedures, including among other things...the use of adjustment, manipulation, immobilization of the articulation and adjacent tissues of the body and the use of the methods of physical therapy, nutritional counseling and supplementation, and patient counseling... (AB 868,2)

A major problem with this bill from the point view of the physical therapists is that it includes a definition of physical therapy as an elaboration of the above extension of powers. That definition is the following:

> "Physical therapy" means the art and science of physical or corrective treatment of any bodily or mental condition of any person by the use of physical, chemical, and other properties of heat, light, water, electricity, sound, massage, and active, passive and resistive exercise, and shall include physical therapy evaluation, treatment planning, and instruction in consultative services. (AB868, 1981-82:3)

This bill is seen by some therapists as potentially very serious for physical therapy, giving Chiropractors the potential of replacing them entirely. Others view it more as a thorn in the side of PT. The latter feel it is not an attempt to replace physical therapists, but merely to take

advantage of a fuzzy boundary to increase the proportion of reimbursable services they can offer.

Physical therapists exist in far smaller numbers in California than do chiropractors. The latter is a richer and more highly politicized group which contributes more to its own lobbyists. The fate of this bill is not yet clear. However, it does have the strong support of the speaker of the assembly. On the other hand, the California Medical Association is strongly opposed to it. The primary intent of the bill is to make chiropractors "primary health care providers." To the extent that the political mood which favors passage is one which favors increasing options for the consumer, physical therapy may ultimately be a beneficiary of the same process through its own efforts at expansion and autonomy. The struggle over this bill has already resulted in renewed attempts by leaders of physical therapy to politicize practitioners. They are asking members to express their concern to state officials and to contribute financially to lobbying efforts.

Politicization of membership is one of the necessary steps in the professionalization process which Freidson implicitly recognizes but has not made explicit in terms of individual participation. It may be particularly important in the case of health related occupations and professions where the political and economic power of medicine is so well developed.

Conclusion

The above evidence indicates physical therapy has made significant progress in creating, protecting and expanding its domain. Its entry level programs have raised their requirements beyond the baccaulaureat level and masters degree and Ph.D. programs have been established. Collectivity or service orientation has become well developed in relation to a clientele, the patient, as opposed to their original focus on serving the physician.

Freidson, however, has warned that collectivity orientation may be merely a tactic in the struggle to get society to support the profession's autonomy. Therefore, he directs analysis to the more central issue of control over work. In this area physical therapy has made significant gains but nevertheless remains somewhat dependent on medicine for prescribing their services, particularly in the acute setting and where reimbursement is involved.

Bucher and Strauss (1961) have alerted us to the fact that physical therapy like other professions or occupations is not a homogeneous entity. Certain segments have been particularly active in challenging the dominance of the profession of medicine by taking the lead in the fight to drop the requirement for physician referral. These include therapists who live in the western United States, and in part this has been a response to the shortage of physicians and

their relative lack of control in many parts of the west. The disproportionately male private practitioners have been most vocal on this issue as have some of the younger PT educators.

The overt conflicts with medicine related to accreditation and referral suggest the autonomy issue is not resolved. However, as Larson (1977) argues, the model of the ideal type of free practitioner in a market of services may no longer fit the contemporary world except as an ideology. The health care worker/client relationship is no longer a dyadic one. Third parties have intervened to dictate terms. In the case of physical therapy Medicare and Medicaid and their bureaucratic offspring such as Professional Standards Review Organizations have reduced the autonomy of the practicing physician and increased the power of physical therapy changing the shape of the pyramid of the health care system into a less clear cut structure in which medicine is no longer reigning far above other and making unilateral decisions which have consequences for other occupations such as physical therapy. These decisions are increasingly subject to negotiation.

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Chapter Four

PHYSICAL THERAPY AND THE ELDERLY

The development of physical therapy, as we have seen in the previous chapter, was linked to the rehabilitation needs of the young which emerged out of specific historical events including wars and epidemics. The relationship between physical therapy and the elderly is a more recent development. It too, is a response to historical changes. In this chapter we will look at the conditions which have led to the creation of an increasingly elderly patient population for physical therapy. Understanding these conditions will provide a background for predicting future trends.

The first historical development we will consider in this chapter is the changing nature of disease from acute, infectious disease to chronic, degenerative disease. Second is the changing age composition of the U.S. population. These developments coincided with, and were not necessarily independent of, developments in rehabilitation philosophy and expansion of rehabilitation knowledge and skills. Finally, developments in health care financing represented attempts to cope with some of these changes. I will conclude this chapter by discussing current health care financing and recent responses to the needs of the elderly within

the profession of physical therapy.

The Ascendence of Chronic Illness

For the past 10,000 years infectious disease has been the major threat to human life. In the past few decades, however, control of infectious diseases has changed this. McKeown (1976) offers substantial evidence that death rates from the major infectious diseases fell to a relatively low level long before the introduction of effective immunization or treatment became available. He attributes this drop primarily to improved nutrition, and public health measures which were reinforced by the dropping of the birth rate. The introduction of sulphonamides in 1935, and later, antibiotics, were, however, sufficiently powerful to have a further effect on national death rates. (McKeown,1976:158). Once the control of infectious disease had become relatively effective proportionately more people survived to become victims of chronic illness.

The recognition that America's health problems had changed from acute to chronic conditions was slow in coming. The structure of our health services is still based on an acute care model and, as Strauss and Glaser (1975) have shown, treatment of chronic conditions is still not reflected in the training and interests of health professionals nor in the organization of medical care. While there remains a serious lag in adjusting to this reality,

there have, nevertheless, been concessions made to chronic illness over the years.

As early as 1956 chronic illness was identified as America's number one health problem and the major challenge to those concerned with sickness and disability (Mayo, 1956). The Director of the National Health Council in 1956 warned that:

> The great increase in the chronic illnesses is today confronting communities throughout the United States with the "daily disaster" of sick and disabled people of all ages who are not receiving adequate care --- Too many health services and institutions are still geared to the needs of patients with acute short term difficulties although the long term ills now account for some three-forths of the nations daily sickness toll (Ryan,1956:3).

A definition of chronic illness was offered by the Commission on Chronic Illness in 1956 which makes its consequences for rehabilitation services quite obvious:

> All impairments or deviations from normal which have one or more of the following characteristics: are permanent, have residual disability, are caused by non-reversible pathological alteration, require special training of the patient for rehabilitation, may be expected to require a long period of supervision, observation, or care. (National Health Council, 1956:35)

In 1978, according to the U.S. Department of Health and Human Services (1981:29), 15 percent of the civilian, non-institutionalized population reported limitation in activity to some degree due to chronic disease. This represents over

30 million people. The most prevalent chronic conditions are heart conditions and arthritis and rheumatism. While chronic illness, as Strauss and Glaser (1975) emphasize, is by no means exclusively a problem of the elderly, it increases dramatically with age. In 1974 chronic illnesses limited activity for 7 percent of those under 45 years, 23 percent of those 45-64, and 41 percent of those 65 to 74. Between the ages of 75 and 84, 51 percent had activity limitation. Twenty percent of these were unable to carry on a major activity. After age 85, of the 60 percent experiencing activity limitation, 31 percent were unable to carry on major activity (DHHS, 1981,29).

The Elderly Become Visible

Chronic diseases with resulting activity limitation increases with age. This is not to say that aging necessarily brings ill health, but that the illnesses we have failed to conquer or which have gained ascendance in the kind of social world we have created, are those which disproportionately affect the elderly.

During the period infectious diseases were declining, and largely as a result of this change, the population at greatest risk for chronic illness was expanding at a disproportionate rate. During the 1950's, for example, there was a 33% increase in the number of persons aged 65 and over; from 12 million in 1950 to 16 million in 1960.

These increases in the numbers and proportion of elderly are generally attributed to both a decline in infant mortality and to increases in life expectancy. While life expectancy has increased dramatically at birth (26.2 years) since 1900, most of this increase represents improvements in infant and maternal mortality rates. Very little of this gain, contrary to popular opinion, has contributed to making the old older. The average life expectancy of a sixty-five year old has increased only 4.4 years, and for white males, only 2.4 years (DHHS,1980:131). Nevertheless, in 1900 there were slightly more than three million older people in the U.S., and by 1977 this had increased to over 23 million. If life expectancy remains constant, by 2003, the elderly will number 32 million or approximately 12 per cent of the total population.

It is important to note that decreases in death rates have not increased the maximum life span. There has been no detectable change in the number of persons living longer than 100 years or in the maximum age of persons dying in a given year (Fries,1980). This is consistent with cellular level theoretical explanations of the finite life span. Statistical evidence is accumulating that suggests that even under ideal societal conditions the mean age at death is not far from 85 years. The consequence of the continuing elimination of premature death us the increasing rectangularization" of the survival curve with natural death occuring

without disease (Fries, 1980). Chronic illnesses lower the age at death, but perhaps more significantly for health policy they create a period of protracted dependency prior to death. Prinicple organ disfunction creates a longer period of disability prior to death which a variety of evidence suggests is potentially preventable:

> The amount of disability can decrease as morbidity is compressed into the shorter span between the increasing age at onset of disability and the fixed occurrence at death (Fries, 1980).

This analysis suggests that while the elderly population will continue to grow, estimates of future population based on continued extenson of the life span may be inaccurate. It also suggests the challenge to a national health policy is to postpone premature death and disability, and that efforts in this direction may result in the emergence of a pattern of natural death at the end of a healthy life.

The population 85 and over is the most rapidly growing age group of all. In the twenty-five years between 1953 and 1978, the number of those in this age group tripled to 2.1 million, and that number is expected to double again by 2003.

While the death rate of the elderly population has been declining, there are some important differences by sex and race. Among the elderly, men and nonwhites have higher death rates than women and whites. Between 1960 and 1970,

white women were the only group for whom death rates declined. In that period, death rates increases 11% for non-white women and 6% for nonwhite men. Because men suffer more from the major killers, the "old-old" is increasingly becoming a population of widowed women. (Siegel, Jacob S., 1980)

Expansion of Rehabilitation Philosophy

The aged were for the first few decades of this century considered inappropriate candidates for rehabilitation services. Rehabilitation, based on an acute care model, implied a return to a life of earning wages and paying taxes. Government support for training in rehabilitation and for rehabilitation services was initially provided only when a good case could be made that such services were a sound economic investment. This is reflected in the original emphasis on vocational rehabilitation (Straus, 1965: Rubin and Roessler, 1978).

For several decades, the exclusive goal of rehabilitation remained restoration of the patient's capacity to earn an independent living. This rationale yielded impressive results and became the basis of the expansion of rehabilitation services. A study conducted by the U.S. Office of Vocational Rehabilitation and the eighty-eight state rehabilitation agencies found that "over 11,000 [or 18.5 per cent] of the disabled persons rehabilitated in 1953 had been

receiving assistance payments at the time they applied for rehabilitation." The Director of the Department of Health, Education and Welfare's Office of Vocational Rehabilitation was a leading advocate of expansion of such services. She made the point that the beneficiaries of rehabilitation were not only the disabled:

> They had been receiving public assistance at an estimated rate of nine million dollars a year. After rehabilitation, instead of consuming public funds, they were paying federal income taxes at a rate which, in four years, will repay the Federal government for its investment in their rehabilitation - an that takes no account of the very substantial state and local taxes which these people also pay. (Switzer,1955:617)

The humanitarian theme emerged from the background only after economic issues had been successfully confronted. It received attention in 1954, when President Eisenhower addressed Congress regarding the health of the American people, he emphasized that economic benefits were not the only ones:

> There are no statistics to portray the full depth and meaning in human terms of the rehabilitation program, but clearly it is a program that builds a stronger America.

Straus (1965,20) suggests this emphasis on humanitarian concerns, of which President Eisenhower's speech was only one example, was partially a response to the cold war and this country's ideological struggle for a more favorable national image among peoples of the world. In any case, the

legislation which was subsequently passed increased support for research, for training of personnel and the construction of facilities, and raised the federal share of support for state programs.

The idea that rehabilitation services should be available to all persons including those without employment potential was reinforced by humanitarian rhetoric. It continued to gain adherents and by the early 1960's it was being clearly voiced. Those with careers in the rehabilitation field were often the most articulate spokespersons for this new approach, which was called social, as opposed to vocational rehabilitation:

> Social rehabilitation would aim to restore a person to a maximum usefulness to himself, his family, and his community. It would involve rehabilitating older people who do not intend to go back into the labor market. It would involve nonvocational counseling for disabled women who are homemakers. It would help men, women and children, irrespective of age or social condition. ---Some individuals, the largest number, we hope and believe, will be employed full time in commerce and industry. ---Another group of individuals receiving rehabilitation services will have achieved the degree of independent living that enables them to be released from the need of custodial care at home, being able to take care of themselves ---They will release other members of the family for full time employment, or will make it unnecessary that a person be hired to wait upon them. Many will be able to perform important household responsibilities. ---Another group formerly institutionalized ---will be living at home again, enjoying whatever degree of independence they have been able to achieve. Probably only those who have had in their households for a prolonged period of time individuals requiring constant custodial care can fully understand what it would mean to the family to have such

> handicapped individuals achieve a status of independent living. A bedridden member can ruin a family financially and contribute to all kinds of problems of human and family relationships. We have long believed that the American people want rehabili- tation services made available to all individuals who can profit from these services, regardless of what the end result of such services may be. (Whitten, 1961:97)

Thus family relationships and quality of life became justification for rehabilitation efforts even though economic consideration remained important. These concerns were validated by the Vocational Rehabilitation Act of 1965 which authorized assistance in expansion and improvement of state and private services and facilities of rehabilitation, increased the federal government's share of the cost of basic services and broadened the class of disabled persons eligible for services (Straus, 1965:13).

Rehabilitation of the Elderly

Benefits of physical therapy, and rehabilitation in general, for the non-elderly became apparent and were well documented by the early 1950's (Howard, 1944; Keys, 1945; Perkins,1953; Kottke,1957,1958). However, financing of health care for the elderly was limited prior to Medicare which meant physical therapy's potential benefits were rarely seen in the elderly. Many were not willing to assume that the elderly had the potential to benefit from such services. For example, Moskewitz, et al (1960) and Reynolds,

et al (1959) argued that nursing homes needed neither rehabilitation training of personnel nor therapy for patients since most nursing home patients showed low rehabilitation potential. Hefferin (1968:301) reported that the concept of "rehabilitation potential" was ignored by numerous other investigators who found significant gains could be made by nursing home participants in rehabilitative programs (Ferderber,1956; Gordon, et al, 1962; Nordstrom, 1963; Rosenblatt and Tavis, 1965; and Hoyt, 1966).

