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PATIENT REACTIONS TO ACUTE AND NON-ACUTE CARE
SETTINGS.

CITY UNIVERSITY OF NEW YORK, PH.D., 1978

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THE EFFECT OF THE HOSPITAL ENVIRONMENT: PATIENT REACTIONS TO ACUTE AND NON-ACUTE CARE SETTINGS

BY:

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A dissertation submitted to the Graduate Faculty in Psychology in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York.

This manuscript has been read and accepted for the Graduate Faculty in Psychology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy

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ABSTRACT

The present study examined the effect of the physical and social environment of a progressive care unit on patients' hospital behaviors and perceptions. Thirty medical-surgical patients on the hospital bed sector of the progressive care unit were compared with thirty similarly diagnosed patients on a traditional surgical unit in the same hospital. Hospital related behaviors and attitudes of thirty patients on the daybed portion of the progressive care unit were also analyzed as a subsidiary comparison group. The progressive care concept attempts to stimulate patient independence and self-care in a non-acute, less institutional setting. The current research looked at the effectiveness of this concept in reducing negative reactions to hospitalization from the perspective of increased behavioral choices. All patients were observed and interviewed in the hospital, using an open-ended and structured interview schedule. In addition they were interviewed after discharge with a structured, fixed choice questionnaire. Patients were also rated by their nurses on a scale developed to measure their willingness-reluctance to accept a passive patient role.

The results found that the surgical patients on the progressive care unit, in comparison to the surgical patients on the traditional floor, felt less confined; rated their environment as more pleasant and cheerful; were more positive and used more non-institutional associations in describing their environment; and saw a more positive relationship between their hospital setting and their affect. Progressive care patients also exhibited more mobile,

more social, and less passive behaviors than the comparison group. No differences were found between the patients rated as more-willing or more reluctant to assume the patient role, nor were there significant differences on patients' ratings of their care. Nursing care on both units was rated as equally good, attentive, emotionally supportive, and individualized. Patients on both units also exhibited equal levels of care-related independence as defined by: confidence at discharge; familiarity with their medications, illnesses, and treatments; degree of anxiety after discharge; attitudes toward self-medications; and making negative feelings known to staff. There were also no signficant variations between units on patient perceptions of boredom, slow passage of time, and depression originating from exposure to acutely ill neighbors. However differences on these variables were in the predicted direction and approached significance.

Lack of significance on these issues was attributed to either the good care delivered on both units, endemic characteristics of institutionalization, and/or a critical change on the progressive care unit. This modficiation placed cardiac patients on the floor, thereby reducing its appearance and functioning capacity as a totally non-acute, ambulatory floor. The positive impact of the unit on patient behaviors and perceptions was attributed to the increased behavioral choice provided by the de-instutitional spaces on the unit and the "energizing" effect which these spaces had on patient activity levels.

The strong symbolic meaning which increased environmental options and exposure to sick neighbors held for hospitalized patients was discussed, as was the importance of patient satisfaction. Recommendations were made concerning ways to further increase patient satisfaction through the provision of more diversionary activities, more familiar and less institutional spaces, and more treatment and illness related information.

ACKNOWLEDGEMENTS

I would like to profoundly thank my committee members, Maxine Wolfe, Leanne Rivlin, and Gary Winkel for the continual intellectual guidance and support they have given to me over the years. Without it, this document would not have been produced.

My gratitude toward the patients who participated in this study can not be sufficiently expressed. I found their willingness to share their feelings with me, at such a stressful period in their lives, to be one of the most moving experiences I have ever had. I would like to publicly remember the three patients who have subsequently died. Unfortunately, the promise of anonymity prevents me from doing this.

To the staff and administration at "Berlen" Hospital, I would also like to extend my sincerest thanks and appreciation. I would like to particularly acknowledge the nurses, aides, and dietary staff on both units for their unfailing co-operation, warmth, and enthusiasm. They made my days at "Berlen" not only possible, but also memorable. The desire for anonymity precludes the possibility of acknowledging them by name. Again, I can not thank them all enough.

My gratitude toward my parents, family and friends for their emotional support and encouragement over the seemingly endless years of my graduate studies must also be expressed. Particular thanks is due Susan, Nancy, Len and Marie, Diane, and Richard D. - all of whom helped me, in their own unique ways, to produce this work.

Finally, I would like to thank the National Institute of Mental Health whose financial assistance supported this research.

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Research Plan

Overview/Problem

Previous investigation of dialysis clinics and intensive care units (Olsen, 1973 & 1972) have illustrated a relationship between the physical qualities of extreme medical settings and patients' treatment experiences. This work stimulated an interest in more ordinary medical settings, focusing specifically on the interaction between the patient, the physical environment, and the treatment goals of the bedroom unit complex. However, a literature review revealed that little or no substantive work existed on this relationship prior to the present investigation. The following study begins to bridge this perceived gap in hospital research by analyzing the relationship between the physical-social environment of a progressive care unit, patients' perceptions of hospitalization, and their actual behavior. On a theoretical level, the present study will also attempt to provide deeper insight into the nature of the human-environment interaction in two critical ways. First it will explore the relationship between people and low-choice, restrictive environments by studying the environment's impact on behaviors and perceptions. Secondly, it will analyze the experience of temporary habitation in a setting which departs considerably from the form and function of familiar living environments.

I INTRODUCTION - LITERATURE REVIEW

Low Choice Environments

Environmental researchers and philosophers have emphasized the need to create settings for people which optimize their sense of behavioral choice (Doxiadis, 1968 in Proshansky, et al, 1970). Optimal choice, it has been theorized, enhances our dignity and the essential quality of our humanity by "making us feel less like automatons and more like fulfilled individuals" (Proshanksy, et al, 1970:183). However, the environments we use during the course of our life may vary in their capacity to provide the desired degree of behavioral choice, assuming that choice is preferred. In some environments, due to the transient nature of their use and their need to provide security or directional clarity, choice may not be a critical issue. The access paths to and from trains, buses and elevators present examples of these environments. However, ordinary life generally presents an array of non-transient settings with varied levels of choice ranges. If one particular environment is somewhat restrictive in its behavioral and social potentials, there are others which open up these options. For example, the restrictive quality of a work or school environment is offset by the higher choice environment of the home to which the user returns at the end of the day.

Some settings, out of varying degrees of necessity, belong to a larger class of environments which are not only choice restrictive in nature, but which also function as total environments. They are considered total in the sense that all behaviors are conducted there at the same time and in the same place and that this particular

environment is the only one experienced over a given time period (Goffman, 1962). Access to complementary, higher choice environments is lacking, on either a short or a long term basis. Examples of these restrictive, low choice environments, are prisons, mental and medical institutions, ship and submarine environments, and various types of group homes and long term treatment centers. In all of these facilities, occupants live in settings with minimal amounts of space to use, finite and frequently small ranges of available activities to pursue, and restricted opportunities for human contact. The choice of where to go, what to do, and when and with whom to do it is curtailed in these total settings to a degree incomparable with the outside world. Rivlin (1976) also saw this stability of activity, set within unalterable time schedules and physical environments, as an invariant characteristic of certain partial, as well as total, institutions. Consequently, the form of the physical surrounding in such low option settings may assume extraordinary significance because it not only establishes the boundaries for limited behavioral choice, but also represents the totality of the inhabitant's world (Winkel, 1976). Recourse to compensatory environments providing more spatial, behavioral, and social mobility is denied. Furthermore, with treatment facilities, the physical and social structure of these settings often conflicts with the explicit goals of the institution: the creation of an environment which will prepare the individual for a healthy return to the outside world as quickly as possible. (Rivlin and Wolfe, 1978, in press; Goffman 1962.)

The character of these choice-restrictive settings raise crucial theoretical and practical considerations for environmental studies.

First, how do they affect the people who must inhabit them? What are the consequences of restricted space, behavior, and social potentials for both the goals of the setting and the individuals who must use them? Secondly, what is the symbolic meaning of these choice restrictive settings? What do they say to their inhabitants about who they are and how much autonomy, independence, and control they have over their lives? A third, and final, issue concerns the habitability of these environments. What is the human reaction to residing, even temporarily, in a strange and alien environment which lacks the familiar spaces, furnishings, routines, and activities of normal living settings?

The present research attempts to look at the larger issue of restrictive choice in an unfamiliar environment within the context of a medical facility. It should be emphasized that although this is a specific setting, with a population and purpose that differs from those found in prisons, mental institutions and other treatment facilities, it contains direct conceptual links to these other institutional environments. All of these settings have an implicit goal of rehabilitation and fixed criteria for individual behavior which allow for little or no deviation on the part of the inhabitant. All of these settings require their occupants to adjust to temporary or long-term residence in an alien, unfamiliar, and total environment that drastically reduces their spatial, activity, and social choices. It is under this rubric that the hospital world will be studied. Such a perspective will allow for exploration into both general issues of restrictive settings as well as those specific to a medical environment.

2. The Hospital Experience

For non-terminal short-term patients, the goal of the medical hospital has always been a health restoring one. Patients are encouraged to heal quickly and be discharged as soon as it is medically feasible. Adequate preparation for a return to independent living would seemingly entail learning self-care and regaining a sense of mobility, activity, and social competence. However, the reality of the hospital experience may frequently impede this preparation process. For example, researchers investigating patient reactions to the medical hospital have alluded to the negative influence this environment may exert on those who experience it (Brown, 1961; Kirsners & Waters, 1972; and Kornfeld, 1972). Like other inhabitants of total institutions, patients are placed in an unfamiliar setting which minimizes opportunities for control over their environment and choice of behaviors, while simultaneously maximizing their feelings of confinement, anxiety, passivity, dependency, and fear of a loss of individuality. In elaborating on this phenomenon, Brown stated that patients often find themselves in a physical and social context that is totally foreign to their previous experiences. In addition to coping with their illnesses, normally responsible individuals are now also _dependent_ upon others for the performance of routine tasks and the meeting of daily needs. Usually active individuals are now passively placed in a highly controlled and restricted world, one that offers a dearth of both meaningful and familiar stimuli and any reasonable range of spatial and behavioral choices.

Spatial options, for example, are generally limited to staying in the room, walking the corridor, with potentially depressing glimpses into the world of the sick and the dying, and visiting a lounge or

seating area, if one is provided. Free access to other parts of the hospital and the outside is lacking. Consequently, the choice of where to go in the hospital, for those patients capable of ambulation, borders on the non-existent. The end product of such a circumscribed spatial realm may be an inevitable sense of confinement. While some spatial restriction is understandable out of necessity for patient security and accessibility, understanding the need does not necessarily alleviate the perception of confinement.

The behavioral choices available to the ambulatory patient are generally as restrictive as the spatial ones. Sleeping, reading, television watching, viewing unit activity, walking the halls, and possibly talking to patients and staff comprise the bulk of the activity pool from which patients may choose what to do. The more extensive diversions of the outside world are unavailable. In addition, not only is what a patient able to do limited, but so is when he or she may do it.

Thus the hospital world possesses a somewhat unique subculture - one which presents patients with a way of life that is at considerable variance with accustomed choice making behaviors. The hospital routine, in particular, underscores this sense of departure from normal life. Frequently, it contrasts with established schedules and there is minimal opportunity to alter it to suit patients' personal habits. Patients cannot choose where or when they will take their meals, and there is only a moderate choice of what will be eaten. Hospital sleeping schedules are also firmly established, for while the decision of when to go to sleep may be somewhat self determined this

choice is obviated by the reality that awakening time is not. In the context of this unrelenting routine, King (1972) saw the total lack of privacy; the strange uniforms, equipment, and language; and the unpleasant sight sounds and smells as a confluence which makes the hospital an alien and potentially threatening setting.

The above authors feel that, for the convalescing or non-acute patient, the frequent end product of this experience is a pronounced sense of confinement, minimal opportunities for social contact, anxiety and depression from exposure to the sick and dying, and days that seem boring and endless. The hospital environment is often as ennervating emotionally as illness is physically. All of these components produce stress, occasionally accompanied by a psychological regression, as noted by King (1972:363). What makes these characteristics of hospital life even more crucial is that they create _external_ sources of stress for individuals already coping with illness engendered _internal_ stress.

Consequently, the hospital environment may hold pronounced psychological implications for its patients. Furthermore, while the hospital environment may clearly affect the quality of patient life, it may also contain a strong symbolic meaning for the patients confined in it. People take cues from their surroundings. The surrounding explicitly, or implicitly, tells them who they are and what behaviors and attitudes are expected from them. A hospital environment may inform its patients that they are independent, competent, individuals on the road back to health, and that the appropriate behavior is expected. Conversely, it may tell them that they are very sick and dependent and should behave in an accordingly passive manner, even though their physical condition no longer requires it.

Thus the hospital environment may play not only an overt role in affecting patients perceptions and behaviors, but may also convey a subtle, covert message in terms of its symbolic meaning to the patient.