More recent studies have confirmed the findings that the elderly can benefit in a number of ways from physical therapy. Elderly ambulatory elective surgery patients who were exposed to fitness programs during pre and postoperative stages had fewer complications and shorter hospital stays according to De Carlo (1977). Physical training was shown by Barry, et al, (1966); and deVries (1970) to increase the aged persons' working capacity.

Exercise therapy has also been shown to improve cognition in institutionalized geriatric mental patients (Powell, 1974). Pre and post operative exercise therapy has been identified as a means of reducing pulmonary respiratory complications (Lindeman, 1972), reducing postoperative vomiting (Dumas and Leonard,1963) and stimulating a shorter hospital stay, faster healing and quicker recovery (Steinberg, 1972).

Perhaps as important as the studies which show the

benefits of exercise therapy to the elderly are those which document the adverse effects on this population of prolonged immobilization. These studies are important particularly for the elderly because acute care traditionally encourages passivity in the patient. The acute care model is based on the assumption that the patient is a victim of forces beyond his or her control (Parsons,1975:36-39) and that intervention by physicians and others directed toward the passive and compliant patient will inevitably lead to resolution of the problem. Interestingly, these expectations are consistent with lay understandings of appropriate behavior when ill, such as rest. These are reflected in the sick role as exemption from normal role obligations. These assumptions tend to be particularly relevant with older people of whom little is often expected by virtue of their advanced age. A classic study of immobilization published in 1948 (Deitrick, et al) documents a wide range of deleterious physiologic effects in young healthy subjects. In six weeks normal young men were found to show significant hypercalcuria and nitrogen loss with negative nitrogen and calcium metabolic balances, significant decrease in muscle mass and muscle strength, deterioration in the mechanisms essential for adequate circulation when erect, as indicated by an increased tendency to faint and decrease in blood volume.

The dangers of prolonged immobilization were underscored by the research of the Naval Research and National

Aeronautics and Space Administration in the mid-1960s, when their findings suggested human survivability in space would be limited to fourteen days because of the deleterious effects of lack of muscular activity in extended zero gravity. Their primary concerns were bone demineralization and deleterious effects on the central nervous system. The physical training during flight necessary to counteract these effects has subsequently been a central concern of NASA (NASA,1967:26).

In 1965, Kottke reviewed the literature on deterioration of the bedfast patient and found the common kinds of deterioration of patients confined to bed are; loss of mobility, loss of muscular strength and endurance, circulatory deterioration, metabolic imbalances, ischemic ulcers, deterioration of the urinary tract, respiratory deterioration, and intellectual and emotional deterioration. He also found that

> in geriatric patients further problems of impairment of cerebral circulation associated with progressive deterioration of the cardiovascular system result in a progressive dulling of the intellect and, frequently in increasing confusion. With the confusion comes disinterest in eating and loss of attention to bladder and bowel continence (Kottke, 1965:446).

Albanese (1972) found that during six weeks of bedrest healthy young normal adults fed adequate diets retained less than 20 per cent of their protein and calcium and suffered decreased glucose tolerance. Other studies have shown

immobilization can lead to demineralization of the bone, hypercalcemia and renal insufficiency (Hyman, et al; Albanese, David, et al). These are consistent with the finding that bone dissolution may be rapid as a result of immobilization (Hulley, et al,1971: Abramson and Delagi,1961).

A host of studies conclude that mobilization at the earliest possible time is the most effective way to prevent hypercalcemia:

> The available studies on immobilization almost universally indicate the development of a negative calcium balance during the period of inactivity and for a prolonged period thereafter. Such negative calcium balance when sufficiently prolonged is associated with reabsorption of bone rather than a reduction of bone formation as previously supposed. (Miller, 1975:362)

In addition to the negative physical effects of bed rest, a number of studies have indicated deleterious psychological consequences. These include anorexia and weight loss leading to malnutrition and induced psychosis (Moolten, 1972), malaise and anorexia (Hulley, 1971) increasing anxiety, dependency and hostile behavior (Deitrick, et al, 1948) and increasing depression, fear, panic, with exacerbation of pre-existing paranoia and organic brain syndrome (Miller, 1975). On reviewing the literature on physical activity and aging Bassey (1978) concludes

> Reduction in levels of habitual activity with age

> seems likely to cause or exacerbate deterioration in both exercise capacity and physical condition, setting up a vicious circle which eventually jeopardizes the capacity for independent living.

On the basis of review and analysis of numerous studies, Aloia (1981) concludes that while inactivity is dangerous, such dangers can be avoided in old age:

> The weight of evidence favors the conception that increased physical activity can prevent involutional changes in body composition, i.e., the loss of bone and muscle increase in fat usually observed with aging. Exercise appears to increase bone mass chiefly in the specific areas where skeletal forces are exerted.

Exercise in the elderly, particularly in osteoporotic patients, must of course, be carefully supervised because of the hazard of increasing the load on bones that are susceptible to fractures.

Evidence of the potential benefits of physical therapy have never been sufficient to quarantee it would be made available to the elderly because a variety of other factors intervened. The aged have always been discriminated against in rehabilitation, particularly since its major emphasis was originally on vocational rehabilitation. Estes (1978:114) reminds us that substantial evidence exists that the needs of the elderly receive little attention in federally supported rehabilitation and education programs. Of the disabled persons served through government programs approximately two per cent are over 65.

Clearly, a number of conditions had to converge to bring the elderly into the rehabilitation picture. The control of infectious disease permitted more attention to be given to other health problems. The control of infectious diseases combined with increasing knowledge, contributed to the older person's opportunities to receive physical therapy. The conquering of polio, in particular, indirectly created opportunities for the elderly to benefit. In 1952, at the height of the polio epidemic there were 58,000 reported cases. By 1957 this figure was down to 5,000 (CDC). The dramatic consequences of this victory on rehabilitation settings were recalled by a California physical therapist working in a country rehabilitation center

> Within one year polio was wiped out. We went from thirty polio patients to one or two. That made it possible for us to start looking more closely at our older people who had problems such as CVAs, hip fractures and other orthopedic problems, amputees, and so on, to see if there was more that could be done for them. (Bright, 1981)

Thus physical therapists, in increasing numbers, began to turn their attention to elderly patients.

The Development of Hip Surgery and Its influence on Physical Therapy

Surgery for the treatment of fractures, although attempted earlier, only became a potentially viable treatment in 1879 with the development of asepsis (Robinson, 1978:357). In 1901 internal fixation (surgical repair) was

recommended at the Congress of the German Society for Surgery and strongly rejected and disapproved. (M.E. Muller, et al, 1965) At this time casting and other forms of external fixation were considered the only acceptable treatment.

Internal fixation was developed in an effort to shorten the lengthy hospitalization and period of immobilization and disability which often produced complications (Holt,1963). Bone infection and incompatibility, and corrosion of metal screws, pins and plates were major problems until an alloy known as vitallium was developed (Robinson, 1978:366).

For many years internal fixation techniques could not be made strong enough so that long term immobilization and use of a cast were not required as well. Plaster casting from the pelvis to above the knee was used after surgery to support the repair work until healing had taken place. Such a cast permitted limited ambulation, but was to remain in place for an average of three months. Free joint movement was not permitted for eight to ten months (Marino-Zuco, 1965).

Since the nail and nail plates used to repair a fracture must bear substantial weight (estimated at about 400 lbs until the break is healed) metal fatigue was a problem until 1956. In 1956 the first model of a strengthened nail made of stainless steel was designed and used which allowed fracture patients to promptly bear weight (Holt, p. 695).

By 1963 trochanteric fracture patients were being assisted into a chair on the first post-operative day and allowed to place their feet firmly on the floor. No precautions against accidental weight bearing were taken. Walking with a walker was beginning at about one week post surgery. Full weight bearing was encouraged as soon as pain permitted.

Hip replacements were first developed to treat fractures which could not be easily repaired. This process began with reshaping of the damaged hip itself (Whitman, 1924) which often led to loss of movement in the hip and produced satisfactory results only in one case out of five.

In 1939, Smith-Petersen described attempts at the temporary insertion of a mold designed to allow nature to do its repair work. This method would facilitate the formation of congruous joint surfaces capable of function. The mold was to be removed at a second operation after the healing was completed.

These early molds were glass which caused a minimum of scar tissue to form. Unfortunately even heavy pyrex molds often broke. The use of vitallium, in 1938 which had led to advances in pins and plates because of its resistance to corrosion and rejection permitted consideration of permanent insertion of molds (Smith Petersen, 1939).

In 1950 the Judet brothers of France described a procedure they had developed in which they removed the damaged

femoral head and replaced it with an artificial head made of plastic which attached to the upper end of the femur. At that time prosthesis was most highly recommended for the very elderly patient who could not cooperate with the postoperative program of non-weight bearing for the three months, or for the patient who had a problem which would prevent ambulation with crutches such as hemiplegia or Parkinsonism. Another indication would be for avascular necrosis of the femoral head following an unsuccessful pinning to repair a fracture.

Articles began appearing warning against the overuse of hip replacement surgery for the treatment of fractures in the mid 1960s. Boyd and Salvatore (1964) stated:

> No prosthesis is as good as the patients own femoral head. Indiscriminate use of prostheses would be unfair to the 56 percent who, with nailing, obtain union without avascular necrosis.

They reminded the surgeons that not all patients who receive a prosthesis obtain a painless hip or avoid a second operation. They argued that a prosthesis would be preferred only when the fracture is "a week or more old, or is pathological, or is so comminuted that adequate reduction and fixation are improbable." (Boyd and Salvatore, 1964:1067) They challenged the position of some surgeons that old age (over 70) is in itself and indication for prosthesis when there is a fracture. Disagreements about the appropriate indications or overuse of prostheses centered on fractures of the

femoral neck. Fractures of the trochanter were generally agreed to be most appropriately treated by internal fixaton (Coventry, 1965:143).

In 1965 an American physician writing for The Journal of the American Medical Association noted:

> But the procedure is losing favor. Complications due to the use of the prosthesis are many and varied, so the surgeon often finds himself trading one complicated problem for another. The best result is obtained with internal fixation of the fracture. Proper healing gives the patient a better hip than does any prosthesis. (Coventry, 1965 JAMA)

While hip replacement surgery developed out of efforts to repair fractures, its major indication soon became the osteoarthritis. Today surgeons still prefer to repair the bone if it is salvageable in the case of fractures. However, where function is severly restricted due to pain, and no other treatments offer relief, replacements have come to be widely used.

Physical Therapy for Hip Surgery Patients

The early techniques of external fixation for fracture patients were not conducive to physical therapy. It was only when internal fixation had developed to the point where casting was unnecessary and early mobilization was possible that the contribution of the physical therapist was recognized and integrated into the treatment plans. Writing on

the merits of physical therapy in 1934, a physician (Kennedy, 1934) noted that the majority of fractures were being treated without the benefit of physical therapy:

> At present I believe that physical therapy is used more to correct the results of bad surgery - indifferent reduction, improper or insufficient immobilization, fibrous replacement of edema - than for prophylaxis or early treatment, where it chiefly belongs.

The purpose of this article was to suggest the appropriate range of services the physical therapist could offer the general practitioner or surgeon. These included: 1) to hasten the laying down of new tissue, 3) to increase local heat, 4) to prevent stagnation in the parts (including removal of edema,) 5) to relieve pain, 6) to maintain muscle function, 7) to maintain joint function, and finally, 8) to maintain the patient's morale.

In 1940, a physician pointed out that many fracture clinicians had "almost completely discarded the use of physical therapy in their treatment of fractures." He attributed this to their experience with improperly or unintelligently applied treatments and proceeded to discuss the appropriate rationale and physical therapy techniques. He divided the fracture treatment into three stages. The first was the emergency or pre-surgery stage. The second was the time between reduction and healing in which the part is frequently "protected, restricted or immobilized in some form of apparatus which appears to mitigate against the

application of physical therapy." He argued that it was most unfortunate that physical therapy was not used during the period of immobilization to counter its effects, instead of waiting until the third stage when movement was less restricted.

While the discussion of the potential benefits of physical therapy for the immobilized patient was beginning to receive some attention conditions of treatment changed to permit earlier mobilization. Under these conditions recognition of the contribution of the physical therapists was more obvious. Once the pinning was secure, discomfort, weakness and fear on the part of the patient were the only barriers to renewed ambulation. Furthermore, these three conditions could be remedied by physical activity. Not only could therapy prevent the ill effects of immobilization, but healing was known to take place more rapidly with activity and weight bearing. The pressure exerted by Professional Standards Review Organizations beginning in the early 1970's to reduce length of hospital stays provided further impetus for early ambulation and intensive physical therapy.

Particularly enthusiastic reception was given to physical therapists by orthopedists specializing in hip replacement surgery who were eager for any treatment which might facilitate the successful outcome of their art. Since those who work in this area are constantly interested in improving prostheses and methods, and often build their reputations

and careers on the success of their procedures, they have tended to welcome the training in proper precautions, muscle strengthening and gait training their patients receive from the physical therapists.

Health Care Financing for the Aged

It was not only on the rehabilitation units of public hospitals that attention eventually turned to the elderly. This occurred on a national level and was reflected in the creation of various new social programs which were enacted on a massive scale during the 1960's. Particularly significant for older people was the passage of Medicare in 1965. Medicaid provided additional benefits to the elderly because a disproportionate number of the aged are also poor. After their enactment both Medicare and Medicaid became important sources of funds for medical care for the elderly. While 18 per cent of Medicaid recipients are over 65, payments for providers account for 38% of Medicaid expenditures (Estes,1978:103).

Medicare has two parts. Part A covers hospital insurance, including in-hospital physical therapy as prescribed, for nearly all persons 65 and over. It also covers short term skilled nursing care for brief periods following acute hospital stays. Part B of Medicare pays for doctors services, outpatient hospital care and outpatient physical therapy up to $100. Enrollment in this part of

Medicare is voluntary and requires the payment of a monthly premium ($11.00 per month as of July 1, 1981), plus a yearly deductible and twenty percent coinsurance for all "reasonable charges" (HEW:1979).

Medicare contributed significantly to the development of hospital and skilled nursing services. Estes (1978:104) reports, that the average number of physician visits remained at approximately 6.6 from 1965 to 1975, but hospital utilization increased sharply during the first fiscal year that Medicare was implemented. In 1975, there was a 236% increase in the number of operations per 1000 elderly people. During this same ten year period there was a 296 per cent increase in arthroplasty (joint replacement surgery) (Estes,1978:104).

The health care legislation passed in the 1960s and still in effect, was heavily weighted toward acute care, as opposed to prevention or rehabilitation. Nevertheless, it created the conditions for the elderly, in increasing numbers to receive limited physical therapy. These benefits, although limited, were nevertheless significant. Specifically, they covered rehabilitation services such as physical therapy, occupational therapy and speech therapy as prescribed by the physician, as long as the patient's stay is not disapproved by PSRO. In addition Medicare, part B could pay for 80% of outpatient physical therapy up to $100.00 a year. This could be received as an outpatient in

a participating hospital or skilled nursing facility, or from a home health agency. Part A could also pay for up to $100 worth of home health visits from a physical therapist for patients confined to their homes if prescribed by a physician.

In 1980, as part of the Omnibus Budget Reconciliation Act signed by President Carter, the medicare reimbursement limitation on outpatient physical therapy services was increased from $100.00 to $500.00 a year to be effective beginning with the fiscal year 1982. President Reagan later recommended a repeal of this provision as part of his budget revision package. However, both the House Ways and Means Committee and Senate Finance Committee eliminated this repeal on the grounds that it is a relatively small cost item which can be provided more economically through outpatient care than through other alternatives where no dollar limitations exist.

In spite of the fact that regulations are heavily weighted in support of hospital care and provide limited skilled nursing care, very little home care, and no long term care, (Gibson and Fisher,1977) these programs have made physical therapy available to the elderly and have contributed to the growing relationship between physical therapy and the aged. Recent increases in reimbursement limitations suggest continued development in this direction.

Physical Therapists Recognize the Elderly

Explicit interest in the elderly among physical therapists has only recently been expressed organizationally. This is a response to a convergence of a variety of factors. The self-conscious and explicit movement toward professionalization has made physical therapy sensitive to demographic changes and reimbursement mechanisms and potential areas of domain expansion including chronic illness and geriatrics.

In June 1978, approval was given by the American Physical Therapy Association to form a Section on Geriatrics. The reasons for forming the section were explained in one of their early newsletters:

> It is our purpose to involve physical therapists in improved care of [aged and aging persons] through research, changes in educational curriculum, generation of educational resources, and development of techniques specifically designed to treat these persons at all levels of the health care system. (Mills, 1978)

The original formulation of the section organizers interest had been long term care, but they were denied permission to form a section on this topic because it overlapped with several other special interest sections. Soon after the section was formed, however, a strong interest in prevention and non-institutional physical therapy management of health care problems emerged (Geriatric Section, Spring 1980:2). One of the section's leading spokespersons has described the scope of physical rehabilitation of the elderly as beginning

with preventive screening and community maintenance, crisis intervention and short and long term rehabilitation (Jackson,1980). Preventive screening and maintenance refers to a variety of services the physical therapist can perform which contribute to maintaining high risk elderly in the community. These include individual and group services designed to promote fitness, use of supportive devices and substitution of one muscle group for another. She identified three functions of physical therapy during crisis intervention. These are: treatment for a specific disease or injury; prevention of complications due to the nature of bed rest or treatment, and preparation for discharge to home or another facility. The latter function would include teaching techniques for safely moving around, and the use of assistive devices as well as the teaching of self treatment in the form of exercises.

The potential contribution of physical therapists to care of the elderly is much greater than the actual contribution. A study by the U.S. Public Health Service published in 1967 reported that 47% of patients in longterm care facilities needed physical therapy, but only 14% of them were receiving it. An important factor in the lack of therapy is the shortage of physical therapists. The Bureau of Labor Statistics, Department of Labor,estimates that until 1985 the demand for physical therapy personnel will exceed the available supply. (DHEW,1979:XI-4). However,

the problem is exacerbated by the fact that facilities primarily providing care to the elderly are viewed as undesirable places to seek employment by new graduates (Jackson, 1979:549). Even in acute settings today, however, fifty to seventy per cent of the patient population is over 55 years of age (Jackson, 1980:3). Given that evidence suggests that training in the care of older patients can enhance therapists satisfaction with their work, the efforts of the Geriatric Section of the APTA are understandable.

Geriatric Section leaders recognize that a barrier to improved physical therapy for the elderly is the limited emphasis on care of the aged patient in physical therapy training Jackson (1980:55) has pointed out that accreditation requirements for physical therapy do not call for any specific gerontological education. She further noted that there were only 17 articles in the professional journal specifically dealing with geriatrics since 1921. The majority of PT school had no faculty members who had attended a continuing education program related to geriatrics in the last year. This situation exists in spite of the fact that nearly all therapists will be working at some time with geriatric patients.

Conclusion

We have seen that several conditions converged to bring physical therapy and the elderly together. Some of these

conditions, such as changes in the age composition of the population, and the shift from acute to chronic illness, have occurred gradually over several decades. Other changes, such as the development of Medicare and Medicaid are more recent, and represent responses to the former developments. Critics have argued persuasively that the present system of health care delivery and funding is based on an acute model which has not been sufficiently responsive to chronic illness, and particularly to the needs of the elderly. (Strauss and Glaser,1975; Estes,1978; Brody,1980)

Estes (1978) argues that while federal aging health policies demonstrate political responsiveness to the anticipated demographic explosion of the elderly and their growing political organization, they in fact serve a variety of interest groups, providers, industries and professionals that serve the aged in one capacity or another. Estes has called these groups collectively, "the aging enterprise".

> In the early 1960's it was recognized that the aged represented a market for service providers and that there was ample opportunity for business expansion in such areas as hospital construction and drugs. (Estes, 1978:23)

She argues that while the aging enterprise flourishes under these policies they reinforce the dominant view of the aged as unproductive and dependent persons whose lives are steadily deteriorating, thereby failing to solve problems or utilize the resources of older people.

There is no question that Medicare and Medicaid have contributed to the growth of physical therapy. To some extent this is one of the occupations which constitutes the "aging enterprise." On the other hand, the interaction between the physical therapist and the elderly patient is predicated on the assumption that the older person can regain his or her independence, or at least some part of it. This assumption contradicts rather than reinforces the dominant view of older people, particularly of acutely ill older people. This apparent contradiction poses some interesting questions which can be answered empirically on the clinical level. In the next chapter we will look at physical therapy in interaction with older patients on a clinical level. This will enable us to explore the consequences of current practices and policies regarding physical therapy and older people.

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Chapter Five

THE DISABILITY AND REHABILITATION TRAJECTORIES OF ELDERLY HIP SURGERY PATIENTS

Background

Diseases of the hip are significant public health problems. Precise data on the amount of such disabilities are not available. It is known, however, that the elderly are most likely to be affected, since osteoarthrosis [joint disease] and hip fractures are the most common hip problems (Kelsey, 1977:274). Both of these problems are indications for orthopedic surgery and represent major expenditures of Medicare funds for treatment and rehabilitation services. This chapter will provide a descriptive analysis of the disability and rehabilitation trajectories of elderly hip surgery patients, the conditions which shape their trajectories, and the consequences for social arrangements and personal identities of the patients, with emphasis on the interaction between the patient and the physical therapist.

The term "trajectory" was first used in reference to illness by Glaser and Strauss (1965) in their work on dying. It was later developed by Strauss and Glaser (1975) for application to chronic illness, as we mentioned in Chapter One. The concept of a disease trajectory, as used by

Strauss and Glaser, differs from the physiological course of a disease because it includes the management and articulation of work designed to bring the episode to a successful conclusion (Weiner, et al, 1979:261). For an acutely ill patient, a disease trajectory can end when the patient leaves the hospital but chronic diseases have much longer trajectories. They may, for example, move slowly but steadily downward, vacillate or hit a long plateau, then move slowly or abruptly downward toward death, or upward again with improvement (Strauss and Glaser, 1975:47). Trajectories may be predictable or uncertain. Their shapes are "not merely reflections of physiological happenings, but are linked with people's definitions of what is expected of a disease" (Strauss and Glaser, 1975:49).

The trajectories of hip fractures and those who opt for elective hip replacements have much in common. They both begin with disability which leads the patient to surgery. Following surgery the patient moves through a series of phases of rehabilitation under the coaching of the physical therapist. This coaching continues for two to three weeks in the acute setting and focuses on ambulation, strengthening exercises and learning to transfer from bed to chair to toilet, etc., moving toward the goal of full independence. While therapy sometimes is continued in a skilled nursing facility or at home, more often it is concluded when the patient leaves the acute setting on the assumption that

further improvement can be expected as a function of time and continued practice of appropriate practices and exercises which have been taught in the acute setting.

In this chapter, we will see that while the trajectory management of both the elective replacement and fracture patients involves progression through similar phases from the perspective of the physical therapist or hospital staff, these trajectories differ sharply from the perspective of the patients. These differences flow from the different meanings of elective surgery as opposed to surgery as a result of trauma late in life. The context for the hip replacement patient is one of optimism in which renewed independence is defined as the appropriate expectation for the future. The patient is presented with a well-developed recovery philosophy based on the efficacy of surgical intervention. In addition the patient is provided with a favorable future trajectory to which the patient's own efforts can contribute. Patient education, often including printed materials and slide shows are used to help construct the favorable future trajectory. Discharge planning is begun early in the process, and optimism is supported by rapid post-surgical relief from pain.

In contrast, as the following description and analysis will show, the trauma of a hip fracture and resulting uncertainty regarding recovery of independence often leads to a shattered self. The hip fracture signifies to many patients

that their bodies are no longer to be trusted and their previous way of life is no longer viable. Furthermore, they bring outdated meanings regarding the medical implications of such an injury. The context of uncertainty is not overcome in the course of treatment because the social-psychological aspects of the injury are not systematically addressed in the acute setting. The patient is not provided with a recovery philosophy which addresses her concerns. Under these conditions construction of a future trajectory is difficult or impossible, and therefore, uncertainty often turns to defeat. This becomes a self-fulfilling prophecy because hard work and commitment to physical therapy are required to rebuild strength and facilitate healing.

The concept of trajectories provides a useful framework for clarifying the interaction between medical and social issues. Before we discuss these trajectories in detail, a review of the epidemiology of the two major classifications of hip patients will provide a useful background.

Hip Replacements. Elective hip replacements differ from fractures in a number of ways. The most significant difference is that hip replacements are planned. The procedure did not become established as a standard operation in most orthopedic centers until the late 1960's. Today the demand is such that there is often a waiting list several months long. Hip replacements are offered to patients who are seriously limited in their activities by severe hip pain

usually due to osteoarthritis or rheumatoid arthritis, particularly those who are unable to walk without assistive devices (Burton and Imrie, 1973:135). The total number of hip replacement procedures performed annually has never been accurately reported; however, in 1973, 73,500 were financed by Medicare and the Veterans Administration (Hori, et al, 1978). As late as 1973 the procedure was not recommended in patients under sixty because of the limited lifetime of the prosthesis due to wear and tear, and the extremely problematic nature of second replacements in the same hip (Burton & Imrie, 1973). As surgery techniques improve, the procedure is becoming more acceptable for younger patients and the problems of a second replacement in one hip are being sharply reduced.

Hip replacement consists essentially of "replacement of both articular surfaces of the hip joint with inert material." This involves the insertion of a prosthetic cup in the acetabulum and a new femoral head with a metal stem extending into the femoral shaft (Dandy, 1979:56).

The major goals of post-operative rehabilitation are normal gait, avoidance of dislocation, and independence in activities of daily living. The patient must therefore be in reasonably good health.

The results of total hip replacement (THR) may be measured in a variety of ways; however, in general terms

"between 90 to 95 percent of patients can expect a good or excellent subjective result five years after the operation" (Dandy, 1979:60). This means that the total hip replacements generally lead to improvement in walking ability, primarily due to relief from pain (Brown, et al, 1980:259). While the improvements resulting from hip replacements are generally substantial, the patients fall lower on measures of functioning than normal subjects of a similar age (Finley, 1970:423; Blessey, et al, 1976:1019). There is a mortality rate of approximately one percent from pulmonary embolism and other disasters. The major complications suffered by 5-10% are infection, loosening and dislocation, or palsy of the femoral or sciatic nerve (Dandy,1979:60).

Hip Fractures. Hip fractures are the 10th ranking diagnosis explaining total days of acute hospital stays in the U.S. (Miller, 1975:1032). There is a growing incidence of hip fractures among the elderly beyond the fact that the population at risk is rapidly increasing. Hip fractures are closely related to age, and are predominantly an affliction of elderly Caucasian women (Hielema, 1979:1221). It has been estimated that one out of twenty women who reach 65 will have a fracture of the neck of the femur and that beyond the age of eighty-five, two percent of women and 0.6% of men fracture a hip each year. Butler (1980:164) estimates the incidence of hip fractures each year at approximately two million.

Hielema's review of the literature (1979) suggests that while hip fractures usually result from "minor or moderate" trauma such as a simple twist, mis-step, or a fall from standing height," they may occur without any apparent cause." This suggests the possibility that the falls associated with broken hips may be the result, rather than the cause, of the fractures.

This fragility of the bones is considered to occur disproportionately in women due to post-menopausal hormonal changes which contribute to osteoporosis, or degeneration, of the bones (Atkinson, 1965), yet there are significant differences in the rates of hip fractures among cultures. Sweden, for example, has morbidity rates twice as great as England, Scotland and Singapore (Hielema, 1979:1221).

Social factors have received relatively little attention in the epidemiology of hip fractures. Disuse, however, is recognized as a contributing factor. Osteoporosis is known to develop rapidly under conditions of disuse, and the greater use of the right hip has been suggested as an explanation for the greater incidence of left hip fractures (Hielema, 1979, 1222). Since disuse is known to have significant short term consequences, the possibility that a lifetime of relative inactivity among women is a contributing factor may deserve more attention. In this respect it might be linked to gender roles. Such a conclusion would be consistent with the increasing incidence epidemiologists have

found.

Additional social factors in hip fractures might be the lower nutritional status of those living alone, who are primarily widows. A third gender-related issue is the fact that even elderly women rarely wear the heavy flat shoes worn by most men, so their footing tends to be somewhat less stable.

Epidemiologists report that the vast majority of hip fractures occur indoors (Katz, et al, 1967:1221). These fractures often cause permanent disability and lead to death. One-year survival rates range in various studies from 50 to 78 percent (Hielema, 1979:1224). Those factors predicting unsuccessful outcome include advanced age, preinjury presence of organic brain syndrome (senility), low prefracture functional status, and pulmonary, cardiac, or other health problems.

The Path to Surgery

Hip Replacements. Elective total hip replacements occur more frequently than surgery to repair fractures in the university hospital in our sample. They account for sixty percent (12 cases) of the twenty elective replacements studied. The community and prepaid health plan hospitals each supplied 20 per cent (or four) of the replacement cases studied.