Kornfeld (1972) analyzed the more direct influence which the physical environment of hospital settings has on patients' psychological states. This relationship between the physical milieu of the hospital and patients' reactions to it has been well documented in the research on intensive care and cardiac care units, where clinical reactions to the environment occurred (Kornfeld, 1971; McKegney, 1966; Schroeder, 1971; reviewed by Olsen, 1972). The relevance of this work for the present research is that it clearly links the physical environment to the physical and emotional responses of the patients experiencing it. However, these researchers have focussed on sectors of the hospital where the environmental press is particularly strong, (i.e. intensive care), while patients adaptive ability is particularly weak due to physical debilitation.

However, should hospital research concern itself only with clinical reactions to extreme environments? The purpose of the present research is to identify analagous relationships between the physical and social environments of hospital bedroom units and the patients who experience them. While these units lack the spatial, psychological, and physical intensity of the cardiac or intensive care patient-environment interaction, they are still relevant areas of research. They comprise the bulk of the patients' physical and social world. As such, it is hypothesized that they strongly impact on patient behavior, for it is primarily in these settings that patients pick up cues about the hospital, themselves, and their illnesses.

It is also where patients experience most of the negative behaviors and perceptions identified by the general hospital literature discussed above.

3. Bedroom Facilities

Existing literature on bedroom facilities includes reviews of new designs, discussions of patients' preferences for roommates, and analyses of stress inducing features of life on the hospital floor. The first body of literature makes assertions about the impact of these facilities on patient and staff behavior and attitudes. Unfortunately these claims rest more upon the designers' and administrators' assumptions than on any empirical evidence (reviewed by Olsen, 1974). The discussions of patient preferences for roommates is somewhat more pertinent, for in discussing reactions to roommates the physical and social phenomena of hospitalization identified above are reinforced. In advocating roommates, proponents of semi-private accomodations cited patient's needs for companionship and support to counteract anxiety and monotony, and a sense of mutual help to offset fears of neglect and depersonalized care. The negative components accompanying roommates involve the anxieties and/or discomforts inherent to confinement, particularly with a stranger, and the lack of ability to control privacy violations, noise, and the flow of traffic through and past one's room (Neumann, 1974). Patients desired private accomodations to avoid noisy, restless roommates and their visitors, unpleasant odors, inconveniences, and the inhibiting effect a roommate has on confidential or sensitive discussions with staff (Penkus, 1976).

The hospital roommate literature also highlights the reality of the hospitalized patient's social world. The lack of ability to choose

or regulate contacts with a roommate reflects the patient's larger inability to order his/her social environment. Opportunities for social contacts are generally limited to roommates, whose companionability is both a function of their illnesses and their personalities. Meeting compatible patients outside of the room is often a chance phenomenon also, depending not only on illness and personality variables but also on the availability of suitable spaces on the unit for socializing as well. Outside social contacts are limited to visitors, whose age, numbers, and time of visits are all regulated by hospital policy. Even telephone calls are circumscribed, either by hospital decree or out of fear of disturbing a roommate. Consequently, the array of social possibilities presented to the patient is a restricted one, and one which is largely a function of chance. Where, when and with whom to socialize is often totally beyond the control of the patient. This lack of control and order over social involvement further emphasizes the patient's larger restricted sense of choice in the hospital setting.

Also relevant in the literature on roommate preference, and the analysis of people with whom patients have contact, was the anxiety of patients who were not seriously ill but who were exposed to the sights, sounds, and smells of those who were (Kirsners and Waters, 1972; Neuman, 1974; Reed and Feeley, 1973.). Perhaps the most disturbing consequence of having roommates is potentially having to deal with their death. Reich and Kelly (1974) reported that amidst the stress and flurry of activity accompanying a neighbor's death one already unstable patient even attempted suicide. While these authors did not make a direct causal link between the two events, clearly the anxiety

generated by the death played some role in the timing of the suicide attempt.

The literature discussing patient stress further illuminates the negative components to life on the nursing unit. In their study of hospital generated tension, Volicer and Bohannon (1975) asked patients to rate the stress inducing capacity of plausible hospital events. In the pilot work conducted to generate their list of events, patients identified potential stress in the general characteristics of life on the unit. These characteristics focussed primarily on the strangeness of the setting and its disruption of normal routines. While in the actual study, these environmental attributes were rated below the stress of serious illness and the receiving of inadequate information, patients still related to them as potential sources of tension.

In an unauthored editorial on the quality of patient's days, The British Medical Journal (1976) listed standard complaints with the hospital environment. Through possibly endemic to confinement in a hospital unit, patients cited noise, early awakenings, and conflicts over food and visitors as major targets for criticism. Schamroth (1976), a doctor hospitalized for surgery, reiterated these complaints and identified other stressful components of the hospital environment. Confinement, the total lack of fresh air, and being at the mercy of seemingly minute environmental factors as the radio (the primary diversion), the angle of one's pillow, and cold x-ray equipment were all irritating and stressful for the patient. Conceptually, all these inconveniences underscore patients' lack of control and choice in the physical and social environment of the bedroom unit.

Dissatisfaction with the bedroom setting can even influence a patient's reluctance to be rehospitalized. In a discharge survey of

patients, Houston and Pasanen (1972) found an unwillingness to be rehospitalized, even when care was satisfactory. This unwilligness was attributed, in part, to dissatisfaction with the bedroom unit. Additionally, these authors, linking setting with prognosis, reported that patients perceived themselves to be more improved when less irritated by lack of information, admitting procedures and the room environment (1972:380).

In attempting to counteract these abreactions to hospitalization health workers have increasingly emphasized the necessity of modifying the hospital environment. Some researchers have proposed accomplishing this task by making the setting less alien and institutional, through the provision of more familiar spaces and amenities (e.g. - dining rooms, lounges, more televisions, better food, etc.) and increased options for socializing and behavioral choices (Brown, 1961; Kirsners & Waters 1972; Klagsbrun, 1970; and Raphael, 1965). In essense, they urge hospitals to provide a wider range of familiar spaces for patients which will increase opportunities for social and diversionary activities. More specifically, King felt that the physical environment of these spaces should also reduce the impression of an institution and heighten the feeling of a club or a home. Commenting on the foreign quality of hospital environments, this author reported:

> "By and large the sights in a hospital do not include rugs on the floor, frilly curtains, overstuffed furniture and so much of the familiar surroundings of home. There is every indication that this is an institution and not a home." (King, 1962:380)

What is implied here is that a more homelike setting may be more comfortable and reassuring than an institutional one. Furthermore

it will have greater ability to reinforce a feeling of health as opposed to illness, for the patient who is not severely ill. King felt that the physical setting has a role to play in providing optimal care and its potential for reducing stress should be more fully explored.

Other investigators advocate reducing negative reactions to hospitalization primarily through treatment procedures set within physical and social contexts which allow for increased self-care, independence in decision making and behavioral choices, and control over the socio-physical environment (Allekian, 1973; Crocket, 1974; Field, 1973; Kirsners & Waters, 1972; Klagsbrun, 1970; McDowell, 1966; and Waisbren, 1972). Once again, the implicit goal is to create an expanded array of choice behaviors, set in a treatment context that will encourage independence.

These recommendations for changes in medical environments all make the assumption that patients should alter their passive and dependent roles whenever medically feasible; patients should be allowed to exercise some control over their environments, and to assume some personal responsibility in the decisions and procedures which affect their lives. Furthermore, these authors urge that changes in the state of patienthood should occur in de-institution-alized appearing facilities permitting a wider range of behavioral choices where the perception of being ill is not reinforced by the presence of seriously ill patients. In effect, patients would be presented with a treatment program, reinforced by a physical and social environment, which not only increases a sense of behavioral choice but which also conveys a strong symbolic message: you

are not that sick, dependent, and passive. The outgrowth of such a perspective has been the progressive care unit (Beckman, 1974; Keene, 1972; and Sutton & Creighton, 1973).

4. The Progressive Care Unit

Self-care or progressive care units, initiated about twenty years ago, attempt to inhibit some of the negative reactions to hospitalization documented above. They strive to do this by: providing settings with a less hospital-like appearance (through the use of daybeds and dining rooms); attempting to combat boredom, the slow passage of time, confinement and passivity by allowing for some degree of behavioral choice through the provision of more spaces and activities (lounges, dining rooms, pantries, and passes to leave the unit); attempting to reduce anxiety by segregating patients according to severity of their illnesses; and by attempting to allay fears of receiving dehumanized or deindividualized care by emphasizing psychological support and reassurance which allows patients to air their personal doubts and anxieties.

The progressive care philosophy lays particular emphasis on the therapeutic effect of increased mobility and independence on the return trip to health:

> "By emphasizing being up and about rather than remaining in bed, encouraging social contact with other patients and visitors rather than the sequestering usual in acute care, and emphasizing health education and instruction in self care, the patient's return to normal activity is enhanced and accelerated." (Glass & Warshaw, 1977:3).

Also underlying the goals of progressive care is the belief that convalescing patients will regain their strength, and confidence, and resume their normal activities more quickly when in a non-acute

care setting (Astolfi and Wilmot, 1972; Henderson, 1975).

Thus the goal of the progressive care unit is to stimulate recovery by creating an environment which prepares non-acute and convalescing patients for discharge by encouraging mobility, social activty, and self-care. It strives to do this in a setting which, in some way, resembles outside life in both its physical form and the choice behaviors which this form allows. In essence, the form and program of the unit are more compatible with the larger goal of the hospital: to prepare patients for healthy, active, independent living as soon as possible.

How effective have progressive care units been in meeting these goals? The evaluations that exist to date rest more upon survey and anecdotal evidence than on empirical comparison studies. Glass and Warshaw (1972) conducted an overview of the units which primarily focussed on their viability as a mechanism toward hospital cost containment. However, in the non-financial section of their review of the units, the authors found them to be well received by consumers. Patients felt they benefited from the emphasis on diminishing dependency and invaldism and from the opportunity for more intensive health education.

In addition, despite difficulties in locating more freely mobile patients, physicians felt that progressive care units were a good bridge between acute and ambulatory care regimens. The nursing staff also found progressive care work to be physically less taxing but equal to acute care in the amount of personal challenge and satisfaction it provided. All of these responses, however, are reports of how people felt. There are no data on how they, in fact, acted on the unit.

This oversight could be a critical one. Patterson and Passini (1974) commented on the danger of conducting evaluation research that rested solely on either behavioral or attitudinal data. With reported data only, the danger of missing a discrepancy between what people do and what they say is always present. Analyses of progressive care settings may be particularly susceptible to a variation between actual and reported behaviors since these units could easily create a "halo" effect over the patients evaluating them. Being enamored with their less institutional atmosphere, progressive care patients could easily attribute favorable, but possibly non-existent, behavioral consequences to them. Given this possibility, an effective evaluation of progressive care units must include both observed and reported data.

Williams, et al (1976) also analyzed the progressive care concept. Unfortunately, this analysis rested solely on comments from staff and three case histories. The authors cited no empirical data to support their claims. They described its effectiveness in encouraging independence and patients' relinquishing the sick role with its dependency orientation. They also felt that the progressive care treatment did in fact stimulate patients' responsibility for their own care. This regime, set in a physical context which gave total support to the treatment philosophy, prepared the patient for a return to independent living. The supporting features of the physical setting were the dining room, the recreational facilities, and the socially energizing character of the unit which stimulated patient contacts. Staff and patients reported therapeutic

consequences from these features of the environment. The dining room provided a setting for a more natural and open type of social interaction. Recreational facilities rerouted patients'thoughts away from themselves and their preoccupations with illness. The extensive social contact which ensued from these environmental amenities also helped discourge the regression to dependency found on acute wards. Patients learned from each other. Concomitantly, exposure to the problems of patients with similar illnesses helped them to place their own difficulties into a more proper perspective.

The only systematic evaluation of the progressive care concept was conducted by Sturvadant and Mickey (1966). These researchers used questionnaires and interviews to determine patients' reactions to a progressive care unit that was temporarily established in the hospital. Although comparative data is lacking, these authors claimed that the primary distinction between progressive and acute care units was the diversity and the extent of their respective patients' activity, exercise and social contacts, each one being more pronounced on the progressive care unit. More specifically, progressive care patients reported spending an average of 4.5 hours per day out of their room. While this seems to be a high index of mobility, comparative data with patients on a traditional unit is lacking, as is any indication as to how this mobility data was collected. With the reported data, patients indicated their positive attitudes towards:

1. The freedom and independence to move around and the lack of confinement to their rooms.
2. The homelike, informal, relaxed atmosphere.
3. The segregation from the acutely ill and the rigid hospital routine.

4. The extensive social contact with other patients.

5. The positive impact that the unit made on their morale and levels of confidence.

Patients, as well as participating doctors and nurses attributed physical and psychological benefits to the unit. All of these findings support the stated goals of the progressive care philosophy and indicate that the concept and the setting may be effective in encouraging mobility and reducing the sense of confinement in a strange and anxiety provoking surrounding. The unit achieves this by reducing the physical and social distance between home and hospital and by allowing patients some modicum of control over their environment through a wider range of choice behavior.