The average age of hip replacement patients in our sample was 76.8 years. Three-quarters of the hip replacement patients were women and all were caucasian.

The fact that hip replacement surgery is elective has several implications for the sample characteristics. Total hip replacement patients:

1. must have good general health (aside from arthritis). This is a pre-requisite for elective major surgery.

2. have the communication skills necessary to negotiate the world of medicine. This means they have either

   a. high socioeconomic status, or

   b. have been socialized into the world of medicine through experience with degenerative disease.

   c. rarely have significant levels of confusion. The chronically confused and/or senile have been eliminated from this group through self-selection and medical screening.

The hip replacement patient has been told by her private physician that he can offer her no help for her worsening condition. She can expect only further crippling. He has referred her to an orthopedic surgeon who has told her she can expect significant reduction in pain and increased mobility from a THR. She has been told this

operation would require approximately three weeks in the hospital, after which time, she would be able to get in and out of bed by herself, go up and down stairs, get in and out of chairs, on and off the toilet, bathe herself, etc. Following discharge there may be a need for crutches, a single crutch, or a cane for 2-4 months, but improvement usually continues after discharge and mobility increases and can be expected to be substantially greater than prior to surgery. In essence, hip replacement surgery offers hope of renewed independence to those who otherwise could expect increasing dependence and pain.

The appeal of the total hip replacement cannot be adequately understood without reference to the constant pain and severely constricted mobility that precede the surgery. As one typical patient's chart explained:

> The patient has a long history of right hip and right knee pain with marked increase in past two years. Unable to walk except with cane and not able to walk outside. Unable to negotiate stairs or put on shoes and socks without great pain. Neighbor needed to tie shoes. Difficulty with getting up from toilet. (1936)

Another patient was described in this way in her medical record:

> At the time of admission she was able to ambulate with a cane for support, but was more at ease with a walker. Her level of activity had decreased in the six months prior to admission. Pt's posture was stooped in her effort to relieve the left hip pain. She had difficulty reaching and bending over, but could get in and out of bed

independently. (1920)

The path to surgery for the THR patient represents a choice rather than an absolute necessity. It is a choice that is often considered for several months before the actual surgery. The decision represents acceptance of a recovery philosophy based on the efficacy of surgery. This is a variant of the medical model. Once the decision is made there is usually a waiting period before the surgery can be scheduled, which allows time for second thoughts and preparation for hospitalization and post-hospital planning.

Hip Fractures. The mean age of the hip fracture patients in our study was 78.6 years. Ninety percent (18) were Caucasian and ninety percent were female.

Hip fractures represent an interesting combination of chronic and acute illness. The underlying condition is a degenerative process of the bones (osteoporosis) but the hip fracture is experienced as an acute problem. The conditions for the fracture had been developing for a long time but were usually unsuspected.

A typical example of the injury itself is as follows:

> A couple people I had known had fallen, so I was always careful when I went out. It was quite a surprise to fall at home. I was vacuuming my bedroom carpet. I'm not sure exactly how it happened. I lost my balance somehow or tripped. When I fell I couldn't reach the telephone. I was in the bedroom near the door to the hall and the

> phone was at the other end of the hall. I crawled and crawled, but then I realized I couldn't reach it because it was too high up. It was in a little alcove. Every day I go out and I always bring up Mrs. E's mail. (She's my neighbor. She broke her hip some time ago and is back home now. She walks with a cane and can't go out.) My phone rang once, but I couldn't answer it. Most of the afternoon passed, then it rang again. I was sure it must be Mrs. E again, wondering what happened to me. I yelled, "I can't get up. I fell." She heard me and 2 or 3 minutes later the manager came in. They called the doctor and an ambulance. (Case 2174)

Another fracture patient told the interviewer that:

> Her niece was out for the evening, so she was alone. She said she got up from a chair and fell. This happened at 6 p.m. and she could not get help until 8 a.m. the next morning. She lay on the floor all night because she couldn't move. In the morning she dragged herself to the phone table in the hall and pulled her phone to the floor, dragged her address book and phone to the floor and called the fire department. (Case 1040)

The sudden dependence of the hip fracture victim is often underscored by the fact that they may wait hours, or even a day or more, to be discovered and get help. Thus the fracture patient moves along the path toward surgery as a result of circumstances which are neither anticipated, nor easily integrated into the patient's self definitions.

Dependency Stage

Both types of hip surgery patients assume what has been referred to as "the sick role". However, the process by which they become patients, the meaning of these events, and the outcomes they envision, result in trajectories with

significantly different shapes. Since the trajectory concept has at its heart the subjective experience of the patient, as well as the illness course itself, we must now recast the events of the first stage of the process in those terms.

Both fracture and replacement patients are the "old-old" to use Neugarten's term. Their self definitions and support networks have been influenced by this fact. As Rosow (1973:83,86) has emphasized:

> The losses of old age overtake everybody, not because they have failed, but only because they have survived...Their social world simply shrinks, and with it, the web of affiliations that support people psychologically.

Seventy-two percent of the patients were single, mostly widowed. Nearly one half (45% or nine) of the fracture patients and one-quarter of the replacement patients reported having no living children. Of those patients with children, most had only one or two. Remaining children were scattered, often with their own health problems. While children may be counted on in an emergency they were not often a source of regular social activity. Sixty percent of the sample lived alone (sixty-five percent of the fracture patients and fifty-five percent of the replacement patients lived alone. Half the fracture patients reported having no close friend, and nearly one half (45% or 9) reported not knowing neighbors. This is, no doubt, related to the fact that they both While the replacement patients were more

likely to know neighbors, both types of patients often referred to themselves as "independent." This was the chief self-referential term used by these elderly patients. They are proud of their independence and very threatened by its potential loss. Independence thus appears to be not so much a personal preference as prerequisite for survival into old age. Now circumstances have resulted in both hip replacement and hip fracture patients assuming nearly totally dependent positions for a period of several days under somewhat different conditions and with different consequences.

Hip Replacements. The hip replacement patient has long been a victim of a painful process which is physically and socially limiting. The surgery is a well-considered choice which offers hope for recovering comfort and mobility and above all, for retaining independence.

Major surgery and the removal of a joint are not easily incorporated into one's everyday life, but these events ultimately make sense. They offer a solution to a degenerative process which threatens the independence central to the patient's identity. Through surgery, continuity of identity can be maintained. As Strauss (1969:146) explains:

> If past acts appear to fit together more or less within some scheme adding up to and leading up to the current self, then 'they belong to me, even though I have somewhat changed'...Past purposes and dedications may be challenged and abandoned but when viewed as part of a larger temporal design they do not plague one by feelings of self-betrayal.

For the replacement patient, past identities can be reconciled. In fact, that is the point of the surgery -- that the patient's life can be made to appear uniform, can be encompassed in a unified interpretation.

It is with this goal of preserving and to some extent restoring independence and mobility that the replacement patient chooses to go through a brief period of dependence. The replacement patient has been prepared for the process emotionally and is, generally, well-informed about the procedures and sequence of events. She has had repeated conversations with her surgeon, beginning prior to admission. She has selected a convenient time for the surgery and made plans to have mail picked up, plants and/or pets cared for, and expressed her feelings to family and friends about visiting her in the hospital. She has had an opportunity to contemplate and plan for post-hospital assistance as well.

Shortly after admission and prior to surgery the physical therapist enters the trajectory of the elective hip surgery patient. The therapist meets with the patient and explains what the patient can expect in terms of function immediately after surgery. She describes to the patient how they will work together. The therapist usually shows the patient what exercises and special precautions she will be required to follow after surgery. Thus the conditions of elective surgery and the built-in communication with the

patient from the physician and the physical therapist support the active involvement of the patient in decision making, planning and recovery. The patient is a participant in the process, rather than simply an object of treatment. This patient's role in the process early in the hospitalization can be described as "elective dependence."

Hip Fractures.

The fracture patient may have been declining in some respects, but if so, the decline was usually imperceptible. When the fracture occurs, it is felt as a traumatic shock for which there was no preparation or warning. The hip fracture is not only traumatic physically, it has been described by its victims as a "shattering experience" emotionally because of its consequences for their identities. It is taken as evidence that they can no longer function effectively.

Aside from the problematic physical recovery, the symbolic significance of the fall and fracture must be considered. It is invariably a critical juncture in the elderly person's identity. A critical juncture has been defined by Strauss (1969:93) as occurring when a person discovers that one of his chief self-referential terms is completely erroneous. As noted above, the chief self-referential term was independence. The self may be said to have been shattered with the hip. The injury means that

they can no longer trust their own ability to function effectively independently, nor can they expect anyone else to. This was particularly poignantly communicated by the 80-year-old woman (2034) who sobbed to the interviewer in the hospital over the loss of the little children she loved and cared for. It was immediately clear to her that she could no longer be relied on as a babysitter. "How could they ever leave me alone with the children again?," she asked. She answered the question herself, "They can't."

Suddenly having been rendered quite helpless, the elderly hip fracture victim's first stage of the illness trajectory is not the elective dependency of the replacement patient, which is understood to be a prelude to, and requirement for renewed independence, but what would more accurately be called, "enforced dependency" which both reflects and reinforces the shattered self. This phase begins with the injury and continues through hospital admission where the fracture is confirmed and the patient's general medical condition is stabilized or cleared for surgery, usually under general anesthetic. Surgery often takes place within 24 hours but may be postponed another day or two.

All interaction between patient and staff demands passivity from the fracture patient until at least one day after surgery. This passivity, or dependence, is enforced both by the pain that comes from attempts to maneuver and, if necessary, by the use of physical restraints because

until the fracture site can be repaired, any movement is painful and can increase the damage. There is no interaction between the physical therapist and the patient prior to surgery and no education in the rehabilitation process. The therapist enters the fracture patient's trajectory at a later phase.

It is the subjective experience and the devastating social-psychological significance of the unexpected hospitalization and "enforced dependency" for a fracture which negates self definitions and leads to a shattered self-conception. The planned entrance (and elective dependency) of the hip replacement patient, in contrast, offers hope for renewed independence. The physical therapist has played a key role in defining the future trajectory for the replacement patient, but has not yet entered the fracture patient's trajectory.

Uncertainty

The first stages of the fracture and replacement trajectories differ largely due to the divergent objective conditions under which the patients enter the hospital. These differences are increased by the contrasting expectations for the future which are socially constructed for replacement patients as opposed to fracture patients.

Uncertainty, as Talcott Parsons (1951:466) and Davis, (1972) have pointed out, looms large in medical practice

generally. A major difference between fracture and replacement patients, however, is the degree of uncertainty, and the response to it by physical therapists and other medical personnel.

In the case of replacement patients, uncertainty is present only by virtue of relatively small risks which are known and discussed in advance by both doctors and patients. These are risks which both parties agree should be taken because they are minor compared to the expected benefits. Uncertainty thus is confronted and minimized in the shared understandings of the patient and physician, and it is on this basis that the patient enters the hospital. This total picture of "what each interacting person knows of the patient's defined status," in combination with "recognition of the other's awareness of his own definition" has been called an awareness context by Glaser and Strauss (1965:10). When both parties share the same understandings the awareness context is an open one. This is the case with hip replacement patients and staff and the content of the awareness context is optimism and a favorable future trajectory.

In contrast, uncertainty regarding the fracture patient's trajectory is not overcome. It is confronted by the physician medically as he martials his skills and the resources of the hospital staff to produce a favorable outcome. In terms of communication with the patient, however, it is rarely confronted at all. It may even be reinforced by

the physician and other staff members who themselves are uncertain of the prognosis. Not only is the staff uncertain, but they fail to appreciate the definition of the situation held by the patients themselves. While this lack of appreciation is not as apparent as the "discounting" of awareness Glaser and Strauss (1965:107) found often occurs with babies, the comatose, and the senile, it persists in more subtle form. It is encouraged by the fact that they do not know the outcome, or they feel they have no information to convey. The potentially negative prognosis of hip fracture in the elderly is known to the staff and it takes some time for them to become assured that a given patient is out of danger or that complicating medical conditions are not likely to develop. As one physician explained when we asked for permission to approach his 71 year old patient:

> You know, of course, that because of her advanced age, this patient is in the high risk category for mortality in the next six months. (Case 2152) As we indicated previously, mortality rates within one year of a hip fracture range from twenty-two to fifty per cent in the elderly (Hielema, 1979:1224).

There were many indications that hip fractures were at least as, but perhaps even more, negatively viewed by patients themselves. The uncertainty, feelings of personal discontinuity and self-betrayal were conveyed in a variety of ways. The most obvious was in the explicit debate in which many hip patients engaged with themselves over whether

or not they would be able to, or even wished to, survive this trauma. For example, one 89 year old patient told us several days after surgery:

> I'm going to die...I'm crippled now. I might be dead in two months.(the time scheduled for our follow-up interview).(Case 1008)

A 71 year old said,

> The age is another factor. I'm getting to the point where I'm ready for bye-bye, if you want to be frank about it. Case No. 3015)

A 92 year-old woman was quite exasperated by the efforts of the physical therapist to rehabilitate her. She explained to me that she would be very happy to be able to just go to sleep and not wake up. She felt therapy would be useful to a younger person, but made no sense for a person her age. At the same time, she was considered by the staff to be physically in better condition than many patients twenty years younger.

Further evidence of the negative outcome associated with broken hips in the elderly was provided by patients who attempted to define their injuries as different from those they believed to be most ominous. One woman, for example, was careful to point out to the interviewer that it was not her hip that was broken, but only her upper thigh. Another explained at great length that her hip was not broken at all, but merely fractured, which she insisted was much less

serious. In the latter case, she associated a break with displacement and took comfort in its absence in her case. In two cases patients associated the negative outcomes of hip fractures to surgery, and therefore such treatment was rejected in spite of considerable pressure for it.

Uncertainty, as Davis (1972:98) points out, can be grounds for hope or despair. Perhaps it is the assumption that hope is more likely among patients who are unfamiliar with many of the potential medical problems that can arise in the course of surgery, hospitalization and rehabilitation, that lead staff to handle questions about prognosis in a perfunctory manner. It is not surprising, however, that elderly hip fracture patients do not respond to uncertainty with optimism when one considers that hip fractures of several decades ago,when these patients were well into adulthood, were much more lethal than they are today. It is only recently, since MediCare, that surgery has been widely available and techniques have improved to the point that a patient can be mobilized early thus avoiding many of the secondary causes of death or complications resulting from inactivity. These patients have seen generations of elderly before them simply go to bed and die as a result of the inactivity following hip fractures. Unfortunately the distinction in cause of death is rarely made clear to the contemporary patient. This is because the social realities of the patient and the practitioners rarely intersect.