As strong as this argument is for progressive care, it would be greatly strengthened by comparative data from an acute unit. These data, along with observational materials, would provide a frame of reference against which patients' feelings and behaviors could be evaluated. This, in effect, is the goal of the present study: to comparatively study a progressive care and a traditional surgical unit. Research of this order should document the impact on patients of increased spatial, activity, and social choices, set within a less institutional environment. Comparative research would provide an index of progressive care's ability to reduce patients' social and behavioral inactivity, their perceptions of confinement and the other negative qualities of institutional life discussed above. These

phenomenal qualities are all reactional components to hospitalization and according to the literature they contribute to patient acceptance of the passive sick role. Before studying how effective a progressive care unit is in combating these consequences of the sick role (i.e. - passivity, immobility, dependence, boredom, confinement, etc.), an analysis of what the sick role entails is essential.

5. The Sick Role and The Hospital

The progressive care environment, explicitly in its program and implicitly in its physical design, tells its patients that while they may be sick, they are not overly sick and that some form of self care is indicated. The totally passive, dependent role of the sick patient is not reinforced in this setting. Is this an environment and a message that will be well received by all patients? This message may be a source of conflict for certain patients. Since the present research will compare progressive care patients' reactions to the hospital environment with those of patients on a more traditional unit, their willingness to relinquish the sick role deserves consideration. It is possible that this willingness or unwillingness to abdicate from the sick role could influence patients' reactions to hospitalization in general, and to the progressive care unit in particular.

The classical analysis of the sick role in medical sociology is the one offered by Parsons (in Jaco,1972). He conceptualizes this role as a two-part categorization: the rights and the obligations of the sick, with each category containing two components. The societal rights of the sick are that they are not to be held personally responsible for their illness; and as a consequence of being sick, they are also temporarily exempt from assuming all of their normal social roles and responsibilities. The duties of the sick, as seen by Parsons, are that

they attempt to get well, and that they seek competent help in this attempt.

Later work has questioned the generalizibility of Parsons' model (Segall, 1976).* However, for the specifics of the study proposed here, Parsons' model appears applicable. Since most of the patients to be studied are surgical cases, it can be assumed that they are not responsible for their conditions. Furthermore, by the very nature of being in the hospital, segregated to some degree from society, the patients in the present study are also exempt from fulfilling all of their accustomed roles and responsibilities. They are also seeking competent help in their efforts toward getting better. Consequently, three of the four components in Parsons' model are clearly met in the present study by both patients on the progressive care unit and on the surgical unit. Whether or not the patient really wants to get better is the only area of Parsons' model open to question for a hospitalized medical-surgical population. This question is a crucial one for this study, and it will receive attention after other analyses of the sick role are briefly reviewed.

While holding some reservations about the applicability of all of Parsons' model for all illnessess for all people, Segall (1972) explored hospital patients' views about being sick. He found them in unanimous agreement with at least one portion of Parsons' analysis: patients viewed being ill as inherently undesirable and they saw the return to good health as a desirable goal.

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* Segall questioned the relevance of this portion of the model for alcoholics and the mentally unstable, since it may be unclear whether or not society absolves them from all of the responsibility for their conditions.

In line with this view of illness as a negative state, Brown and Rawlinson (1976) found that post open heart surgery patients viewed the healthy as being more active, independent, potent, and more positively evaluated than the sick. Additional medical research has shown that sickness is viewed as being highly undesirable and carries with it connotations of dependency, passivity and weakness (Parsons, 1961; Petroni, 1969; and Suchman, 1965).

In her work on medical-surgical wards, Coser (1962) also felt that the hospital placed the patient in a passive social role. Patients experienced the loss of important ego sustaining symbols and activities, such as personal clothing, outside status, responsibilities and duties, in the strange environment of the hospital.

Bloom (1963), in his analysis of illness behavior, saw the sick role as one which forces the patient to live in a manner that differs from what is customary in his/her life and from the conditions that prevail in society at large. Essentially, Bloom felt that being sick created a discontinuity between the patient's current status and his/her normal life. For the hospitalized, this sense of discontinuity is even more pronounced.

However negative the sick role may be perceived by society and by these researchers, it is quite possible that some patients may exhibit some hesitancy in relinquishing it. In view of the perjorative connotations of being sick and the isolating aspects of hospitalization mentioned above, what would prevent patients from actively giving up the sick role? The answer may lie in Parsons' original model. The second privilege accompanying the sick role-exemption from the performance of normal social roles and obligations - may inhibit the

meeting of the first obligation of the sick - a strong motivation to get well. Parsons & Fox postulated that the temporary solace from family and social pressures and from traditional societal roles may interfere with a patient's desire to get better (in Bloom 1963).

Similarly, Coser (1962) found that patients have different attitudes toward being sick. Some patients liked the hospital because they received more care and attention there than they did at home. Since everything was done for them in the hospital (meals, laundry, etc.) these patients were basically pleased with the hospital. Such an outlook may impede the giving up of patienthood. For patients with this orientation, regaining autonomy, which they were first asked to relinquish, may be a difficult and threatening experience.

Brown and Rawlinson (1976) in their study of patients' willingness to give up the patient role, asked post operative open heart patients to rate themselves on a series of semantic differential scales, before and after surgery, and to also rate healthy people and sick people in general. They were also asked to complete the MMPI and the Taylor Mainfest Anxiety Scale to obtain personality profiles. The difference between the ratings of "myself after surgery" and "most people who are sick" was taken as the index of the patient's willingness to leave behind the sick role. The findings of the authors possess some theoretical relevance. Patients' willingness to give up the sick role was positively correlated to a younger age, the experience of less depression, the exhibition of a pre-operation tendency to reject the sick role, and a shorter duration of illness. While these specific variations are beyond the focus of this study, the significant finding here is that patients do exhibit variations in their willingness to give up the sick role.

Interviews with staff at the proposed study site have also indicated that patients may be afraid to give up their patienthood due to fear of their illness and doubt about their ability to care for themselves. In addition, the presense or absence of an adequate support system at home was also considered to be a critical variable. Patients must feel that they will receive adequate care when they leave the hospital, should their condition require convalescence. Without this assurance, leaving the hospital may be seen as threatening and the patient may consciously or subsconsciously resist it.

Another issue relevant to the relinquishing of the sick role may center around social class. Most research on unwillingness to abdicate from the sick role appears to have been conducted on middle class populations. Consequently, prolongation of illness may be more of a middle class than a working class phenomenon, due to the latter's lack of financial support systems and their resulting need to maintain steady employment. While the issue has not been addressed directly in the literature, it is possible that termination of the sick role and socio-economic class may be related.

In summary, interpersonal, social class, and illness specific variables, along with relief from personal responsibilities, the changing demand characteristics of the hospital which require passiviity followed by activity, and the lack of an adequate at-home support system may all inhibit the patient's desire to surrender the sick role. While the scope of the present study is not to look specifically at <u>why</u> a patient may resist getting well, the fact that a patient <u>may</u> resist it is of critical importance. This issue is

highly relevant in a study of patient's evaluations of a hospital setting, as it is necessary to know what portions of the evaluations are attributable to individual, environmental, and programmatic factors.

6. Relationship Between the Hospital Environment and the Sick Role

Earlier the question was raised as to whether or not the progressive care unit would be a supportive environment for all patients. The literature on the sick role indicates that some patients may not want to relinquish this role. Thus, since a progressive care unit does not reinforce the traditional passive-dependent behavior of the sick role, it may be viewed as an implicit threat for patients clinging to this role.

For these patients, the increased range of social and spatial choice available on the progressive care unit may be more conflictual than beneficial since they prefer to passively accept their sick role. They may resist the implicit or explicit pressure to engage in more active, choice seeking behavior, both in their treatment regimes and in their degree of mobility on the unit. In addition, such patients may resent the "normalizing" homelike cues in the environment out of preference for a more traditional hospital setting which will reinforce their assumption of the sick role.

Consequently, the overall evaluations of the unit, its non-traditional patient spaces (daybeds, dining room, pantry and lounge), and the nursing care in operation there may all be more negative for patients seeking to maintain the sick role than for patients seeking to terminate it. While this effect has not been studied previously, it is a hypothesis of this study that such an effect will occur.

II. STATEMENT OF THE PROBLEM

The overall goal of the medical hospital is to encourage the non-acute or convalescing patient to give up the sick role, with its passive dependent behavior, and to resume an active, healthy, outside life. However, as the hospital literature indicates, patients' experiences in this setting are frequently negative and conflict with this larger goal of the facility. Implicitly or explicitly the hospital environment reinforces dependency and physical and social inactivity in its choice-restrictive institutional setting. Convalescing patients are often given conflicting messages. They are told they are getting better, should be moving around, and will be going home shortly. However, they are frequently placed in an environment which makes them still feel sick, dependent and inactive.

The concept of progressive care attempts to reduce some of this conflict by giving patients more spatial, social, and behavioral choices which are similar to those existing in their outside lives, thereby increasing their sense of autonomy and independence. The progressive care unit provides more spaces to stimulate mobility, activity, and social contact. It also segregates the critically ill from the unit so there are more patients physically capable of socializing in a non-acute atmosphere. Progressive care also urges its patients to assume a more active participation in their treatment by emphasizing education and self care.

Compared to the low-choice, hospital-like environment of a traditioal surgical unit, what is the impact of the physical, social, and therapeutic atmosphere of the progressive care unit? Does it reduce some of the negative qualities of hospital life which the literature

identifies and which hospitals share with other choice restrictive, total environments: limited mobility, activity, and social contacts, as well as feelings of depression, confinement, boredom, and slow passage of time, in an alien and frightening setting?

Progressive care units have been analyzed to some degree in the past. However, these analyses suffer from a lack of comparative data to document the actual use of the units by their patients. Finally, while people have written about the sick role and the desirability of progressive care units in diminishing it, it is unclear whether such a unit would be favorably received by all patients, especially those clinging to the sick role.

The current study will attempt to look at these issues. It will compare progressive care patients' perceptions of and behaviors on their unit with those of comparatively diagnosed patients on a surgical unit. In addition, since the evaluation of a hospital setting may also be affected by patients reactions to patienthood and the perceived quality of care received in that setting, these issues will also be investigated. The following hypotheses will, therefore, relate to both patient and care variables, as well as to environmental components which influence the quality of hospital life. To test these hypotheses, staff ratings of patients, in-hospital interviews and observations of patients, post-discharge patient questionnaires, and achival data will all be employed.

Hypotheses

Coser (1962) found that patients with a primary orientation (i.e. more illness oriented) toward the hospital are more accepting of the hospital routine and their passive role within it. Consequently, these patients (referred to here as "More Willing Patients") may respond differently to the hospital environment, and especially to an environment which discourages passive behavior, than those patients exhibiting a stronger desire to act well (referred to here as "More Reluctant Patients").

Hypothesis I: "More Willing Patients" will react to the hospital environment differently than "More Reluctant Patients".

Program Care Evaluation

The contemporary hospital is experiencing unprecedented growth in all sectors. Increased hospital patient and staff populations are accompanied by increments in both its physical size and its mechancial technology. Both are necessary to provide high quality, up-dated patient care. These developments can be expected to hold strong implications for patients' perceptions of care since increases in staff and patient sizes may increase the potential for human error and fractionalized patient-staff interactions. Increases in hospital size and the omnipresence of forboding looking machines may consequently lead to a fear of receiving mechanized, de-individualized treatment (Brown, 1961; Dunn, 1975; Kirsners & Waters, 1972; and Kornfeld, 1972). The progressive care unit's nursing staff, relieved of responsibility for providing strong-acute care, attempts to conteract this perception of depersonalized treatment

by administering care that is educational, individualistic, and emotionally supportive.

Hypothesis II-A: Progressive care unit patients will evaluate their nursing care as being more emotionally supportive than will patients evaluating their care on the surgical unit.

Hypothesis II-B: Progressive care unit patients will feel that they are receiving more individualized care than will surgical unit patients.

Hypothesis II-C: Progressive care patients will feel they are receiving all the nursing attention they need. Surgical unit patients will feel they could receive more attention from the staff.

Hypothesis II-D: Progressive care patients will feel they are receiving enough information and explanation relevant to their care and condition more frequently than surgical unit patients.

Until recently, the role of the patient has primarily been a dependent one. The patient relinquishes his/her autonomy and

passively allows the hospital staff to take care of him/her, contrary to his/her accustomed role in the outside world (Brown, 1961; King, 1962; and Kirsners & Waters, 1972). The efficacy of this role has recently been challenged. Health care researchers now advocate that patients be allowed to assume a more active role in their care in an environment that encourages some degree of self care and independence in behavior and decision making (Allekian, 1973; Crocket, 1974; Field, 1974; and Klagsbrun, 1970). The progressive care unit addresses this issue of decreased dependency by fostering some modicum of patient autonomy. The progressive care unit attempts to modify the passive-dependent patient role into one of increased independence by educating the patient about his/her illness and treatment regime and by urging the patient to learn self-care.

Hypothesis III: The progressive care patient, in comparison to the surgical unit patient, will exhibit less operationally defined dependency on staff as illustrated by:

A: A more positive attitude toward the taking of self-medications.