Interaction is sufficiently limited that the perceptions of the patient are rarely brought into alignment with those of staff. As a result the uncertanty of the hip fracture patient is heavily tinged with fear and negative expectations. Under these conditions the uncertainty gives way to depression and lack of commitment to physical therapy, and the fear becomes becomes a self-fulfilling prophecy.

Reticence by the patient to press for information appears to be partially a response fear of the negative information one might receive, and inability to imagine a favorable future trajectory, but much of it surely is related to awe of, and deference to, the physician. This may be a much greater problem for women due to gender-related socialization. Concerns that were freely expressed in the context of the interview were withheld from the M.D. by patients with the explanation that the patient didn't want to be too demanding, or that he would probably take care of it anyway.

Another reason the fears of the older fracture patient are not adequately addressed by any member of the hospital staff is the confusion between long term and immediate concerns. The patient is treated as having an acute problem which indeed she does, and the staff views their job as dealing with the immediate threat. The patient's fears, if she expresses them, are addressed as an acute problem, "You'll be just fine, dear." This is a response she

recognizes as ritual, and one which does little to allay her concerns about the level of independence she will ultimately be able to recover.

While uncertainty is a problem for patients, Davis (1972:97) has observed that there are structural conditions which encourage it. For example, uncertainty, although neither premeditated nor intended, often serves the purely managerial ends of treatment personnel. He found it reduced the expenditure of time, effort and involvement which a frank and straightforward prognosis to the family might entail:

> his contact with the parents, the doctor was able to avoid "scenes" with them and having to explain to and comfort the, tasks, at least in the hospital, often viewed as onerous and time consuming.

In the case of young polio victims, uncertainty led parents to "expect a more favorable outcome than could be justified by any of the facts then known." In the case of elderly hip fracture patients uncertainty is not generally conducive to optimism and in many cases turns to despair and depression which ultimately impede recovery.

Confusion: A Major Issue In Rehabilitation

Confusion on the part of the fracture patient is a complicating factor which both impedes and results from poor communication between staff and elderly hip fracture patients. It is exacerbated, if not caused by the traumatic

entry and enforced dependency of the hip fracture patient's entry into the disability and rehabilitation trajectory. Given the traumatic nature of the hip fracture and its potential threat to the elderly person's survival, it is not surprising that "confusion" is often apparent in the patient. The occurrence of acute confusional states, sometimes referred to as "hospital psychosis" is well known. Its incidence has been estimated from ten percent (Garner, 1970) to thirteen percent (Butler and Lewis, 1978:72). Among elderly patients who were alert and oriented on hospital admission, 24% had shown substantial signs of confusion by the time of surgery (Williams, et al, 1979). In a pilot study conducted by the same authors (Williams, et al) in which elderly hip patients were not screened for pre-admission confusion, over half of the medical records contained some evidence that confusion had occurred during hospitalization.

Our own efforts at quantifying the problem of confusion among hip fracture patients have met with limited success because the confusion usually clears after the patient becomes ambulatory and nears discharge. Our interviews were deliberately scheduled as close to discharge as possible in order to obtain maximum information regarding planning for that transition. However, depression is recognized to be one potential source of confusion (Libow, 1973). In several cases, patients appeared so severely depressed that they

were neither responsive to the interviewers nor to physical therapy. Fracture patients had significantly lower scores on the Bradburn measure of affective balance (12.7) when compared with heart (13.03) and replacement (16.3) patients ($p.<.007$, $F=5.214$ at 2 d.f.). This was reinforced by P.O.M.S. scores among which fracture patients scored highest on depression ($x=9.9$), followed by heart patients ($x=4.0$) and replacement patients ($x=3.4$, $p.=.015$, $F=4.41$ at 2 d.f.).

With sustained attention from the interviewers, patients were often able to be very clear about their depression and confusion:

> I feel hopeless, defeated. If only I could get things settled. If only I knew where I was going. I just lie here wondering how I'm going to manage. Sometimes I feel I deliberately tune out just to get away from it all. It's much worse when I'm upset, but that's most all the time since I broke my hip. I try to think about happy days in the past. I think about my childhood and my mother. (Case 3029)

Not infrequently, cognitive problems went unrecognized or unnoted in medical records, but were apparent to interviewers. This is apparently explained by the greater response necessary to satisfy the interviewers than to satisfy busy physicians and nurses who require little response from the patient, particularly during the dependency stage of the trajectory.

The "pinning" or "nailing" of the fracture site remains somewhat fragile after surgery and improper usage can be

dangerous. This fact combined with the patient's confusion, which may manifest itself in an attempt to get out of bed to go to the bathroom, or to go home, often is apparent and in such cases leads to the use of a "posey," a cloth restraint which ties the patient in bed or chair. Finding oneself tied down often further frightens and confuses the patient, but is necessary from the staff's point of view to prevent new falls or the wrong type of movement.

One daughter of a patient flew in from the East Coast a few days after her 81-year-old mother was hospitalized. The central issue in her conversations with the hospital social worker was her mother's ability to return home after rehabilitation. The daughter felt her mother was mentally quite competent. The social worker felt the patient was quite "confused." The daughter explained:

> Of course she's confused now. Look at what she's been through. She had a bad injury and then was brought to the hospital where she has difficulty communicating because of her poor hearing and then was tied down for two or three days. Who wouldn't be confused! I know the posey was for her own good, but she didn't know that. (Case 2152)

While the patient's daughter argued that confusion under these conditions was understandable, the social worker felt that children have difficulty accepting the mental failings of their parents. The social worker cited as evidence for her position that the confusion was not merely temporary, the apartment manager's comment that he had been

worried about the patient starting a fire in her apartment. Once the daughter made arrangements for an extended care facility and left town again to tend her own family, her mother's depression prevented further effective communication with the rehabilitation staff or our interviewers.

There was recognition by the patients, in many cases, of their own confusion. This often led them to think maybe they had been given the information they wanted, but had simply forgotten it. One patient confided to the interviewer that she had been "terribly embarrassed" when her orthopedist told her that yesterday he had given her the information she was now requesting, yet she was unable to recall the first conversation.

Nursing staff turnover is often great during the patient's hospital stay which makes it difficult for the patient to experience a sense of continuity even within the hospital, to say nothing of integrating this experience with life prior to an following hospitalization. Furthermore, nurses are less likely to respond sensitively to temporary disorientation if they are unfamiliar with the patient. One patient described her experience with the nursing staff after nearly three weeks,

> Our nurses - my gosh, I have to ask them their names. Especially the night shift. I've seen the same nurse twice at the most. They have such a turnover. During the day time it's a little better. We've had some of the same ones. (Case 3029)

While the specifics vary by case, it is apparent that there are a variety of conditions present for hip fracture patients which reinforce tendencies for confusion. Confusion is particularly important because, in addition to being a condition for closed awareness, the closed awareness context in turn promotes confusion. Thus, a downward spiral occurs which is mitigated only by the intervention of the physical therapist who coaches the patient through the transition from the dependency phase of the trajectory into the mobilization phase.

The Mobilization Phase

We have seen that the physical therapist entered the trajectory during the pre-operative phase of the elective surgery patient's trajectory. For these patients transition to the mobilization phase began then. Trauma patients have not had this preparation. As a result their transition is more abrupt and less comprehensible. In both cases, however, the need to mobilize the patient leads to frequent and sustained interactions between patient and physical therapist. These usually take place twice a day for about one half hour each, six days a week. They continue over a period of two weeks or longer until the patient is discharged. These repeated and extended periods of interaction focus almost exclusive attention on the physiological barriers to ambulation and independence. However, these interactions provide a major source of reality construction

for the patient which may be as equally significant in determining outcome. This relationship is not the only one in the hospital which contributes to the construction of a future trajectory for the patient. However, the physical therapist is the only member of the acute hospital staff who has a theoretical understanding of the philosophy of rehabilitation.

As discussed in chapter one, there are fundamental differences in the assumptions of the medical model and the rehabilitation model of treatment. This is particularly important to the fracture patient who has not experienced the dramatic post surgery improvement felt by the replacement patient. It is important because therapy for the fracture patient is a more painful process with less obvious and immediate rewards. In addition to the fact that no one else has the training in rehabilitation philosophy, no one else has an equal opportunity to impart a recovery philosophy.

Orthopedic surgeons, not surprisingly, tend to center their attention on the technical aspects of hip surgery. Their involvement with the patient is most intense around the time of surgery. They continue to monitor the results of the surgery, but this can be done with the aid of x-rays, physical therapy and nursing notes, and can most accurately be described as supervisorial. Interactions with the patient tend to be very brief. This does not mean, however, that the physician relinquishes control. For example, the

order to get the patient out of bed and to advance from one stage of therapy to the next is issued by the physician and directed and carried out by nursing or physical therapy.

In recent years the transition from the passive stage to the mobilization stage of the trajectory has become more and more the province of physical therapy as opposed to nursing. There are a number of reasons for this. The first is the growing problem of a shortage of nurses combined with increasing demands on the nursing staff. These increasing demands are due in part to the impact of Professional Standards Review Organizations and their representatives in the hospitals, the Utilization Review Coordinators. The consequences of these processes has been to significantly reduce the average length of stay for Medicare and Medicaid recipients (National Center for Health Statistics, 1980:70). This means that hospitals now house patients who are more acutely ill than has been the case up until recent years. This has increased the demands on nursing at the same time requirements for keeping records have increased. As one physical therapist explained:

> Nurses are big supporters of physical therapy because they are so overworked. They know they cannot handle the additional work of getting the patients up and around.

Nursing shortages and the increased use of floaters and registry nurses have contributed to the growing use of PT's

because the many non-regular nurses on an orthopedics unit are less likely to be highly skilled in the subtleties of orthopedic care, and are less likely to be familiar with the precautions required by the M.D. and the specific patients in each case. The fragility of both the surgery and the patient, particularly in the case of hip replacements, requires a high level of knowledge and skill in order to avoid complications and accomplish the desired goals. Further, elderly patients often begin the mobilization phase of their hip replacement trajectories with the use of special physical therapy equipment such as parallel bars and tilt tables.

The patient-therapist relationship, more than any other relationship the patient has in the hospital, is a coaching relationship. The patients require this coaching in order to pass smoothly from one stage of their disability and rehabilitation trajectory to the next. As Strauss (1069:110) has defined it,

> a coaching relationship exists if someone seeks to move someone else along a series of steps when these steps are not entirely institutionalized and invariant, and when the learner is not entirely sure about their sequence.

The patients are experiencing surprising new limitations and/or capabilities that require explanations as well as training. As in the previous stages there are significant differences between the post-operative treatment and reha-

bilitation of the hip fracture and hip replacement patients which have significant social-psychological implications.

Hip Replacements. The replacement patient, following surgery has a greater potential for dislocating the new joint and for hematomas, than does the fracture patient, whose injury can be securely "pinned." As a result, following surgery, the replacement patient's new hip is usually immobilized for a longer period. The replacement patient is placed in "balanced suspension" for up to five days. This is an arrangement which holds the replacement leg and hip still while allowing the patient to use his/her arms and an overhead trapeze, with the help of the non-operated leg, to shift weight, have the bed made, and to get on and off the bed pan.

Replacement patients not only receive a rest, but during that time are prepared for the next stages of their trajectories. This preparation is given, in part, by the physical therapist who works with the patient doing isometric exercises and teaching the precautions which must be followed once the patient begins ambulating. Additional education is provided in the form of pamphlets and slide shows. The university hospital used two slide presentations; one to prepare the patient for surgery and the immediate post-operative phase, and another to prepare the patient for discharge. Other studies have confirmed our observations that replacement patients tend to be exceedingly optimistic

(Burton, et al, 1979; Weaver, 1978) Analysis of variance showed hip replacement patients had the highest Bradburn Balance Scores of replacement, heart or fracture patients, while fracture patients had the lowest scores ($p.<.007$). They have high expectations and look forward to a fuller more active lives after their surgery. The education they receive both reinforces their optimism and helps them to realize their goals.

This period of immobilization for replacement patients means that physical therapy begins gradually. They have a smooth and gentle transition from dependency to mobilization. This transition is reinforced by shared definitions of a favorable future trajectory which have been made explicit in interactions between the physical therapist and patient and reinforced in the patient's interactions with others.

Fracture Patients. The risk of various problems such as accelerating osteoporosis, emboli, and pneumonia are increased in the elderly. Given these facts and the lack of risk for dislocation and hematomas, there is agreement that hip fracture patients must be encouraged to ambulate as soon as possible. Furthermore, good circulation and some weight bearing can help knit the fracture. Thus, the fracture patient is made to get up in a chair one or two days following surgery when the pain is often still acute. She is expected to begin walking with the assistance of a walker

within another day.

Once the patient begins ambulation, the rehabilitation process is very similar for fractures and replacements. When the patients' strength and stability with the walker increase, they are taught to walk with crutches. About the tenth day after surgery, the physician removes the stitches. Training includes not only ambulation, but "transfers" in and out of bed, on and off the toilet, and chairs. As patients progress they are shown how to climb and descend stairs, and perhaps how to get in and out of automobiles.

Not only is the transistion more abrupt and painful for the patient, but helping the fracture patient through this transition is not a desirable task for the physical therapist. As one therapist explained, "You feel like you are torturing them because they are in so much pain after surgery, and they are afraid. You can't do much with them.

The lack of attention given to the education of the hip fracture patient is striking in comparison to the replacement patient. To some extent this difference is the unavoidable result of the difference between elective and emergency surgery. Following surgery, however, few efforts appear to be made to compensate for this difference.

Differences between lay and professional understandings of the appropriate response to physical and emotional trauma are barriers to therapy for fracture patients. Lay

understandings emphasize rest. Laymen are rarely aware of the lethal effects of prolonged immobility in the elderly. It is not surprising then that fracture patients frequently commented to interviewers that "they are pushing me to fast", "I am not up to it yet," or "I need more rest." The pain they feel when they attempt to use the fractured hip further reinforces their initial impulses to stay off it and rest.

The therapist holds taken-for-granted assumptions regarding the importance of weight bearing and exercise for healing. These constitute a recovery philosophy which runs counter to lay understandings, but this is not transmitted to the elderly patient in any systematic way. Failure to transmit this recovery philosophy has significant consequences because the patient cannot make a successful transition from dependence to independence without considerable commitment to the process. Absence of this commitment does not go unrecognized. In the next section we will see how the physical therapist labels and responds to this problem.

Motivation

The absence of systematic education of the fracture patient has not been seen by physical therapists as a factor in the patient's lack of enthusiasm for the rehabilitation process. Limitations on preparatory instruction, after all are obviously imposed by the traumatic nature of the injury.