B: More requests for and receipt of information about their treatment.

C: Exhibiting more knowledge about their medications and the nature of their illnesses.

D: Citing more examples of making negative feelings known to staff concerning their medical treatment or specific circumstances in their hospital experience.

E: Reporting feeling less upset or depressed after discharge.

F: Expressing greater confidence in taking care of themselves at discharge.

Hospital Perceptions and Behaviors

The traditional hospital bedroom unit provides limited spatial options for its patients. In addition, the need for the staff to maintain constant accessibility to some patients dictates a functioning policy which prohibits all patients from leaving the unit. This restriction extends even to convalescing and diagnostic patients, for whom constant surveillance is no longer indicated. These environmental and functioning restrictions create a hospital setting frequently perceived as confining by the patients who experience it. The progressive care unit attempts to counteract this perception by offering more spatial options to stimulate mobility and socialization (e.g. - lounge, dining room, pantry) and by allowing patients to leave the unit when their medical conditions allow (Beckman, 1974; Keene, 1972; and Sutton & Creighton, 1973).

Hypothesis IV: Progressive care patients will report less intensive feelings of confinement than patients hospitalized in a traditional surgical unit.

Hypothesis IV-A: In utilizing the spaces on the nursing units, progressive care patients will exhibit a wider range of active behaviors (e.g. - reading, writing, socializing, walking, etc.) than patients on the traditional surgical unit.

Hypothesis IV-B: They will also exhibit less passive behavior than patients on a traditional unit (e.g. sleeping, lying awake, standing and sitting).

Hypothesis IV-C: Progressive care patients will show more mobility than patients on a traditional unit.

The same research on the experiential quality of patienthood has also emphasized patient feelings of boredom and monotony while hospitalized (Brown, 1961; Kirsners & Waters, 1972). The progressive care unit, in providing more spaces and allowing more behavioral options for its patients, attempts to alleviate patient perceptions of boredom and monotony (Sutton & Creighton, 1973; and Williams, et al,.1976).

Hypothesis V-A: Progressive care unit patients will evaluate their hospital environment as being less boring and monotonous than patients on the traditional surgical unit when they evaluate their unit.

An issue which may be related to the perceptions of boredom and monotony is that time passes very slowly for the hospitalized patient. The progressive care unit attempts to counteract this perception of time passing slowly by providing more environmental and social options for its patients to utilize, thereby making the day pass faster.

Hypothesis V-B: Time in the hospital will be perceived as passing faster for progressive care patients than it will for patients hospitalized in the traditional nursing unit.

Researchers investigating the hospital setting have found that it also possesses great potential for arousing anxiety among patients who are exposed to an array of frightening sights, sounds, and smells (Brown, 1961; Kornfeld, 1972). Much of this fear originates from being in a close proximity to other patients who are severely ill, disruptive, or dying (Kirsners & Waters, 1972; Neumann, 1974; and Reid & Feeley, 1973). The progressive care unit attempts to counteract this source of anxiety by segregating the convalescing and diagnostic patient from those patients who are severely ill and/or disruptive.

Hypothesis VI: Reports of depression or anxiety originating from exposure to the severely ill or the disruptive patient will emerge less frequently from progressive care unit patients than from traditional surgical unit patients.

Since disruptive patients and patients in severe pain are not allowed on the progressive care unit, this unit will be quieter at night.

Sub-hypothesis VI-A: Progressive care patients will report less sleep disruption than surgical unit patients.

Sub-hypothesis VI-B: Progressive care patients will request less sleeping medication than surgical unit patients.

Sub-hypothesis VI-C: Progressive care patients will request or desire room changes less frequently than surgical unit patients because they do not have very sick or disruptive roommates.

Work on Intensive Care Units and on Cardiac Care Units (Kornfeld, 1971; McKegney, 1966; and Schroeder, 1972) and pilot work conducted on the progressive care unit have indicated that patients frequently pick up cues concerning the severity of their own conditions from the conditions of patients surrounding them. By eliminating patients who look or sound seriously ill, the progressive care unit attempts to curtail this feeling of "illness by association" ("if they are sick, than I must be also").

Hypothesis VI - D: Progressive care unit patients will perceive the presence of other non-acute patients as an indication that they are also in a non-acute stage of illness. Progressive care unit patients will verbalize this perception

more frequently than surgical unit patients, and they will see this as a positive feature of the unit.

Because there are more patients with whom one may socialize, more non-acutely ill patients capable of socializing, and because there are more spaces amenable to socializing, social activity for patients on the progressive care unit should be more extensive than it should be for patients on the traditional surgical unit.

Hypothesis VII: Progressive care unit patients will socialize more among themselves than will patients on the surgical unit.

The hospital environment is a strange and frightening one for many patients. Investigations of hospital settings, along with anecdotal evidence, have suggested that for certain patients the more homelike and de-institutional the setting, the more beneficial its effect on patient morale (Brown, 1961; Kirsner & Waters, 1972; Klagsbrun, 1970; and Raphael, 1962;), because of its potential capacity for reducing hospital associated stress. The progressive care unit, through the provision of a daybed sector, a dining room, a pantry, and lounge attempts to create a less institutional appearing hospital setting.

Hypothesis VIII: The environment of the progressive care unit will be perceived by its patients as being more pleasant and cheerful than the environment of the surgical unit.

Hypothesis VIII-A: In describing their unit, progressive care unit patients will use more posi-

tive descriptors and will make more associations between their surrounding and non-institutional settings (e.g. - "like a hotel", "more homelike" etc.) than will patients on the surgical unit.

Hypothesis VIII-B: Progressive care patients will see a positive relationship between their physical surroundings and their morale more often than will patients on the surgical unit.

III. DESCRIPTION OF THE SITE/METHODS

The two units studied are in "Berlen" Hospital - a 1000 bed Catholic hosital in a large Eastern city. Although the hospital is administered by a religious order, it is staffed primarily by lay people. Nonetheless, a Christian atmosphere prevails in the hospital. Clergy are frequently seen visiting patients and crucifixes and other wall embellishments have a Christian motif.

UNIT I: Kate - the Progressive Care Unit

This unit was located on the 7th floor in the newest area of the hospital. This building was constructed in 1964. The design of Kate was carefully executed to spatially reflect the therapeutic goals of progressive care as previously detailed. The unit is divided into two areas: the daybed side and the hospital bed side (See Areas A and B, Figure 1). KATE hospital bed is reserved for surgical patients and cardiac patients, while KATE daybed primarily receives diagnostic and/or patients in need of medical observation or stabilization (e.g. - diabetes). The major comparison of the study will be between surgical patients on KATE and surgical patients on a control unit. Due to differences in diagnoses, comparisons between KATE daybed and the surgical samples are not the most desirable since severity of illness could easily confound patients' reactions to the hospital. However, since the daybeds, being the most radical departure from the traditional hospital room, and the daybed patients, being the least sick patients in the hospital, clearly contributed to the overall ecology of the unit, it is important to include the perceptions and behaviors of this sample in the study as a subsidiary comparison.

The nursing stations and service facilities (Area C) are in the center of the unit, surrounded by a race track corridor which connects the hospital bed side with the daybed side so that it is easy to walk back and forth between the two sides. However, visual accessibility between the two areas is limited for patients when they are in their rooms.

The daybed sector, which runs along the southern side of the unit contains five double bedded rooms, all with private bath. As indicated, the daybeds are reserved primarily for patients admitted for diagnostic workups, chemo and radiation therapy. Occasionally patients undergoing minor surgery are assigned to a daybed or they may be transferred to one when the hospital bed is no longer necessary. The hospital also has an extensive cardiac program and the daybeds are frequently used by patients undergoing open heart surgery. These patients are assigned to a daybed while being prepared for surgery. They also return post-operatively to the daybeds after coming from the Intensive Care Unit the Intermediate Cardiac Care Unit and the regular hospital bed area on Kate.

As Figure 2 indicates, the daybed rooms contain two couches. They convert to a bed at night by sliding the seating portion away from the back of the sofa. The couches are pale green vinyl and have a medium brown wood frame and gold bedspreads. The rooms are painted either pale blue or pale yellow and the windows are framed with contrasting solid colored curtains. The two armchairs are covered in either gold, orange, or green vinyl. The total effect created by these rooms, as mentioned by some patients, is that of a sitting room. Except for oxygen outlets on one wall, there is nothing in them traditionally associated with hospital bedrooms.

At one end of the daybed area are the patient dining room and pantry (Areas D and E, Figure 1). The dining room is opened at meal times and ambulatory patients who have their doctors permission may eat there at their own discretion (no one is forced to use the dining room). The dining room is wallpapered with bright green and gold flowers on a white background. The curtains are a gold woven material and cover the large windows, which flood the room with sunlight. The dining room contains four imitation butcher block tables, each having gold and tan kitchen chairs with arms (Figure 3).

The pantry is directly across from the kitchen. It has a refrigerator stocked with milk, jello, juice and other snacks, and there are electric burners for making coffee and tea. Patients are free to use the pantry, except when meals are being prepared. The pantry is also closed during the prime visiting hours: 6 pm. to 8 pm. (Figure 4).

The patient lounge is at the opposite end of the daybed side from the dining room. (Area F, Figure I). The sofa and chairs are green vinyl. The walls are pale blue and the rug is a medium version of the same color. The drapes are a contrasting blue and green pattern. This room also has a southern exposure and on a clear day it is covered with sunlight. The total feel of the room is probably more comfortable than luxurious. It also contains magazines and puzzles but no television (See Figure 5).

The hospital bed side of the unit has eight bedrooms. One is a private room, one a double room and the remaining six are triples. All have their own baths and all rooms face north.

Originally the hospital bedrooms were occupied by medical-surgical patients. However, in the Fall of 1976, two triple rooms and one double room were converted into an intermediary coronary care unit. Patients coming from the Cardiac Care Unit are transferred to these rooms and are placed on cardiac monitors twenty four hours a day. This alteration in policy now placed acutely ill patients on the floor. The implications of this change are crucial and are discussed in Section IV. The remaining hospital beds are occupied by surgical patients and heart patients who no longer need monitoring. Five of the rooms are painted light tan and have bright gold curtains. The remaining three rooms are pale yellow with the same window curtains as the tan rooms. Each bed, which is a standard movable hospital bed, has tan draw curtains which can completely enclose the patient for privacy. There is a bedside table, a movable tray, and a chair (or two) by each patient area (See Figure 6). Illumination is by a central overhead fluorescent fixture and each patient has a small fluorescent light in back of his/her bed which is controlled by a string pull.

The race track corridor which connects the two corridors is painted off white. There are some sketches on the wall which primarily depict staff helping patients and other hospital related scenes. The hall floor is tiled in an off white or cream color and has tan accent stripes to break the monotony. The hall contains two chairs and four benches where patients sit to talk, rest, or watch the unit activity. The illumination is by fluorescent rectangles and the ceiling of the entire unit is covered by speckled white ceiling tiles. The hall also

contains two shower rooms, a phone, and a water fountain. (See Figure 7).

UNIT II: Lenmar, The Traditional Surgical Unit

Lenmar 8, the comparison unit, is an eighth floor surgical floor constructed in 1941. It is a typical unit in the hospital. It occasionally receives medical patients and they are represented in the study. Lenmar is located immediately adjacent to the Kate building. The units have almost identical exposures: the southern rooms face a brownstone lined street with a view of the city. The rooms which face north, east, or west in Lenmar all look into an alley or small courtyard and the backs of other hospital buildings. (The Kate hospital rooms face the covered patio of the psychiatric building).

The Lenmar floor has eighteen beds arranged along a T shaped hall (See Figure 8). Four of these rooms are double bedded and are located along the top portion of the T. The remaining rooms are singles: four are along the top of the T and six are along its base. All rooms along the front corridor have private baths. Those along the back corridor (base of the T) have sinks and they share two toilets.

The Lenmar rooms contain the same amenities as the Kate rooms (Figure 9). These furnishings, however, are much older than those used in the Kate building. Three of the rooms are painted a whitish grey, eight of them have recently been wallpapered in an off white subtly textured pattern, one room is pale blue, and two are pale yellow. The windows are framed by patterned sheer curtains. Some are in geometric patterns, some in flowered prints. The colors range from yellows, greens and blues to earth tones. The bed curtains are a

brown green cloth. Each bed has an incandescent light fixture attached to the bedside table. There is also an overhead incandescent light.

The Lenmar hall was painted an institutional green. However, a few months after data collection began, the hall was prepared in muted shades of off white with contrast walls papered in bright green and blue stripes. The ceiling of the entire floor is painted white and the floor is made up of white tiles with tan diamond shaped tile insets. The hall is illuminated by overhead incandescent fixtures enclosed in disc shaped globes. There is one shower room and one bath tub on the floor (Figure 10).

The Lenmar floor does not have a lounge per se. It does have a seating area at the intersection of the two corridors. This now contains a turquoise vinyl sofa with two matching chairs and a coffee table (Figure 11). For half of the study the seating area had an old sofa and two chairs covered with faded brown and rust slipcovers. Given its location -- at the junction of two corridors and directly across from the elevator and nursing station, the lounge offers minimal opportunities for privacy. Like its Kate counterpart, there is no television. There are a few magazines for patients and visitors to peruse.

PATIENT SELECTION

All participants were selected according to diagnosis. Any medical-surgical patient on Kate was eligible, with the exception of the cardiac patients. The latter were excluded from the study because there were no cardiac patients in the control unit. The Lenmar sample included any medical-surgical patient who, by nature of his/her illness, could have been admitted to Kate. The criteria were that the patient be in total possession of his/her faculties, not have abdominal or other serious surgery, and be able to take care of themselves one or two days post operatively. Surgical patients were assigned to KATE or LENMAR randomly, wherever space was available, and seventy percent of the doctors who had patients in the study regularly admitted to both units. Patients had to be in the hospital a minimum of three to four days before they could be included in the study. This rule was adopted because we wanted patients to be familiar with the hospital environment and routine before discussing their perceptions and experiences. A three to four day stay seemed to be the minimum amount of time needed for patients to acquire the necessary familiarity. All patients were privately admitted by their physicians. There were no welfare or Medicaid patients in the sample.

Patient charts were reviewed several times a week to find patients who met the diagnostic critera. Eligible patients were first approached by their nurse and told that "a gentleman was doing a study on the hospital environment and would they be interested in talking to him?" If they agreed, the investigator was then introduced. Prospective participants were told that a dissertation

study of the hospital environment and the hospital experience was being conducted and that it involved an interview of forty five minutes to an hour and would focus on their feelings and reactions to the hospital, with specific emphasis on the physical environment. In addition participants would be unobtrusively observed every fifteen minutes for a total of six hours. Finally, patients were told that a questionnaire focusing on their hospital care, their stay in general and how things have been going for them since discharge would be mailed to them at home. The researcher would then call them in a week or two and would review the questionaire with them over the phone. Patients were advised that participation in the study was totally voluntary and that all information would be anonymous and confidential. Patients were asked if they would like to participate. Of the 114 patients approached 18 or 16.5% (10 females and 8 males) declined to participate generally citing the following response: "I don't feel up to it", "everything is fine, I have no compaints", "I have too much on my mind", etc. Of the 96 patients who agreed to be interviewed 6, or 6.2% of the sample refused or neglected to complete the at home questionaire. They were replaced in the study.

METHODS

DESCRIPTION OF RESEARCH INSTRUMENTS

Overview of Methods

The primary research instruments employed in the study were in-hospital interviews and observations of patients, a patient rating scale completed by his/her nurse, and a post-discharge

questionnaire mailed to each patient. Supplementary to these instruments were 15 pilot interviews of patients and numerous formal and informal interviews with staff. These patient and staff interviews took place on both units. The pilot interviews of patients contained open-ended questions focussing on general reactions to hospitalization and feelings specific to the physical and social environment of their unit. It was from the contents of these pilot protocols that the in-depth hospital interview evolved.

The nursing staff were interviewed formally on their feelings about the environment and treatment philosophy existing on their unit. They were also questioned about patient reluctance to relinquish the sick role. The latter staff interviews were the basis for the patient - "Willing-Reluctant" scale. Since the investigator was on the units for a 14 month period, there were numerous opportunities to informally discuss with staff any change and developments which occurred over time. A more detailed analysis of the final instruments used follows.

A. The In-Hospital Interview

Patients were interviewed in the hospital for approximately forty minutes to one hour. Whenever possible, attempts were made to interview the patient in a setting which provided some degree of privacy. Consequently, interviews occurred in a variety of places: the patient's room, the lounge or seating area, on a bench in the hall, or in the dining room. The in-hospital interview began with general, open ended questions designed to establish rapport

(ie. -"What has it been like for you in the hospital so far?", "Could you mention something pleasant, unpleasant,?", etc.). Close ended, scaled questions then followed which focused on the passage of time, boredom, confinement, degree of contact with other patients, noise and overall plesantness or cheerfulness of the unit. (See Appendix A for complete interview). During this interview Kate patients were also asked to evaluate the specific features of the environment: their rooms, the pantry, dining room, hall, and lounge. Lenmar patients were asked to evaluate their rooms, the hall and seating area, and to comment on the desirability of daybeds and a patient dining room and pantry. During this phase of the interview, Kate patients were asked if they used any of the above amenities. In addition, all patients were requested to give suggestions as to how their unit's environment could be improved. The interview ended with patients being asked to comment on how important physical surroundings were to them while they were on the hospital and why they were important. All interviews were tape-recorded.

B. OBSERVATIONS

Patients participating in the study were observed after the interviewing,using a behavior mapping technique (Ittleson, et al, 1970). Once every fifteen minutes an observer would enter the unit and locate the participating patients. The patient's location was recorded, as was his/her body position (e.g. - lying in bed, sitting in or

at the bed, sitting in the chair, or standing/walking). In addition, the patient's activity was recorded, using an activity list developed from previous hospital research with behaviors that have been found to be reliable across time, setting, and observers (Ittleson, et al, 1970).

The number of patients participating in the research at any given time varied from one to four. When more than one patient was involved at any one time, the observer would locate each patient individually and make the appropriate recordings until all patients had been observed. After this information was gathered, the observer would then leave the unit, returning on the next quarter hour and repeating the procedure. In this way each patient was to be observed twenty four times. However, not all patients were observed for twenty four time periods. A treatment, test, or examination periodically necessitated their leaving the unit. Consequently the actual number of observations per patient varies slightly. Of the 90 patients in the study, 70 have 24 observations recorded for them. Eighteen patients have observation frequencies which vary from 19 to 23. One patient has 12 observations and one has none. The observation periods on both units were established during the patient's "free" time: in the afternoon and evening. (Most test and therapies are scheduled in the morning). This was done deliberately to determine how patients spent their unscheduled time in the hospital. We wanted to know how patients used their free time on the unit and how active they were when the choice was left to them. We did not want to

observe during the primary testing time since patients are forced to be active and mobile at these periods. Afternoon observations started at 2 p.m. and ended at 4:45 p.m. Evening observations started at 6 p.m. and ended at 8:45 p.m. Visiting hours end at 8:00 so each patient was observed for an hour when his/her time was totally his/her own (See Appendix B for copy of observational sheet).

Patients were cautioned to ignore the observer and act in their normal manner. Since visibility from the halls into the rooms was very good, the observer merely walked past the room, glanced into it briefly and coded the observed behavior. This method was extremely unobtrusive and most of the time the patient did not even see the observer. In addition his repeated presence on the unit made him a fairly regular feature, along with the normal parade of people on the medical unit.

C. PATIENT SCALE

Since it was hypothesized that patients would respond differently to the progressive care environment according to how willing they were to accept patienthood, a scale was developed which would discriminate patients along a willing/reluctant patient dimension. Prior to data collection every nurse on Kate and Lenmar was interviewed and asked to list those behaviors or attitudes which patients exhibited that indicated a reluctance to relinquish the patient role, either out of fear or out of enjoyment of the role. From these interviews an eighteen item questionnaire was developed. Each patient's primary nurse was asked to complete

this questionnaire at the time of the interview. Nurses were asked to rate each patient on each item on a 1-7 scale. They were to rate the patient relative to other patients with comparable diagnoses that they had treated. By doing so, a hernia patient was rated in comparison to other hernia patients, giving the nurses a frame of reference against which they could rate each patient. From these items, a patient's score was computed which was used as an index of the patient's willingness or reluctance to remain a patient (See Appendix C).

D. QUESTIONNAIRE

Approximately one week after discharge, each patient was mailed a thirty item questionnaire. This instrument asked patients about the care received in the hospital, the adequacy of preparation for discharge, how things have been going for them since discharge, and some additional questions on their reactions to the hospital and its environment (See Appendix D). The investigator wished to obtain a retrospective evaluation of these issues at a time when the patients could be more candid about their treatment in and reaction to the hospital (Kirsners and Waters, 1972). Patients were instructed to complete the questionnaire and to wait for the investigator to contact them at home. The investigator then called the patient and reviewed the questionnaire with him/her over the telephone. In 10% of the cases (nine patients), a telephone contact was not possible and participants mailed back the questionnaire. The rationale behind the telephone call was to encourage patients to complete the questionnaire and to provide assistance with any unclear questions. During the telephone contact respondents were

also asked to mention anything pleasant or unpleasant about their hospital stay, whether or not they felt ready to leave the hospital at discharge time, if they had any problem taking care of themselves, and whether or not anything happened that they were not warned about (e.g. - any unexpected pain, hygiene difficulties, adverse reactions to medicines, etc.).

SLEEPING MEDICATIONS

At the end of the data collection, the investigator reviewed all the patients' charts and recorded the frequency and strength of any sleeping or sedating medications taken.

STAFF INTERVIEW

Staff on both units were interviewed formally about their feelings toward their jobs, the treatment philosophies of their units, and their attitudes toward the environment. They were also interviewed formally about patient reluctance to relinquish the sick role, and informally during the course of the study about any changes which occurred on their units over time. These later interviews were particularly important on KATE. As discussed in Section IV, a major modification occurred tnere and it was crucial to know how the staff viewd this policy change. Nursing adminsitrators were also interviewed about their perceptions of the care and environments on the two units, and about the general philosophy of care at the hospital.

Statistical Analysis

Interview

The quantifiable scaled data were taken directly from the respondents' interviews and analyzed using an analysis of variance

technique. Significance of frequency data (number of patients reporting a specific behavior or feeling) were analyzed using the chi-square statistic. Responses to open ended questions were first content analyzed. Coding categories were then developed from this analysis. Two raters then coded 20% of the interviews, achieving a reliability score of .92 based upon Holsti's (1968) method for computing reliability with open ended data. Once an acceptable level of reliability had been reached, the investigator then coded the remaining interviews. The frequency of certain patient responses were then analyzed with chi-squares to determine whether significant differences existed between samples.

Observations

Since the number of observations per patient was not constant across the entire sample, the frequencies of individual patient body positions, behaviors, and their locations on the unit were converted to percentages. Each patient received a percentage score whose numerator represented the number of times a specific behavior, body position, or location was observed and whose denominator reflected the total number of observations for that patient. These percentages were then analyzed with an analysis of variance technique.

Patient Scale

A score was developed for each patient based upon the nurses ratings of eleven items on the willing/reluctant patient scale. Since not all of the 18 items on the scale applied to all patients (e.g. - not all patients were on medications, special diets, or used unique hygiene procedures), the final score was based upon the number of items which did apply to everyone. Each item had a seven point scale

and a score was computed based upon the mean of these eleven items.

Questionnaire

Frequency data from the questionnaires were treated with chi-square analysis and the scaled data were treated with an analysis of variance.

Sleeping Medications

Since the amount of sleeping medication consumed by a patient during the course of his/her stay depended, in part, on the length of his/her hospitalization, this variable was also computed on a percentage basis. Percentage data were neccesary since length of stay varied considerably both among and within samples. The percentage used reflected the number of nights a patient took a sleeping pill over the number of nights he/she was in the hospital. This percentage was treated statistically by an analysis of variance.

IV. CHANGES IN THE SITE

A major and unexpected change occured on KATE after the initial piloting and just before data collection. A portion of the hospital bed area was converted into an intermediary cardiac care unit. This area was to receive open heart surgery and heart attack patients from the cardiac care unit. Three bedrooms were equipped with cardiac monitors and the intermediary care unit opened three months prior to data collection. This change altered the character of Kate in a number of ways. Prior to the alteration, KATE was perceived as strictly a progressive care unit. Now it was also seen as a cardiac floor - a perception shared by both staff and patients. Some patients were quite frank in their dislike of sharing a floor with heart patients. From a staff point of view, the presence of cardiac patients substantially increased the demands and pressures placed upon them. For the first time, KATE patients had to be closely monitored. Consequently staff did not have the time they once had for talking, teaching, and explaining things to the medical and surgical patients. Finally the concept of a convalescing unit which excluded the very sick and dying was eroded by the appearance of cardiac care patients. KATE patients were no longer completely segregated from potentially upsetting or depressing contact with the critically ill. During the course of data collection, there were two deaths on the unit and a number of cardiac arrests. This created a form of stress and anxiety on the unit that was non existent when the units were first selected for the research.

The impact of the cardiac patients affected the present research in two major ways. Since staff no longer had sufficient time to devote

to teaching the patients and talking to them on an informal basis, differences in the amount of explanations and information given to patients on the units may have equalized out. Secondly, since a fair proportion of KATE'S patients were now quite sick (at least 25% of them), the therapeutic impact of eliminating the acutely ill from the unit was diminished to some degree. Consequently, hypotheses testing this impact were placed in considerable jeopardy. Even though the cardiac patients are neither intubated nor in oxygen tents, serious illness and the threat of potential death from a recurring cardiac arrest, previously absent from the floor, were both now present.

Due to this alteration in policy, the KATE setting no longer employed the progressive care concept in its original entirety. Rather, it now utilized a modified version of it. This modification may have dissipated some of the beneficial effects of progressive nursing care. This was unfortunate and unavoidable. However, as the data will show, the importance of non-institutional design was, in fact, highlighted by these alterations, since the physical setting still made a substantial, and positive, impact on patients even though it no longer received total support from the functioning policies of the unit.