The need for education is further obscured by the high incidence of confusion and depression which makes these patients less responsive and communicative. It appears that an additional factor in overlooking the need for such education is the low expectations physical therapists and others have for these patients due to their advanced age and apparent frailty. Further, an important structural barrier is the dominance of the medical model in the acute setting with its emphasis on what is done to and for the patient. None of this, however, keeps physical therapists from recognizing that a problem exists in the rehabilitation process. The problem is recognized and labelled as a lack of "motivation."

From the patient's perspective, there are several reasons why therapy is resisted or more often only passively accepted. They include depression, pain and fear of falling, as well as adherence to lay assumptions regarding the necessity for rest discussed in the previous section. All of these are concerns which tend to be greatest among fracture patients. They are barriers which are difficult to overcome unless they could construct a future trajectory based on a rehabilitation or some other recovery philosophy.

Depression arises partly from the patient's belief that her chances of recovery are minimal or that independence has been permanently impaired. In only one case was this depression ever dealt with by a psychiatric consultation.

In this case the psychiatrist recommended support and reassurance. The patients' interactions with social workers, as we will discuss below, did not usually take place until discharge approached, and even then, they tended to focus on practical problems rather than the patient's emotional response to her fracture, or it's meaning for her future. One patient who was very upset immediately after admission about the implications of what had happened to her asked for help and received counseling, not from a social worker, but from a chaplain. She explained, "I was alone, very nervous, shook up -- so bewildered -- at sea. I just needed someone to talk to..." The fact that she was seen by a chaplain, as opposed to a social worker illustrates that such services are considered peripheral, not essential. Further it is unlikely the chaplain was able to educate the patient in the philosophy of rehabilitation or to help her understand fully how her participation could contribute to her own recovery.

Often patients' confusion or depression was written off as "organic brain syndrome" or ignored on the assumption that it would pass. What seems to happens is that either the confusion and depression subside once physical therapy helps the patient recover walking ability and the pain is reduced, or the depresssion interferes to the extent that the patient is defined as having poor rehabilitation potential and discharged to a skilled nursing facility or a nursing home.

It is surprising that the depression of elderly fracture patients has not been recognized as a serious problem. It is well known that similar trauma in a younger person necessitates attention to social-psychological issues if rehabilitation is to be effective. Recognition of the importance of this aspect of care is a cornerstone of rehabilitation philosophy:

> In the long process of recovery and rehabilitation which the disabled person goes through there are certain points where success or failure looms especially important, here the individual's whole future often is cast for good or bad. One of these is no future. Here the physical therapist like the nurse can be the deciding influence. Here the rehabilitation process begins - and if it does not begin here, it frequently is never successfully completed. (Switzer, 1955:618).

Recognition of the decisive role of the physical therapist in reconstructing the shattered self and related social-psychological processes can be found throughout the physical therapy literature. These issues seem to have received more attention as a general problem of the disabled than one with any increased significance for the elderly, however:

> When a person has had a severe disabling accident, much more than his physical abilities may be shattered. His fundamental concept of himself may also be in pieces and must be fit back together over a period of time (Owen, 1972:284).

A physician once explained this challenge this way:

> Perhaps in no other medical specialty does the auxiliary medical personnel have as close a patient relationship as in physical therapy...The

> professional relationship between the physical therapist and the patient may in many instances determine the success or failure of any program of patient care. More important than any single technical skill is the ability of the therapist to maintain the patient's morale at its highest level.

None of these statements were made with reference to older patients, but merely to disabled patients in general. The emotional significance of major trauma late in life may have even greater consequences for identity.

While motivation is a central concept in physical therapy it is seen in essentially behavioristic terms, as opposed to being understood as a response to a set of meanings or interpretations. Attempts to motivate the patients include cajoling and coaxing as well as praise for small successes. They are aimed at getting cooperation for specific actions as opposed to enlisting the patient as a partner in the process. One therapist revealed her behavioristic bias by describing the problem of motivating a patient as "kind of like a power struggle." The process of reality construction has received little attention from physical therapists.

In the case of the hip fracture patient the shattered hip is often accompanied by a shattered self. Not only is independence seriously threatened, but the victim is drawing on a life time of experience in which a hip injury has been a virtual death sentence. This is no longer the case, yet

no one is placing the meaning of a hip fracture in historical context for the patient. As a result the hip patient may receive excellent medical treatment but the patient remains dependent and unmotivated to regain independence. The fact that the major barriers to recovery from a hip fracture are not medical, but psychological has been noted by one of this country's leading orthopedic surgeons:

> It is often the final insult which preceeds death in the geriatric patient. Since the use of open reduction and internal fixation of hip fractures first popularized by Smith-Peterson, the perioperative mortality has significantly decreased to less than ten per cent, however, the overall long term mortality has not been altered and still remains from thirty to fifty percent six months post injury. The reason for this remains obscure, however, it appears that a psychological and social phenomenon occurs that far outweighs the medical problem resulting in the patients "giving up" (Karpman, 1980).

The fracture patients who make a successful transition from the enforced passivity of the early stage of their trajectories, do so largely due to the dedication of the physical therapists. At first the shattered self-conceptions of the hip fracture patients grate against the physical therapists' plans for sequential movement. While they do not directly address these problems, the physical therapists offer kindness, attention, and a a set of milestones in the recovery process. As the patient moves from one to the next, often just to please the therapist rather than out of self interest, she may begin to reconstruct her shattered

identity and gain hope for effective recovery. Often meeting fear and other forms of resistance, the therapists push (and sometimes even drag) the patients through the transition until they become able to walk again.

This interaction between the physical therapist and the patient is based on the assumption that the patient has the potential of at least partially recovering. This is an assumption that seems to set the standards of therapy for all patients in the acute setting. At the very least the patients must be improved enough to leave the acute setting. In contrast to reports from chronic settings (Roth and Eddy, 1967) in which the elderly are rarely given a realistic opportunity for rehabilitation, the physical therapists in the acute settings persist in the face of indifference and even resistance. Confusion, for example, is considered to invalidate the patient's refusal to participate in therapy. This means that the therapy often works in spite of lack of attention to the patient's interpretations of the meaning of her situation and in the absence of a clearly defined future trajectory. Mind and body are in opposition to each other, as Davis found was often the case with polio victims, and remarkably, the body often survives and improves anyway. The potential for recovery which could result from attention to the reality which the physical therapists and others participate in constructing for the hip fracture patient remains untapped.

Discharge

There is a general sense about fracture patients on the part of all levels of staff that less can be reasonably expected of them than is expected of replacement patients. Yet the presence of fracture patients in the acute setting often poses a threat to the economic well-being of the hospital if they are kept too long. Utilization review "non-accredits" them as soon as they are "able to ambulate independently with walker, cane, or crutches, or sooner, if the patient appears to have reached maximum potential for improvement in a hospital setting. Their improvement must take place in a "reasonable period of time," or Medicare will no longer continue to provide reimbursement. Definitions of a reasonable period of time are based on the prevailing average length of stay at the admitting and other institutions and on a predicated length of treatment that would not fall into the realm of chronic care. This has been shortened as fiscal pressures have increased. Ironically, Medicare regulations are interpreted in such a way that the average length of stay for replacement patients is greater than for fracture patients. The mean stay for fracture patients in our sample was 16.5 days, as opposed to 22.2 days for replacement patients. As a physical therapist from the community hospital explained:

> It is very difficult to distinguish slow progress from maintenance, so old people get pushed out of the acute setting. A few years ago we didn't have

> to work that hard to show the progress. Now we have to buy time and bargain... Now patients are being forced to leave the hospital in much worse condition with much less P.T... These people are being sent home while still in need of a lot of therapy and the absence of it leads to their deterioration. As a result, they have to spend everything they have on medical care and eventually they become Medicaid patients.

The patient perspectives on discharge are often similar to that of the above quoted physical therapist. A significant proportion of the fracture patients do not ever become motivated to recover. Many of these were among a group identified by interviewers as "too confused" to be given our baseline interviews. Some of these patients work at therapy, but do not overcome their fear of falling or being alone (having fallen) by the time of discharge. They opt for placement rather than independence because they feel they are not ready. Out of 29 previously independent fracture patients seen during this study, nine were no longer living independently at the end of two months.

In spite of these problems patients must be moved out of the acute setting after approximately two to three weeks. The physical therapist functions as a gatekeeper within the limitations set by Medicare. That is, she provides the assessment of the patient's functional capacity to both the physician and the social worker. She may indicate that the patient is not capable of returning directly home alone. Usually this judgement is made in terms of the patient's safety. On the basis of this information the social worker

may be called in to help the patient find temporary placement in a skilled nursing facility or a custodial care setting.

The social worker may be alerted to a patient's needs in discharge planning or social service rounds, or receive an order requesting her services from the M.D. Sources of information other than the M.D. are important because they give her more time. One social worker explained:

> Often the doctors don't think about social services until utilization review gets on their backs, then they are willing to have us solve the problem of what they are going to do with a patient they can't send home. On the other hand, if we approach a doctor about a patient they usually won't turn us down.

As two utilization review nurses concurred:

> Toward the end we contact the social worker and ask if the patient can go home. Theoretically the social worker is supposed to chart shortly after admission, but that is not usually the case.

In addition to the problem of what appear to be tremendously heavy work loads, the social worker's ability to begin discharge planning early in the patient's hospital stay is made difficult by the fact that it is usually not possible to know how much help a patient will need until her level of independence can be assessed near discharge. Her involvement doesn't usually come earlier because it is not clear then what, if any, assistance will be required.

Furthermore, if she does enter notes into the chart this will be interpreted by utilization review as indicating discharge planning has begun, and utilization review may then begin to follow that particular patient more closely, thus increasing the pressure the social worker is under, according to one informant.

There are two major dimensions to the work of the hospital social worker: counseling and discharge planning. The former includes helping patients and their families on an emotional level, including alleviation of anxieties or fears concerning permanent disabilities, disfiguring illnesses, or an uncertain future. This is particularly important insofar as such problems interfere with understanding, accepting and following medical recommendations.

The discharge planning dimension includes arranging for discharge or post-operative care at home or in institutions, placement in nursing homes, providing financial assistance to patients or families during illness.

Social workers, are unanimous in finding the emotional counseling aspect of their work the most rewarding. Yet, the social worker does not function as a rehabilitation counselor with elderly hip surgery patients in any of the three settings studied. The structural pressures are such that they are able to find little time for counseling. When they do find time for it, it is rarely with elderly, con-

fused and depressed hip fracture patients. When asked about the content of their actual work, as opposed to the official job description, or training, social workers commented:

> The psycho-social aspects of the medical social worker's job tend to get lost. That is because we have too many people to take care of, there are too many hassles, and too much red tape. The situation is getting worse, not better, because of Medicare and their regulations. (129812)

and:

> What I do I don't even need a degree in social work for- a secretary could do it. All I do is make arrangements for services. We don't spend anytime doing what we should, which is helping people cope emotionally with acute illness. Instead of finding out what patients need, we are always in the position of having to persuade them to accept whatever it is that we can arrange...whatever it is that we can work out to get them out of here.

When social workers do make time for the counseling aspects of their work it is with different categories of patients; those younger and in more obvious emotional distress. One social worker, for example, explained that she makes a special point of seeing amputees and those who are given a diagnosis of cancer.

As the patient approaches the juncture of actual departure from the acute setting, it is again instructive to compare fracture and replacement patients.

Hip replacements. The replacement patient has had an opportunity to plan for the post-hospital convalescence beginning long before her hospitalization. She (or he) generally has had a longer hospital stay, and probably partly because of the longer stay, is more confident and eager to return home. Ideally a hip surgery patient is ready for discharge when the following criteria are met:

1. The incision is healed and without drainage.

2. There is no abnormal temperature.

3. The patient can get in and out of bed and go to the bathroom without assistance.

4. The patient is stable and safe walking alone with a walker or with crutches. This should include walking up and down stairs with crutches if the patient has stairs at home.

5. The patient can do muscle strengthening exercises by herself.

6. The patient understands and follows the activity restrictions.

7. Arrangements are made for any assistance needed at home. As we indicated in the previous section, only items one and two are recognized as justifying continued presence in the acute setting.

M.D.'s, however, would prefer that all seven criteria be

met. If the patient does very well this is possible, otherwise the M.D. and the social worker must eventually succumb to utilization review pressures and placement in a skilled nursing facility becomes and interim measure, or the patient goes home.

Hip Fractures. The fracture patient is less well prepared and tends to be fearful of her ability to manage at home. The institutional pressures for discharge are greater on the fracture patient, nevertheless. There are two relevant conditions here:

1) The physicians who do total hip replacements assume a greater share of the responsibility for a successful outcome just by virtue of the fact that the surgery is elective. The patient has been cleared medically and failures reflect more directly on the individual surgeon's reputation and skill, and to some extent on the reputation of the hospital in cases of elective surgery than in the case of hip fractures. Therefore, they are reluctant to turn the replacement patient over to another institution while still in need of a significant amount of care, they do not feel the same degree of responsibility for the fracture patient.

2) PSRO regulations have less rigid criteria justifying continued reimbursement for replacement patients. Review occurs more frequently in the case of fractures, and the average length of stay which serves as the

guideline for utilization reviewers is shorter, giving them a stricter standard to meet.

Once utilization review has determined that a patient is not certifiable at the acute level of care, she must be discharged quickly or the hospital has to carry the costs of her continued stay. This creates a number of problems for the patient and for social workers, because at the same time the patient is not independent enough to return home, there may not be any available beds in skilled nursing facilities.

When asked by this interviewer if the availability of skilled nursing beds was considered in the non-certification process, a utilization reviewer responded that there was usually a delay. Nevertheless, she added, "We more or less wipe our hands of the patient once we decertify them."

Transfers to SNF's are problematic for several reasons. First, patients often do not want to go, because they fear them as places they may never leave. One social worker estimated that about fifty per cent of her elderly patients felt this way. A second reason is that beds are often not available at the appropriate level of care. And third, if the patient is rapidly improving she may not qualify for SNF level of care by the time the bed becomes available.

Skilled nursing facilities are reluctant to take patients who are doing too well, because they may soon be decertified at that level of care by their utilization

reviewers. On the other hand, if they are not doing well, and become decertified for lack of adequate improvement, or their Medicare benefits run out, the skilled nursing facility may have trouble finding another place that will take them that the patient can afford. Convalescent, or maintenance level care is not covered by Medicare. Medicare hospital insurance will help pay for inpatient hospital services only as long as the patient requires the kind of care that can only be provided in an acute hospital. Rehabilitation services such as physical therapy may be covered under Medicare, but the need for PT, in and of itself, is not sufficient justification for a patient to remain in the hospital by utilization review standards. Physical therapy can be obtained in a skilled nursing facility which is the next level of care. These services may also be obtained through a home health agency in cases where a patient is well enough to be home alone, or perhaps has family or paid help. The fact that post hospital services are very difficult to get is not considered.

The influence physical therapy exerts in discharge planning is thus primarily in in determining what level of care is appropriate for the patient on discharge. For example, a utilization reviewer may indicate that a patient's time is running out because the average time for such conditions to be in an acute setting is passed, and no medical problems remain which require this level of care. The phy-

sical therapist can then say, "But the patient is not safe enough to go home without supervision." Since most hip patients live alone, this means they must go to a skilled nursing facility to continue their physical therapy. However, if the therapist indicates that the patient can be "independent" in another day or two, utilization reviewers will often allow an additional few days. They do this because it helps them avoid the paper work involved in non-certifying patients, and because they recognize that it is often the best solution to a complex problem.

Summary. The disability and rehabilitation trajectories of elective hip replacement surgery and hip fracture patients have many characteristics in common. Both require surgery, a two or three week hospitalization, and physical therapy to help them move through a series of similar phases in the process of rehabilitation.

Physical therapists enter these trajectories at different phases and encounter different responses from the two types of patients. Replacement patients tend to be optimistic and eager for therapy. Fracture patients, in contrast, often resist or only passively accept therapy. This difference is noticed by the therapists and attributed to the fracture patient's lack of motivation. Examination of the trajectories from the perspectives of the patients indicates that differential responses to physical therapy as well as

the notoriously poor outcomes for hip fracture patients may be less a function of the personal failings implied in the term "motivation" than an inability to construct a favorable future trajectory. The hip fracture patient's poor outcome is partially a response to socially constructed definitions of the situation which offer neither hope nor a coherent recovery philosophy.

In the next and final chapter I will discuss and summarize the implications of interaction between the physical therapist and elderly patients, particularly elderly trauma patients.

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Chapter Six

CONCLUSIONS

The preceeding chapters have examined two processes which intersect and influence each other. The first is the development and professionalization of the occupation of physical therapy. The second is the disability and rehabilitation trajectory of the elderly hip surgery patient. By linking these processes, one macro-sociological and historical, and the other micro-sociological and interactional, we can clarify some of the consequences of this relationship for both the occupation and the clients.

In this chapter I will summarize these processes and discuss the implications of each for the future of the other. I will first discuss the implications for the development of physical therapy. Then I will discuss these issues from the perspective of the patients' interests.

Implications for Physical Therapy

Physical therapy has emerged as a major service provider for the elderly. Elderly patients constitute the majority of physical therapy clients in two of the three acute settings studied and nearly half in the third hospital. This is consistent with previous findings that 50 to

70 percent of the acute rehabilitation patient population is over fifty-five years of age (Jackson,1980:2 Geritopics). The data presented on population trends indicates further movement in this direction for at least the next 28 years (Fries, 1980:131). More specifically, the population at risk for hip replacements and fractures is growing rapidly and the incidence of hip fractures within that population is increasing (Hielema, 1979:1221). Currently there are 2,000,000 such injuries annually (Butler, 1980,164).

Originally physical therapy emerged out of efforts to respond to the health care needs of children who were victims of polio epidemics. Later the occupation's domain was enlarged to provision of services to young soldiers during the first and second world wars. As skills were developed and demonstrated they were made available to wider segments of the population. However, historical events and processes such as wars, epidemics and demographic shifts exerted a strong influence on physical therapy's rate of expansion, settings, and clientele. These historical events and processes provided the context in which physical therapy created and defined its occupational domain.

While these historical events were occurring physical therapists organized to assert their own interests and independence as an occupation. They began to resist attempts by medicine to retain and strengthen control. As physical therapy has been successful in developing its

autonomy and expanding its domain the socio-historical context has continued to change. Relevant developments include the changing age composition of the U.S. population, and the increasing prevalence of chronic disease. The latter includes conditions treatable by various technologies such as as hip fracture surgery and replacement surgery which potentially expand the need for rehabilitation services for the elderly.

In response to demographic changes and in response to political interests and pressures the federal government has established social policies such as Medicare and Medicaid which have made health care services including physical therapy available to the elderly and, as Estes (1978) emphasizes, profitable to the providers. These programs have established and encouraged attention to issues related to care of the elderly. This activity has not been purely one of facilitating delivery of services or fulfillment of perceived needs. For a variety of complex political reasons (Estes, 1978) legislation has reinforced concentration on the acute stages of illness trajectories leaving long term problems to be financed privately or by need-based programs such as Medicaid, in effect, limiting reimbursement to an institutionally based acute care model. The presumed and most often articulated goal of these restrictions has been to control costs through limiting intervention to what has been socially defined as the most pressing.

This emphasis on acute care surprisingly has not hurt physical therapy. This specialty has adapted remarkably well to the acute hospital setting which is where far more physical therapists can be found today than in skilled nursing facilities, convalescent hospitals and rehabilitations centers, and home care agencies combined. In fact, demands of the acute setting have contributed to the shortage of physical therapists, and this is a continuing problem.

Physical therapy began as a rehabilitation occupation which meant it was based upon a series of assumptions which, as discussed in chapter one, are inconsistent with an acute care treatment model. Yet it has been more successful than any other rehabilitation occupation in the acute setting.

This adjustment has resulted in growth along all of the dimensions associated with the process of professionalization. These include expansion of educational requirements for entry level physical therapists as well as establishment of masters degree and Ph.D. programs. There has been development of its collectivity or service orientation with its focus having moved from service to the physician to service to the patient.

The autonomy of physical therapy has been extended through the development of independent accreditation and the emergence of private practice. Specialization is now emerging with the approval in 1981 of certification for speciali-

zation in four areas including orthopedic physical therapy, pediatric physical therapy, cardiopulmonary physical therapy and sports physical therapy.

The self-conscious and explicit movement of physical therapy toward professionalization has made PT sensitive to demographic and political trends and to issues related to the care of elderly patients. This is indicated by the fact that the gerontology section is the fastest growing section of the American Physical Therapy Association. Through this organization therapists support development of expertise or scientific knowledge and use evidence of this development in the political arena to promote the institutionalization of professional authority.

Analysis of the extent to which physical therapy has attained the attributes commonly associated with professions can be misleading. As Freidson and others have pointed out, most of these attributes can be developed as a device for helping occupations justify or improve their position. Furthermore, Roth (1974) has warned that the rating approach often deflects concern from more crucial social issues of process such as the use of political power to increase the occupations quasi-monopoly or from issues of accountability to the public.

In terms of the first issue, protecting or expanding physical therapy's quasi-monopoly or domain, two potential

problems emerge from the material presented in the previous chapters. These are financing, and competition from other occupations and professions.

The current political atmosphere of perceived fiscal crisis suggests two likely developments. One is that health policy will increasingly focus on cost-benefit analysis in determining which expenditures are to be trimmed, cut or strengthened. The second is that private financing can be expected to become increasingly significant as a source of payment for physical therapy. The latter would not be inconsistent with movement toward autonomy since reimbursement requirements for prescriptions from physicians are becoming the last major barrier to full autonomy. The two developments are not mutually exclusive, however.

Current fiscal crisis and political pressure can be expected to continue to focus attention on cost-benefit analyses of various types of health care strategies as measured by outcome. This means that expertise and collectivity orientation will be subject to more critical assessment by privately paying patients as well as by policy makers who will be looking for successful outcomes with regard to maintaining or restoring the independence of those for whom treatment is being financed.

Thus, emphasis on cost-effectiveness has tended to work in favor of physical therapy to a limited extent. That is,

physical therapy is generally recognized as necessary to speed recovery so that stay in the acute setting can be reduced as required by Medicare and Medicaid reimbursement policies. Well developed systems for measuring and quantifying patient progress strengthened its position in this context.

The recognition of the potential contribution of physical therapy to facilitating early discharge has not been extended to recognition that additional therapy administered through home care programs could improve outcomes by reducing costs of readmissions or long term care. These are the questions that will be addressed increasingly as attempts to cope with the problems of fiscal crisis continue. In the meantime, however, it is in the interest of physical therapy to give increasing attention to the special rehabilitation needs created when disability and advanced age coincide both within and beyond the acute setting in order to strengthen their claim to legitimation particularly to third party payers.

The second potential barrier to development of a closer relationship between PT and the elderly is the competition between PT and other occupations for this clientele. This can be expected to come primarily from occupational therapy and chiropractic.

Occupational therapy is a potential threat to physical

therapy only long range and to the extent that it can be used by home health agencies and day care programs to provide services that can also be provided by physical therapists. Currently physical therapy is protected by an advantage in reimbursement regulations which designate it as a primary service and occupational therapy as a secondary service. However, some demonstration projects which have different reimbursement agreements with the government are relying more heavily on occupational therapy. For example, San Francisco's innovative On Lok program offers both occupational and physical therapy in its day care program and reports that occupational therapy is not only very effective in developing clients capacities for independence, but it is more popular with them. Occupational therapy's paradigmatic heritage which includes attention to mental status and practical problems of daily living is particularly well-suited to address the complex physical problems of the elderly with their consequences for emotional well-being. This breadth of approach might be one anticipated benefit occupational therapy has to offer physical therapy should the issue of a merger receive continued attention in the future.

Chiropractic, as discussed in chapter three, is moving aggressively toward gaining legal sanction to provide physical therapy in order to be eligible for reimbursement through Medicare and Medicaid, particularly in California. It is unlikely due to its relationship with medicine and its

established pattern of private practice, to attempt to replace physical therapy in the acute setting. This may lead to significant encroachment among the outpatient population, however.

Evidence of of physical therapy's ability to successfully meet the rehabilitative needs of an elderly clientele becomes increasingly important in martialing government support for institutionalization of physical therapy's interest in rehabilitation of the elderly, particularly when the struggles over domain enter the public arena for debate.

The next section will summarize the findings of chapter five regarding the clinical relationship between the physical therapist and elderly patients and discuss implications for both.

Physical Therapy and the Needs of the Older Patient

Physical therapy has achieved a secure position in the acute phase of treatment of osteoarthritis and hip fractures. Elective hip replacement surgery patients receive instruction on the rehabilitation process and appropriate use of their new joints even before surgery. This enables them to learn to prevent dislocation and other complications and facilitates speedy recovery of independence. The importance of physical therapy in treating fracture patients seems to be equally well recognized. Cases in which it is

not provided occur only rarely where patients are considered to have no hope of recovering ambulation ability. The physical therapist spends about one hour per day with the hip surgery patients; usually in two half-hour sessions, over a period of about two weeks. The interaction during this time is potentially significant not only for improving the physical strength, gait, and endurance of the patient, but for constructing a future for the patient. This process of reality construction has received little attention from physical therapists.

We have seen that the trajectories of hip replacement and hip fracture patients have certain medical characteristics in common. These include the need for surgery, a two to three week hospitalization period, physical therapy to help them move through a series of phases in the process of regaining their mobility. While these two trajectories have many similarities, they differ sharply from the patients' perspectives.

The physical therapists enter these two trajectories at different phases of the process and under different conditions. The context for the hip replacement patient is one of optimism in which renewed independence is defined as the appropriate expectation for the future. This expectation is socially constructed for the patient in the course of interactions with the physician and reinforced by the physical therapist and other members of the hospital staff. The

patient is provided with a well developed recovery philosophy based on the efficacy of surgical intervention. This is essentially an acute care philosophy in that the emphasis is on what is done to and for the patient. However, the patient is also provided with a favorable future trajectory which depends in part on his or her cooperation and participation. This future trajectory is defined and reinforced with various forms of patient education. For example, slide shows and printed materials are often presented to the patients. Discharge planning is begun early in the process and optimism is supported by rapid post-surgical relief from pain.

In contrast, the trauma of a hip fracture often leads to a shattered self. The symbolic significance of a hip fracture is a function of its occurrence in advanced age, when time, physical resources and social supports are in short supply and independence is tenuous, but highly valued. Often fracture victims are alone and without help for extended periods of time before they are found and receive assistance. Fears and pessimism are exacerbated by outdated meanings regarding the medical significance of such an injury. The context of uncertainty in which treatment begins is not overcome. Treatment is provided without challenge to these meanings, partly because the staff shares this uncertainty. Lack of confidence in a favorable outcome combines with lack of understanding of the symbolic signifi-

cance of the injury to the patient to inhibit the staff from offering any well developed recovery or rehabilitation philosophy to the patient. The injury is treated as a physical problem which is amenable to technical intervention by hospital personnel.

The physical therapist serves as the coach in the patient's transition from the enforced dependency phase of the trajectory to the mobilization phase. This transition is a more dramatic one than the replacement patient must make. Continued post-surgery pain discourages assumptions that surgery in and of itself has solved the problem. The patient is expected to move to the mobilization phase but is never provided with the appropriate recovery philosophy necessary to construct a favorable future trajectory. For example, the patient is not provided with a coherent set of definitions of elements of the rehabilitation process such as the importance of exercise and weight bearing, the dangers of prolonged rest and inactivity, the meaning of pain during the process and the importance of personal volition in the recovery process.

Pessimism about the potential outcome is the major barrier to successful rehabilitation of the fracture patient. When the patient does not believe recovery is possible, that belief becomes a self-fulfilling prophecy in that the patient does not do the work required in rehabilitation. The rehabilitation process is by definition a long process

requiring work and commitment on the part of the disabled person.

By default the patient is left with the acute care treatment assumptions that what counts is what is done to and for the patient. These are reinforced by lay definitions of appropriate responses to pain and discomfort which emphasize rest. Thus, mind and body are allowed to undermine each other rather than to serve each other; a danger Davis (1963) noted in his work with polio patients. This reflects the perspective of acute care which is in sharp contrast to the philosophy of rehabilitation. Under conditions of lack of attention to the symbolic significance and social consequences of a hip fracture uncertainty often turns to defeat, not only for the patient, but for the therapist as well in terms of her ability to achieve maximum results. The patient's potential for confusion is increased rather than reduced under these conditions.

This examination of disability and rehabilitation trajectories of hip surgery patients suggests that the distinction between elective surgery and trauma is an important one because of the contrasting meanings of each. The former offers hope; the latter tends to destroy it. Trauma in later life does not have the same meaning as trauma at an earlier stage of life. The physical condition cannot be treated effectively without recognition of the symbolic significance of the injury to the older person. Karpman's

(1980) observation regarding the social and psychological barriers to recovery among hip fracture patients are borne out by the findings of this study. Depression is sufficiently prevalent among fracture patients that it must be considered the primary barrier to recovery of independence. The problem does not go unnoticed by physical therapists. However, it is identified and labelled as a problem of "motivation".