V. RESULTS

Any comparative study of the impact of the hospital environment must consider two crucial sets of potential moderating variables. The first set concerns the samples studied. Are they comparable in terms of crucial independent variables? The second group clusters around the perception of the care received in the respective environments. Hospitals are perceived as total settings. Consequently it is imperative to know if patient reactions to the physical setting are possibly being contaminated by their perceptions of the quality of the care. In recognizing the potentially important role played by patient and care variables in hospital research, hypotheses relating to these variables will be treated prior to the more environmentally related ones.

PATIENT VARIABLES

The most salient patient variables in a hospital evaluation study are diagnosis, amount of previous hospitalization, age, sex, and willingness to assume the passive patient role.

DIAGNOSIS

As mentioned in the methods chapter, patients were selected according to their diagnosis and willingness to participate in the study. The breakdown of patients by unit and diagnosis is as follows:

	KATE HOSPITAL	LENMAR	KATE DAYBED
Mastectomies	11	4	0
Hernias	6	7	1
Rectal Surgery	2	3	1
Breast biopsies	2	0	0
Misc. surgery	4	8	3
Chemotherapy	2	0	2
Diagnostic	3	8	23

While the overall patient profile may vary between the units in terms of their distributions by specific illness, there is a comparability, on the aggregate level, in terms of severity of illness. Most members of KATE Hospital and LENMAR samples could have been admitted to either unit. Only three LENMAR patients were not eligible for KATE Hospital at admission, but they were eligible for transfer at the time of participation in the study. Since these two matched surgical groups form the primary comparison in the study, severity of illness as an intervening variable is controlled for. The reactions of the KATE Daybed sample will be treated as a subsidiary comparison, since there is a lack of assignment reciprocity between this sample and KATE Hospital and LENMAR. All of the daybed patients could have been admitted to either KATE Hospital or LENMAR. However, most of the LENMAR and KATE Hospital bed patients were not eligible for admission to the daybeds since they needed a hospital bed for some portion of their stay. Consequently, their responses are considered ancillary ones and are included in the study because of their contribution to the total character and ecology of the unit.

PREVIOUS HOSPTIALIZATION

Past experiences and degree of familiarity with hospitals could also affect a patients response to a bedroom environment. Consequently, sample members were grouped into one of three categories according to their degree of previous hospitalization:

Primary: no prior admissions
Intermediate: one or two prior admissions
Multiple: three or more admissions

A one way analysis of variance was then performed on these data and no significant differences were found between units. The

mean number of previous hospitalizations were 3.0; 2.5 and 2.4, for KATE Hospital, LENMAR, and KATE daybed samples respectively.

AGE

The mean age of the samples differed among the units (See Table 1). KATE Hosptal bed patients were the oldest, with a mean age of 56.6. LENMAR patients had a mean age of 46.4 years and KATE Daybed patients averaged 41.0 years. A one way analysis of variance was then performed on this data to determine if patients varied significantly by age across the units.

TABLE 1

AGE AND SEX OF SAMPLES

A. MEAN AGE

	KATE HOSPITAL	LENMAR	KATE DAYBED
M	56.6	46.4	41.0
SD	15.2	14.4	15.5
N	30	30	30

F (2.87 = 8.36
P = .005

COMPARISONS

KATE HOSPITAL VS. LENMAR	KATE HOSPITAL VS. KATE DAYBED	KATE DAYBED VS. LENMAR
.05 (Scheffe)	.05 (Scheffe)	N.S.

B. SEX

	KATE HOSPITAL	LENMAR	DAY	TOTAL
Male	9	13	11	33
Female	21	17	19	57
N	30	30	30	90

χ^2 = 1.15

P .60
Not Significant

The post-hoc comparison test indicated that the KATE Hospital bed patients were significantly older than both the LENMAR and KATE daybed samples. The differences between the daybed and hospital samples on KATE is an inevitable result of hospital policy. The admitting office assigns daybeds to younger patients as the beds are low and older patients may experience some difficulty with them. The age difference between KATE hospital bed and LENMAR samples is less easily explained. This difference could present interpretive problems for the mobility data. Since the KATE Hospital bed sample is older than their surgical counterparts on LENMAR, they might be expected to be less mobile, and to have had more previous hospitalizations -- two factors which could ameliorate some of the positive impact of the environment. If anything, then, this age difference might have a conservative effect on the mobility hypothesis. It is, therefore, significant that, despite more advanced age, the KATE Hospital bed patients had <u>not been hospitalized</u> significantly more times and, furthermore, they exhibited <u>more mobility</u> than patients in the LENMAR sample. This finding strengthens the hypothesis that the environment exerts an "energizing" influence on its patients.

<u>SEX</u>

As Table 1 indicates, the samples from all units contained more females than males. This may be a result of the diagnostic criteria. More women than men have mastectomies, but males and females may fall equally into the other diagnostic cateories. Chi square analyses were performed to determine if the samples differed significantly in their male-female distribution. No significant differences were

found between units. Since there are more females than males in the study it is possible that variations found between samples on the environmental variables may, in part, reflect sex as well as unit differences. To address this potentially confounding issue, a two by three analysis of variance (unit by sex by dependent variable) was performed on the following major dependent variables: perceptions of confinement, boredom, slow passage of time, depression from exposure to sick patients; reported and observed social activity; care ratings; degree of post discharge worry and general distress; body positions; mobility index and frequency of passive behavior; amount of sleeping medications consumed; and ratings and descriptions of the physical environment. There was only one significant main effect attributed to sex out of these 25 dimensions. Consequently, despite samples containing disproportionately more females than males, the data reported here represent responses of a patient population independent of sex.

Staff Variables

While the present research did not rate the nursing staff per se, there are a number of staff related variables which must be considered due to their potential impact on patients' attitudes, behaviors, and their perceptions of the quality of their care. These variables concern the patient-staff ratio, possible differences in the work loads on the two nursing floors, and varying staff attitudes toward illness, its treatment and the degree of patient involvement with it.

On KATE, the usual patient staff ratio was 5:1. On LENMAR, there was an approximately comparable one of 4.5:1. It could be argued, nonetheless, that the higher percentage of diagnostic patients on KATE, a population who traditionally require minimal care, made nursing less demanding there than on LENMAR. However, the presence of the cardiac patients on KATE, who needed continual monitoring and heavy nursing care, more than compensated for the decreased demands of the diagnostic patients. LENMAR had surgical patients in need of substantial care. However, this need was pronounced for their first few post-operative days only, and the number of severely acute patients on the floor at any one point fluctuated. There was no constant population on LENMAR in need of continual attention as there was on KATE. Consequently, no evidence existed which indicated that nursing duties were easier to perform on KATE than on LENMAR. Interviews with KATE staff did reveal that while at one time the physical (but not emotional) nursing load was lighter, this was no longer true once the intermediary cardiac care unit opened. The level of work was now equally demanding on both units.

It is also possible that different types of staff would self select themselves onto a progressive care unit. Given a progressive care unit's unique philosophy of care, this possibility is a very real one. Variations in staff expectations for patient activity and self care could easily affect patient attitudes, behaviors, and perceptions of their hospitalization and treatment. Considering the fundamental differences between progressive and traditional surgical care, it is

impossible to eliminate this effect, which in fact is an intentional one. However in the present study its impact may not be as pronounced as might be expected since the KATE staff were no longer able to practice progressive care in its totality.

Willingness to Accept the Patient Role

It was hypothesized that patients on both units would respond to the hospital environment differently according to how willing they were to assume traditional patienthood.

Hypothesis I: More Willing Patients Will React Differently to the Hospital Environment Than More Reluctant Patients.

To test this two-tailed hypothesis, each patient was given a score computed from the scale developed to measure this More Willing-More Reluctant dimension. As indicated previously, this score represents a mean calculated from nurses' ratings of the patients on 11 items along a 7 point continuum. A high rating indicated that the patient was more reluctant to assume a traditional passive role. These means were treated with a oneway analysis of variance.

TABLE 2

PATIENT WILLINGNESS/RELUCTANCE TO ACCEPT THE PATIENT ROLE

1 = Very Willing to accept the patient role

7 = Very Reluctant to accept the patient role

	KATE HOSPITAL	LENMAR	KATE DAY
M	5.36	5.24	5.98
S.D.	1.24	.96	.68
N	30	30	30

F (2,87) = 4.80

P = .01

Grand Median 5.79

COMPARISONS		
KATE HOSPITAL VS. LENMAR	KATE HOSPITAL VS. KATE DAY	KATE DAY VS. LENMAR
N.S.	N.S.	.05 (Scheffe)

As Table 2 indicates, patients on KATE Day were significantly less willing to assume a passive role, as measured by the staff on this scale. (See Appendix C). Since these patients were less sick than the surgical patients, it is understandable that they would be more mobile and more active in their daily care. These are the primary behaviors measured by the scale. No significant differences existed between the two surgical units on this score. Consequently, the main comparison groups in the study were equally reluctant to assume a passive patient role.

To determine if a More Willing-More Reluctant orientation toward patienthood affected their evaluations and use of the hospital environment, patients were assigned a position above or below the grand median. A score below 5.79 indicated a more willing disposition while a score above it indicate a more reluctant one. A two by three ANOVA was

then performed on each of the following variables: perceptions of confinement, boredom, slow passage of time, depression from exposure to sick patients; reported and observed social activity; care ratings; degree of post discharge worry and general distress; mobility and passive behavior index; consumption of sleeping medications, and ratings and descriptions of the physical environment.

TABLE 3

WILLING RELUCTANCE SCORE BY UNIT BY	MAIN EFFECTS	INTERACTION
	F (df) P	F (df) P
Confinement	.004 (1) = .948	.562 (2) = .572
Confinement Comparison	.788 (1) = .380	.882 (2) = .421
Boredom	.678 (1) = .431	.586 (2) = .559
Passage of Time	.025 (1) = .876	.190 (2) = .827
Ratings of Environment	.185 (1) = .668	.218 (2) = .805
Depressed by Other Patients	2.060 (1) = .111	3.250 (2) = .043*
Reported Social Activity	.035 (1) = .851	.284 (2) = .753
Noise	.535 (1) = .467	.832 (2) = .439
Time Spent Lying in Bed	.525 (1) = .471	2.467 (2) = .091
Time Spent Sitting in Bed	.104 (1) = .748	1.360 (2) = .262
Time Spent Sitting at the Bed	.214 (1) = .645	1.325 (2) = .271
Time Spent Sitting In the Chair	.558 (1) = .457	1.473 (2) = .235
Time Spent Standing/Walking	4.830 (1) = .031*	2.363 (2) = .100
Time Spent Out of Room	.067 (1) = .797	1.663 (2) = .202
Time Spent Socializing	1.298 (1) = .258	1.485 (2) = .233
Time Spent Sleeping/Lying Awake	.091 (1) = .764	2.189 (2) = .119
% of Nights on Sleeping Pills	3.192 (1) = .078	2.027 (2) = .138
% of Passive Behavior	3.093 (1) = .082	2.011 (2) = .140
Confidence at Discharge	7.120 (1) = .009*	1.086 (2) = .342
Care Ratings	2.170 (1) = .144	.925 (2) = .401
Staff Attention	.001 (1) = .981	.313 (2) = .732
Emotional Support	1.381 (1) = .243	2.947 (2) = .058
Personal Interest	3.032 (1) = .085	1.756 (2) = .179
Upset In the Hospital	.416 (1) = .521	.378 (2) = .686
Upset at Home	3.443 (1) = .067	.351 (2) = .705

* = Significant Effect

	χ^2
Medications Thoroughly Explained Vs. Not	N.S.
Satisfaction with Information Received Vs. Not	N.S.
Asked Questions Frequently and Sometimes Vs. Rarely and Never	N.S.
Satisfied with Illness Knoweldge Vs. Not	N.S.
People Who Complained Vs. Not	
Medical	N.S.
Non-Medical	N.S.

In addition, chi square computations were performed on the number of patients who reported that they made complaints to the staff, were satisfied with the amount of information received, and felt the staff had adequately prepared them for discharge.

As Table 3 indicates, only two variables showed a main effect and only one showed an interaction effect for the patient willing-reluctant score. Since significance was rarely reached on the analyses of the dependent variables by willing-reluctant patient score, Hypothesis I is rejected.

Since no appreciable main effects were found for sex and patient scores by unit on the two by three analyses of variance, all data will now be treated with one-way analyses of variances (dependent variable by unit) or two by three chi-squares, and the primary comparisons, as previously indicated, will be between the surgical samples.

CARE VARIABLES

The quality of care received on the units was measured on the post-discharge questionnaire. As a general index of care quality, patients were asked to give an overall rating of their in-hospital treatment. Table 4 lists the mean ratings on the 10 point scale. (See Appendix D, Question 9). There were no significant differences between units on overall patient ratings. Mean ratings clustered between excellent and very good.