Motivation tends to be operationalized and defined behaviorally rather than viewed as a response to a set of interpretations and arrangements. A well motivated patient is one who cooperates by following instructions and does not complain too much. Encouragement is provided to engage in specific tasks or exercises. Patients are praised for their accomplishments, but there is no program of systematic education in rehabilitation and physical therapy theory to explain how this activity contributes to healing and out of which the patient can construct a favorable future trajectory. Nor is education provided which points out the deleterious effects of prolonged inactivity. These are assumptions which the therapists takes for granted, but which are never presented to the patient in a systematic way as alternatives to lay assumptions.

The physical therapist's approach to motivation has been shaped by a history in which professionalization has been closely related to medicalization. The development of

objective measures of progress and the use of machine technology have given the therapist status in the medical setting. At the same time the subjective experience of the patient has been relegated to the background.

In a rehabilitation setting this may be less likely to occur for a variety of structural reasons. These include the dominance of the rehabilitation philosophy, maintained through the support of team members who share it, the presence of rehabilitation counselors, and more time to attend to this aspect of care. However, the elderly trauma patient is not considered a rehabilitation patient and normally never goes to a rehabilitation center. Medicare and Professional Standards Review Organizations define hip and other fractures as acute problems. The primary pattern is to go from the acute setting to home. Skilled nursing units which can be distinguished from rehabilitation units, may be a transition to home or permanent placement only in a minority of cases where complications or special problems arise.

It has been noted in the previous chapter that the lack of assurance that help will be available at home appears to be a factor in the inability of the patient to construct a future trajectory. This suggests that attention to the meanings of the injury to the older person facilitates understanding of the need for increased home care and post acute setting supports. Often patients themselves, fearful of going home, request that temporary skilled nursing

facility placement be arranged for them. This can be very difficult for hospital care providers to arrange under existing Medicare/Medicaid regulations. Uncertainties surrounding the patient's eligibility requirements for skilled nursing facility or home care review, as well as the heavy demand for these services social workers or physical therapists from assuring patients they will be available until the need is confirmed or not confirmed near discharge. This situation does nothing to reinforce optimism or construct the future trajectory necessary to repair the shattered self. Studies should be made to see if such assurances earlier in the patients' trajectory could build patients' confidence in their capacity to return home and thus reduce costs of long term institutional care. At the very least they suggest that the building of a future trajectory has structural as well as social-psychological components. The social-psychological aspects of treatment need not wait for policy changes from the federal government, however.

Physical therapy has gained ascendency in the acute setting by following the medical model. Today, however, it is facing a situation in which a purely medical model has proven inadequate. That is the confrontation with chronic problems in elderly patients. The demographic revolution of which the current elderly are only the first wave, and the current political mood of perceived fiscal crisis, can be expected to result in further scrutiny of claims to serve

the interests of the elderly, as well as claims to cost-effectiveness of specific services. To the extent that physical therapy continues to emulate the profession of medicine it can be expected to take credit for some of the same failures.

The history of PT shows that adoption of the medical model of treatment was an effective strategy for professional growth during the period in which PT emerged. The hegemony of the medical profession and the philosophy of acute care were in ascendence. Physical therapy's capacity for providing scientific rationale for treatments, objective measures of progress and general orientation to technical issues served its development as a profession very well. Medicine accepted physical therapists as participants in patient care because they supported the success of medicine.

Currently, however, there is increasing recognition of the limited ability of the assumptions of the medical model to provide the basis for successful resolution of existing health problems. We have discussed how these fail to address the most serious barriers to recovery of independence among elderly hip fracture patients. Medicine's power to determine who the other providers will be has become somewhat attenuated. The interest of third party payers in cost-effectiveness means that standards of care have been established which include physical therapy. Increasingly it is recognized that the patient must be acknowledged as a

participant in the treatment process rather than a passive recipient of this intervention. Effective management of chronic problems demands more active participation even during the acute phases (Strauss and Glaser, 1975).

Physical therapy now faces a critical juncture in its own development as a profession. It is attempting to strengthen its autonomy in a variety of way, perhaps the most significant of which is by eliminating the requirements for referral by a physician. If efforts in this direction are successful, physical therapy will be in a position of increasing responsibility for helping the elderly patient with chronic disabilities. But whether these changes occur or not therapists will continue to have frequent and sustained interactions with hip surgery and other elderly patients who are dependent on them for constructing a definition of their situation and a future trajectory that is potentially favorable. As Butler (1980) has stated, the health care needs of the elderly create an opportunity as well as a responsibility to attend to psycho-social and personal issues which those who treat younger patients have been able to avoid dealing with.

The professionalization of an occupation is, as Hughes and Freidson (1970b) have emphasized, a political process. It bears no clear relationship to expertise. In fact, professional authority can be distinguished from technical or scientific expertise. The former is institutionalized

through the granting of a quasi-monopoly over a particular type of work on the basis of acceptance of the philosophy of expertise and collectivity orientation of the profession. Only scientific authority depends on rationality.

Physical therapy can choose to use its position to attribute responsibility for failures with elderly trauma patients to the patients' own deficiencies, as current usage of the term "motivation" implies. Alternatively, they can choose to recognize the complex treatment issues that arise when old age and disability, particularly traumatically caused disability, intersect. If they choose to do the latter the challenge is a significant one, but one which can be rewarding for the profession and its individual practitioners. For while efficacy and expertise do not bear a clear association with professionalization, they can be used to support its claims.

Sociological Implications

The development of physical therapy as a major service provider for the elderly in the acute setting raises a number of sociological issues related to the process of professionalization and to patient practitioner relationships. Many of these issues were introduced in chapter one in the form of questions. In previous chapters many of these questions have been answered with regard to physical therapy.

In this section I will summarize the answers and discuss their theoretical implications.

The review of the sociological dimensions of the concept of a profession in chapter one indicated that while some sociologists have identified a number of characteristics which purportedly distinguish professions from lesser occupations, Freidson (1970) has argued persuasively that the only truly important criteria distinguishing occupations from professions is autonomy - "a position of legitimate control over work." According to this definition medicine emerges as the only true profession in the acute setting due to its power to place limitations on the responsibility, authority and autonomy of the other occupations in the acute setting.

I have argued that this formulation creates too static and simplistic a picture and does not consider struggles over domain which occur among health occupations other than medicine and nursing, and because it does not explain differential development among what Freidson (1968) refers to as "paraprofessions." A processual approach facilitates a more complex analysis and more accurately reflects empirical reality.

Looking at the development of physical therapy we have seen that it has expanded its domain over the years and achieved a strong presence in the acute setting, particu-

larly in orthopedics. Its success in establishing itself in this setting has been much greater than that of occupational therapy nationally. This was reflected in the fact that occupational therapy is essentially non-existent in two of the hospitals studied and considered non-essential for hip surgery patients in the third. This differential success can be attributed largely to the capacity of physical therapy to adapt to the structural and philosophical demands of the acute care setting in which emphasis is placed on what is done to and for the patient, and in the capacity for quantitative measurement of short term objective results.

The success of physical therapy in the acute setting challenges the viability of the conceptual distinction between acute and rehabilitation models of treatments and of static role concepts based on those models. This dichotomy reflects neither the processual nature of the treatment process, nor the patient's experience. It further suggests that medical dominance may occur along a dimension not identified by Freidson (1970), namely in definitions of professional philosophy.

Bucher and Strauss's (1961) point that professions are not homogeneous is supported by the fact that this rehabilitation occupation has adapted to the acute setting by embracing the values and approaches of the medical or acute care treatment model. Physical therapy's sense of mission is different in the acute setting than the traditional

rehabilitation model found in settings where a stronger colleagueship among various rehabilitation occupations and professions exist. In these settings, the patient is expected to participate as an agent of change rather than as a passive object in the hands of the rehabilitation team. In contrast, a short term intervention strategy directed to the passive patient is supported by medicine and the structure of the acute setting, and in the case of elderly patients, reinforced by uncertainty and low expectations for their futures.

The core activity and the range of work activities and how they contribute to the process of professionalization was a focus urged by Bucher and Strauss in chapter one. Here again, we have seen that the work activities -- the training in ambulation, transfers, and proper gait training are approached behavioristically and teaching techniques are applied to the elderly patient without attention to the "shattered self", the inability of the patient to construct a favorable future trajectory, or other meanings and arrangements to which the patient may be responding.

While medical treatments commonly are applied without attention to the patient's definitions of the situation, this approach is particularly problematic in physical therapy because of the necessity of enlisting the patient's active participation to achieve optimal results. This approach represents an emulation of medicine which has

facilitated the professionalization process in the past, but which may have outlived its usefulness as a strategy. As medical problems become increasingly chronic as opposed to acute, the limitations of the traditional medical model are becoming recognized even in purely medical treatments.

The limitations of the patient-client relationship in the acute setting clearly reflect post-institutional socialization, as Olesen (1973) suggested. They also reflect the increasing emphasis in physical therapy education on technical aspects of treatment as opposed to social-psychological aspects of rehabilitation. In this sense the therapists education does not adequately anticipate the pressures the acute setting exerts which inhibit the transmission of rehabilitation philosophy. It seems that efforts to be attuned with change have resulted in attention in one area at the expense of another equally important aspect of work.

One might expect the colleagueship among physical therapists would enable them to maintain a rehabilitation philosophy in the acute setting. There are a number of reasons this is not the case. First, they usually work alone with patients. Second, the therapists tend to be very young. The acute setting is usually the first job they hold before moving into a more specialized setting or going into private practice. As a result their own rehabilitation philosophy is not as well developed as with veteran therapists who have seen its long term effects. Finally, the APTA has

not conceptualized the demands of the acute setting as posing particular challenges to rehabilitation philosophy. This stand no doubt arose out of a desire to promote the versatility of physical therapy. Specialty certification programs and special interest sections generally span the acute and long term care settings. Interestingly, one of the earliest attempts to form a geriatric section was formulated as a long term care section. This was rejected by Association leadership on the grounds that it overlapped with established sections such as pediatric and orthopedic physical therapy. The specialization areas have thus mirrored rather than challenged medical definitions in spite of efforts to the contrary, particularly from those with an interest in care of the aged.

This study has shown that the process of professionalization and the structural conditions under which that process has developed have consequences for the interaction between patient and therapist and ultimately for the disability and rehabilitation trajectory of the elderly hip surgery patient. These consequences are most apparent in later life under conditions of trauma as opposed to elective surgery, because the former renders the patient more dependent on the therapist for constructing a favorable future trajectory. Finally, attention to patient-practitioner interaction, can facilitate sociological analyses of distinctions between professional rhetoric which may merely reflect a

professionalization strategy, as opposed to those which reflect effectiveness or expertise from the perspective of the client.

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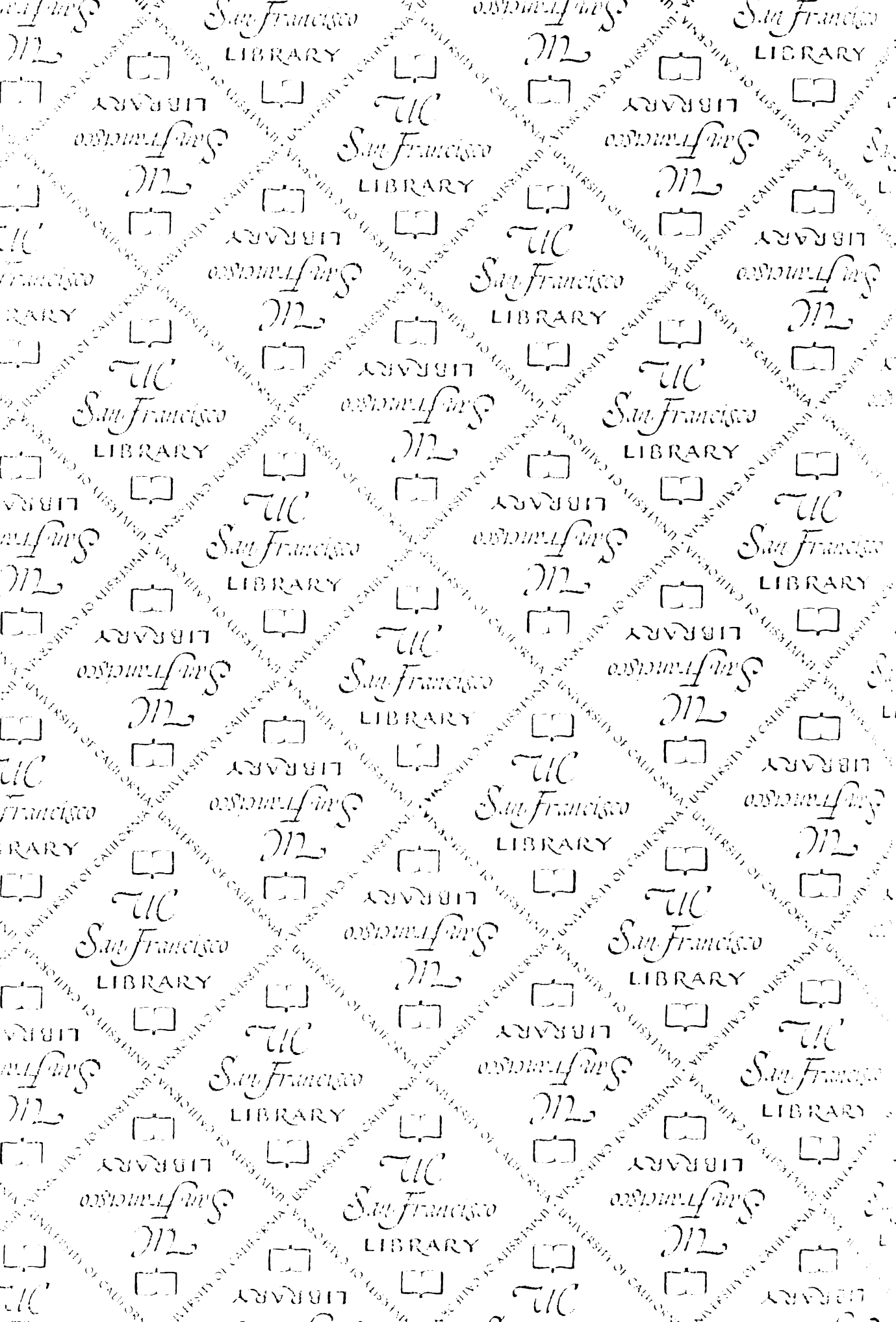
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