TABLE 4
RATINGS OF NURSING CARE

1 = Excellent 10 = Very Poor

	KATE HOSPITAL	LENMAR	KATE DAY
M	1.86	2.80	2.36
S.D	1.27	2.05	1.69
N	30	30	30

F (2,87) = 2.24
P = .1117
Not Significant

Since progressive care has unique treatment philopsophies and goals, patients were additionally asked to rate their care along the specific dimensions reflected in the following hypotheses:

Hypothesis IIA: Progressive care patients will evaluate their nursing care as being more psychologically supportive than will patients evaluating their care on the surgical unit.

IIB: Progressive care patients will feel they are receiving more individualized care than will surgical unit patients.

IIC: Progressive care patients will feel they are receiving enough nursing attention more frequently than surgical unit patients.

IID: Progressive care patients will feel they are receiving enough information and explanations relevant to their care and condition more frequently than surgical unit patients.

To test hypotheses IIA through IIC, Patients were asked to rate the amount of emotional support, attention and personal interest and concern shown to them by the nursing staff. (See questions, 16,17, & 18, Appendix D). Responses to these questions were rated along a five or six point scale. As Table 5 Indicates, there were no significant differences between units on any of these dimensions. Therefore, Hypothesis IIA, IIB, and IIC are rejected. Patients on all units felt they received a sufficient amount of attention, emotional support, and individualized care from their nursing staff.

TABLE 5

RATINGS OF NURSING CARE IN TERMS OF ITS EMOTIONAL SUPPORTIVENESS, DEGREE OF ATTENTION AND PERSONAL INTEREST AND CONCERN

1 = "I received too much" 6 = "I could have used more"

A. EMOTIONAL SUPPORT

	KATE HOSPITAL	LENMAR	KATE DAY
M	2.14	2.43	2.30
S.D.	.52	.77	.53
N	28	30	30

F (2,87) = 1.57
P = .213
Not Significant

B. AMOUNT OF ATTENTION

	KATE HOSPITAL	LENMAR	KATE DAY
M	2.46	2.83	2.53
S.D.	.62	1.34	.57
N	30	30	30

F (2,87) = 1.36
P = .261
Not Significant

C. PERSONAL INTEREST AND CONCERN

	KATE HOSPITAL	LENMAR	KATE DAY
M	2.43	2.68	2.36
S.D.	.62	.89	.49
N	30	30	29

F (2,87) = 1.81
P = .169
Not Significant

Hypothesis IID was tested by a question directly focusing on the amount of information and explanations received about treatment plan and care. Patient responses to the question (See question 12, Appendix) were dichotomized: those who received enough information and those who would have liked more, regardless of the amount of information actually given. Patients who felt they did not need any information or explanations were eliminated from this analysis, as was one LENMAR patient whose diagnosis was undetermined. Diferences between the units were not significant, as Table 6 Indicates. Hypothesis IID is therefore rejected.

TABLE 6

RECEIVING ENOUGH INFORMATION/EXPLANATIONS

	KATE HOSPITAL	LENMAR	KATE DAY	TOTAL	%
# of Patients Satisfied	20	19	22	61	75.5%
# of Patients Who Wanted More Information	6	9	5	20	24.5%
N =	26	28	27	81	

χ^2 = 1.429

P = .40

Not Significant

It was further hypothesized that care on the progressive unit would make patients less dependent upon staff, in regard to their care.

Hypothesis III: The progressive care patients in comparison to the surgical unit patients, will exhibit less operationally defined care dependency on staff as illustrated by:

A. A more positive attitude toward taking self medications.

B. More request for and receipt of information about their treatment.

C. Exhibiting more knowledge about their medications and the nature of their illnesses.

D. Citing more examples of making negative feelings known to staff concerning their medical treatment or specific circumstances in their hospital experience.

E. Reporting feeling less upset or depressed after discharge.

F. Expressing greater confidence in taking care of themselves at discharge.

During the in-hospital interview, patients were questioned about their attitude toward the concept of self-medications. Table 7 A lists the number of patients who responded positively and negatively to this idea. There was no significant difference between the samples and each sample was equally negative about the concept. Section A of the Hypothesis III is therefore rejected.

Patients on the follow-up questionnaire were asked how frequently they requested information from the staff in order to test component B of Hypothesis III. Responses were dichotomized into those patients who asked qustions frequently and sometimes compared with those who rarely or never questioned the staff. See Table 7 B (See question 14, Appendix D). Patients who felt they did not need information were dropped from the analysis. A chi-square of <1 resulted when the data were analyzed. Consequently, part B of Hypothesis III is also rejected.

TABLE 7: OPERATIONALLY DEFINED INDEPENDENCE

A. PATIENTS WHO LIKED CONCEPT OF SELF-MEDICATION

KATE HOSPITAL	LENMAR	KATE DAY
8	8	9

χ^2
Not Significant

B. PATIENTS WHO ASKED QUESTIONS

	KATE HOSPITAL	LENMAR	KATE DAY
N who asked questions frequently and sometimes	14	12	15
N who asked questions rarely and never	14	17	15

χ^2 = .68
Prob = .75
Not Significant

C-1. EXPLANATION OF MEDICATIONS

	KATE HOSPITAL	LENMAR	KATE DAY
N who received careful explanations	16	10	11
N whose medications were not carefully explained	3	9	3

χ^2 = 4.38
Prob = .05
Kate Hospital vs. Lenmar significant

C-2. FAMILIARITY WITH ILLNESS

	KATE HOSPITAL	LENMAR	KATE DAY
N satisfied with amount known	23	18	16
N wanted to know more about illness	6	9	13

χ^2 = 3.82
Prob = .25
Not Significant

D. NUMBER OF PATIENTS WHO MADE COMPLAINTS

MEDICAL

	KATE HOSPITAL	LENMAR	KATE DAY
made complaints	6	9	9
not make complaints	24	22	21

χ^2 = .812
Prob = .6
Not Significant

NON MEDICAL

KATE HOSPITAL	LENMAR	KATE DAY
6	8	5
24	22	25

χ^2 = .931
Prob = .6
Not Significant

To test Hypothesis III, part C, patients were requested to evaluate how thoroughly their medications were explained to them while they were in the hospital, and also to estimate how familiar they were with their illness (Questions 7 & 19, Appendix D). Table 7-C shows the breakdown of patients who felt that their medications were either carefully or not carefully explained to them. Chi-squares were performed on these data and a significant difference between KATE Hospital and LENMAR surgical samples emerged (χ^2=4.38). Other two way comparisons between units yielded no differences.

Responses to the question gauging patients' familiarity with their illnesses were also dichotomized into those patients who were satisfied with their degree of knowledge in comparison with those who would have liked more information. Cases where the exact nature of the medical problem was undetermined were dropped from the analysis. Table 7-C-2 presents these data. Chi-square treatment of these dichotomized responses indicated no significant variation between units.

Since progressive care patients were more knowledgeable about their medications but not about their overall illnesses, Section C of Hypothesis III is only partially accepted.

One indicator of an independent personality may be his/her ability to express criticism or lodge a complaint against people in authority. Consequently, patients were asked if they had questioned or complained to staff about medical procedures or their underlying rationale. Whether or not patients had ever made non-medical complaints -- about food, noise, roommates, etc. was also surveyed. These two post discharge-questions (questions 20 & 21, Appendix D)

were used to test component D of Hypothesis III. Table 7-D indicates the total number of medical and nonmedical complaints made. Both of these comparisons yielded a non-significant chi-square of <1. Hypothesis III, Section D is therefore also rejected.

The post discharge questionnaire additionally requested patients to rate (on a 10 point scale) how upset or stressed they felt upon returning home after their hospital stay. (Question 29, Appendix D). This question tested Hypothesis III, Component E. The underlying assumption present here is that patients from a ward emphasizing independence in care will have more emotional control and will feel less upset or depressed. Table 8 lists the results of these ratings. The data clustered at the positive end of the scale. A one way analysis of variance was performed on these ratings and showed that no significant difference existed between units, thereby rejecting Section E of Hypothesis III.

TABLE 8. DEGREE OF POST DISCHARGE DEPRESSION OR UPSET

1 = very upset or depressed   10 = not upset or depressed at all

	KATE HOSPITAL	LENMAR	KATE DAY
M	9.09	8.23	8.16
SD	2.05	2.22	2.54
N	30	30	30

$F\ (2,87) = 1.33$

$P = .268$

Not Significant

As a final index of Hypothesis III, patients rated how confident or worried they felt about caring for themselves at their discharge point (Question 3, Appendix D). Responses to this question were converted to a 7 point scale. To test Hypothesis III, Section F, a

one-way analysis of variance was performed on these responses. As Table 9 signifies, patients' replies indicated a level of post- discharge confidence that clustered between the slightly and fairly confident ratings. The ANOVA revealed no difference between the units. Index F of Hypothesis III is also rejected.

TABLE 9 DEGREE OF POST-DISCHARGE CONFIDENCE

1 = I was very worried 7 = I was very confident

	KATE HOSPITAL	LENMAR	KATE DAY
M	5.26	5.00	5.51
SD	1.79	1.66	1.88
N	30	30	29

F (2,86) = .622

P = .539
Not Significant

On the analyses of the 7 indices of care-related independence, as reported by patients, only one index revealed a significant difference between samples. Hospital bed patients on the progressive care unit felt that their medications were explained to them more carefully than did their counterparts on LENMAR. However, since this only one of the seven measures used to test Hypothesis III, this hypothesis must be rejected.

In summarizing the data on quality of care, the critical major finding is that the care on both units was considered to be positive. The lack of significant differences between units on these care indices does not indicate that the care on the progressive care unit was marginal in any way. On all measures taken, the profile of the

care given on all these units borders on the exemplary. Although KATE hospital bed patients did rate their care slightly more positively than LENMAR patients, the difference between the two was not significant. On the overall care ratings, responses clumped in the very good range. Patients thought that the amount of attention, emotional support and personal interest shown to them by the nursing staff was more than sufficient. Patients reported confidence in caring for themselves after discharge, as well as low levels of depression and stress at this critical time. Nonmedical complaints were voiced by one fifth of the sample, medical complaints by one fourth. Seventy percent of the patients on medication felt they were carefuly explained to them and two thirds were satisfied with the degree of familiarity they had with their illnesses. Similarly, 75% of the entire sample were pleased with the amount of explanations given to them about their treatment plan. However, one third of the sample did feel that they would have liked more information about their illness and one-fourth wanted more information about the treatment of it. Possibly this gap in information giving may account for the low percentage of patients favoring self-medications (25%).

ENVIRONMENTAL VARIABLES

The first major environmental variable focuses on the issue of confinement. How does a progressive care unit, with its environmental amenities to stimulate socialization and mobility, affect patients' perceptions of confinement? Hypothesis IV addresses this question.

HYPOTHESIS IV: Progressive care unit patients will report feelings of confinement less intensely than patients hospitalized in a traditional surgical unit.

To test this hypothesis, patients were asked to rate how confined they felt during their hospital stay compared to their life outside. (Question 6A, Appendix A). Table 10-A shows that the one way analysis of variance performed on these data yielded significant differences.

TABLE 10-A. CONFINEMENT COMPARED TO OUTSIDE

1 = I don't feel confined at all 10 = I feel very confined

	KATE HOSPITAL	LENMAR	KATE DAY	COMPARISON: KATE HOSPITAL VS. LENMAR	COMPARISON: KATE HOSPITAL VS. KATE DAY	COMPARISON: KATE DAY VS. LENMAR
M	3.66	6.40	4.80	.01	N.S.	N.S.
SD	3.29	2.93	3.14			
N	30	30	30	(Scheffe)		

F (2,87) = 5.76

P = .004

TABLE 10-B. CONFINEMENT COMPARED TO OTHER HOSPITALS

1 = This unit considerably more confining 10 = This unit considerably less confining

	KATE HOSPITAL	LENMAR	KATE DAY	COMPARISON: KATE HOSPITAL VS. LENMAR	COMPARISON: KATE HOSPITAL VS. KATE DAY	COMPARISON: KATE DAY VS. LENMAR
M	7.59	2.50	8.00			
SD	2.21	1.41	2.44	.01	N.S.	.01
N	22	19	8	(Scheffe)		(Scheffe)

F (2,46) = 19.22

P = .000

The between unit post hoc comparison test indicated that KATE hospital bed patients felt less confined than LENMAR patients at the .01 confidence level. No significant difference existed between KATE daybed and KATE hospital bed or between KATE daybed and LENMAR, although daybed patients tended to feel less confined than LENMAR patients. Since the primary comparison in the study is between the matched samples of KATE hospital bed and LENMAR, Hypothesis IV is accepted.

Patients were also asked to compare how confined they felt in their present hospital environment compared to previous hospital settings (Question 6-C, Appendix A). These data showed that patients felt less confined on KATE and more confined on LENMAR in comparison to previous hospitalizations. This finding further supports the hypothesis that progressive care units are perceived as less confining than traditional units.

We had hypothesized that since there were more spatial and behavioral choices available to patients on the progressive care unit, these patients should be more active than surgical unit patients:

HYPOTHESIS IVA: In utilizing the spaces on the nursing units, progressive care unit patients will exhibit a wider range of active behaviors (e.g. - reading, writing, card playing, arts and crafts, etc.) than patients on a traditional unit.

HYPOTHESIS IVB: They will also exhibit less passive behavior (e.g.-sleeping, lying awake, standing and sitting) than patients on a traditional unit.

HYPOTHESIS IVC: Progressive care patients will show more mobility than patients on a traditional unit.

To test Hypothesis IV A a list of all active behaviors observed during the study was compiled. (See Appendix E). The observation sheets for each unit were then reviewed to determine how many of these behaviors were observed on each unit. The four passive behaviors (sleeping, lying awake, sitting and standing) were eliminated, as were adjusting the bed and fixing the bedside tray.* The total number of different behaviors (e.g. - reading, walking, card playing, writing, etc.) which occurred on the units were 20, 22, and 22 for KATE hospital, KATE daybed and LENMAR respectively. Consequently, Hypothesis IV A is rejected.

Hypothesis IV B was tested by calculating a percentage index of passive behavior for each patient. This calculation was made by dividing the number of times each patient was observed in a passive behavior (e.g. - sleeping, lying awake, sitting or standing) by the total number of observations for that patient. The resulting percentages were then analyzed by a one way ANOVA according to unit. As Table 11 indicates, KATE Hospital bed patients, in comparison to LENMAR patients, spent a significantly lower proportion of their time in passive behavior. The difference between KATE day bed and LENMAR, the subsidiary comparison group, is also significant. Since both KATE hospital bed and day bed patients exhibited less passive behavior than the LENMAR patients, Hypothesis IV B is accepted.

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* The latter two behaviors were deleted because KATE daybed patients do not have adjustable beds, nor do they have bedside trays.

TABLE 11. PERCENTAGE OF PASSIVE BEHAVIOR

	KATE HOSPITAL	LENMAR	KATE DAY	COMPARISONS: KATE HOSPITAL VS. LENMAR	COMPARISONS: KATE HOSPITAL VS. KATE DAY	COMPARISONS: KATE DAY VS. LENMAR
M	7.90%	14.40%	6.15%	.05	N.S.	.05
SD	9.02	16.65	7.62	(LSD)		(Scheffe)
N*	28	30	30			

F (2,85) = 4.08

P = .02

TABLE 12. PERCENTAGE OF TIME SPENT OUT OF THE ROOM (MOBILITY)

	KATE HOSPITAL	LENMAR	KATE DAY	COMPARISONS: KATE HOSPITAL VS. LENMAR	COMPARISONS: KATE HOSPITAL VS. KATE DAY	COMPARISONS: KATE DAY VS. LENMAR
M	24.40%	10.10%	24.38%			
SD	23.82	15.19	18.14	.05	N.S.	.05
N*	29	29	30	(Scheffe)		(Scheffe)

F (2,85) = 5.30

P = .0068

* Differences in sample sizes reflect particular patients who had to be eliminated from this comparison. For example, one was mobile but not allowed out of her room, another developed a post operative clinical depression, etc.

Patient mobility, as addressed by Hypothesis IV C, was measured in a manner analagous to the method used for passive behavior. All patients included in this analysis were: ambulatory, allowed out of their rooms, and had, at the minimum, a corridor and seating area to utilize. A logical index of mobility would consequently be the extent to which patients left their rooms to ambulate, explore, or use the unit's facilities. The number of times a patient was observed outside of his/her room over the total number of observations per patient was used as this index. As Table 12 indicates, the Kate Hospital bed and daybed samples spent significantly more time out of their rooms than the LENMAR sample. Hypothesis IV C is consequently accepted.

We also hypothesized that a progressive care unit in providing more spaces and allowing more behavioral possibilties for its patients attempts to alleviate perceptions of boredom, monotony, and the slow passage of time. The present research studied this progressive care goal:

HYPOTHESIS V-A: Progressive care patients will evaluate their hospital environment as being less boring and monotonous than patients on the traditional surgical unit.

HYPOTHESIS V-B: Time in the hospital will be perceived as passing faster for progressive care patients than it will for patients hospitalized in the traditional nursing unit.

During the in-hospital interview sample members were asked focused, scaled questions about boredom and the passage of time to test these hypotheses. (See questions 3A & 4A, Appendix A). As with the confinement perception, outside life was used as a frame of reference against which to compare the quality of hospital time.

TABLE 13-A. BORING/INTERESTING RATING

1 = Days are very interesting | 5 = Days are boring and interesting | 10 = Days are very boring

	KATE HOSPITAL	LENMAR	KATE DAY
M	4.62	5.93	5.50
SD	2.99	2.44	2.86
N	29	30	30

F (2,86) = 1.75

P = .179
Not Significant

TABLE 13-B. PASSAGE OF TIME

1 = Days go very fast | 5 = Days go fast and slow | 10 = Days go very slow

	KATE HOSPITAL	LENMAR	KATE DAY
M	5.56	6.50	5.20
SD	2.96	2.51	2.24
N	30	30	30

F (2,87) = 2.002

P = .141
Not Significant

Table 13 indicates mean ratings on these items for each unit. As Table 13 shows, the subjective quality of the days in the hospital were rated variably in terms of interest and time passage. The hospital experience was rated as boring and an interesting one and

time spent there passed at a pace which fluctuated between fast and slow. Since the F ratio was not significant on either of these ANOVA comparisons, both Hypotheses V-A and V-B are rejected.* However, it should be emphasized that the differences between both KATE samples and LENMAR were in the predicted directions and approached significance on these two issues. Days on KATE were rated as both more interesting and as passing faster than days on LENMAR. KATE daybed patients, however, did rate their days slightly more negative than did their neighbors in the hospital beds. We feel that this difference, which was probably a function of their being less sick and consequently less able to tolerate hospital confinement, may have affected the overall F ratio and reduced the possibility of achieving significance between the surgical samples.

One of the principal aims of the progressive care unit is to create a peaceful environment that is conducive to convalescing. One way to achieve this goal is by segregating the very ill and/or disruptive patient from the unit. Exposure to the sights and sounds of the seriously ill can be a source of considerable noise and distress. Consequently we hypothesized that:

HYPOTHESIS VI: Reports of depression or anxiety originating from exposure to seriously ill or disruptive patients will emerge less frequently from progressive care unit patients than from traditional surgical unit patients.

* These issues are treated jointly because there was a high correlation between responses to these scales. (Pearson Correlation = +.55, Probability = .001).

In addition:

Sub Hypothesis VI-A: Progressive care patients will report less sleep disruption than surgical unit patients.

Sub Hypothesis VI-B: Progressive care patients will use less sleeping medication than surgical unit patients.

Sub Hypothesis VI-C: Progressive care patients will request or desire room changes less frequently than surgical unit patients because they do not have sick or disruptive roommates.

Hypothesis VI was tested by a question in the in-hospital interview. (See question 7F, Appendix A). Patients were requested to estimate how upset or disturbed they had been because of exposure to sick patients. As Table 14 indicates, there were no differences between the units. Consequently, Hypothesis VI is rejected. (Responses clustered between slightly upsetting and not upsetting at all, indicating that this was not a crucial issue <u>at this particular time</u> on the units. Patients did indicate, however, that it would be a major concern if they happened to be sharing a room or a floor with very sick patients).

Patients were also asked if the presence of other patients had ever disturbed their sleep. (Question 14D, Appendix A). Three patients from KATE Hospital (and three patients from KATE Daybed) reported that they had been disturbed. Six patients from LENMAR made similar reports. Although in the predicted direction, the variation between surgical samples is not signficant, thereby causing Hypothesis VI-A to be rejected.

TABLE 14. DEGREE OF REPORTED STRESS ORIGINATING FROM OTHER PATIENTS

1 = very upset or disturbed   10 = not upset, disturbed at all

	KATE HOSPITAL	LENMAR	KATE DAY
M	8.66	7.16	7.96
SD	2.29	3.28	2.45
N	30	30	30

F (2,87) = 2.29

P = .106
Not Significant

Archival data on the amount of sleeping medication was computed on a percentage basis. Since patients length of stay varied the index of this medication was the percentage of nights a patient took a sleeping pill based upon the number of nights of hospitalization. Results are listed in Table 15.

TABLE 15. PERCENTAGE OF NIGHTS PATIENTS TOOK SLEEPING MEDICATION

	KATE HOSPITAL	LENMAR	KATE DAY	COMPARISONS: KATE HOSPTAL VS. LENMAR	KATE HOSPITAL VS. KATE DAY	KATE DAY VS. LENMAR
M	45.99%	41.39%	21.26%	N.S.	.05 (Scheffe')	N.S.
SD	37.99	30.64	26.89			
N	29	29	30			

F (2,85) = 4.97

P = .009

The smallest amount of sleeping medications was consumed by KATE Daybed patients. There was no statistical difference between

the two surgical samples, although KATE Hospital bed patients had a slightly higher sleeping pill rate than LENMAR (45.9% vs. 41.39%). Since these are the two primary comparison groups, Hypothesis VI-B must be rejected. Variation on sleeping medication levels between daybed and surgical patients is most likely attributable to the differences in severity of illness and pain between the two samples.

Patients were asked during the in-hospital interview if they had ever requested or desired a room change, and if so, why. (See Question 9, Appendix A). This question was used to test Hypothesis VI-C.

One patient from each of the three areas reported that he/she would have liked to change rooms because of a sick or disruptive roommate. Since no variation exists between units, Hypothesis VI-C is rejected.

We believe that patients may receive cues from the patients surrounding them as to the severity of their own illnesses. If a patient is on a floor with a number of critically ill people, he or she may begin to question the seriousness of his/her own illness. Progressive care, by segregating patients according to diagnosis, attempts to eliminate this potential problem:

HYPOTHESIS VI-D: Progressive care patients will perceive the presence of other nonacute patients as an indication that they are also in a nonacute stage of illness. Progressive care patients will verbalize this perception more frequently than surgical unit patients, and they will see this as a positive feature of the unit.

A series of questions on the in-hospital interview attempted to test this hypothesis. (Question 7B - 7D , Appendix A). No patients on LENMAR, and only 2 patients on KATE Hospital spontaneously reported that the condition of the fellow patients made them feel less sick. (Four Daybed patients also reported this). Since the variation is negligible between surgical samples, Hypothesis VI-D must be rejected.

The atmosphere of a progressive care unit is one of convalescence. Nonacute patients are able to socialize and settings are provided that are amenable to socializing. Consequently, social activity on this unit should be more extensive than on a surgical unit.

HYPOTHESIS VII: Progressive care unit patients will socialize more among themselves than will patients on the surgical unit.

To verify this hypothesis both reported and observed data were obtained. During the in-hospital interview patients were requested to rate the extent of their social contact with fellow patients. (Question 8, Appendix A). To supplement these data, an index of social activity was also constructed from the observational material. The number of times a patient was observed talking, playing cards, watching television or ambulating around the unit with another patient was calculated. This figure was divided by the number of total observations for that patient. The resulting percentage was used as an index of social behavior (See Table 16).

TABLE 16. DEGREE OF SOCIAL ACTIVITY AMONG PATIENTS

REPORTED SOCIAL ACTIVITY

1 = "I stick pretty much to myself"   10 = "I socialize quite a bit with other patients"

	KATE HOSPITAL	LENMAR	KATE DAY	COMPARISONS: KATE HOSPITAL VS. LENMAR	KATE HOSPITAL VS. KATE DAY	KATE DAY VS. LENMAR
M	6.93	4.93	7.36	.05	N.S	.01
SD	2.81	2.98	2.48	(Scheffe')		(Scheffe')
N	30	29	30			

F (2,86) = 7.65

P = .0024

OBSERVED SOCIAL ACTIVITY

	KATE HOSPITAL	LENMAR	KATE DAY	COMPARISONS: KATE HOSPITAL VS. LENMAR	KATE HOSPITAL VS. KATE DAY	KATE DAY VS. LENMAR
M	19.79%	3.75%	32.33%	.01	.05	.01
SD	19.29	4.92	22.62	(Scheffe')	(Scheffe')	(Scheffe')
N	28	29	30			

F (2,84) = 19.84

P = .0000

The data indicate that both KATE Hospital bed and daybed samples reported significantly more contact with fellow patients than did the LENMAR sample, with KATE daybed reporting the most socializing of all three groups. (See Table 16).

The observational data verify the reported data. Both of the KATE samples were observed socializing with fellow patients significantly more often than the LENMAR sample. In addition, there was also a significant within unit comparison on KATE. Analogous to the reported findings, KATE daybed patients were the most social group in the study. Since more patients were in private rooms on LENMAR than on KATE Hospital (11 vs. 1), a preliminary analysis was performed on the LENMAR sample to determine if observed social activity varied between single and double room occupants. It did not. Consequently the low index of patient interaction on LENMAR does not reflect the social behavior of a unit unduly influenced by private accomodations. Rather it is indicative of the social climate on the unit as a whole. Since KATE patients in both samples both reported and exhibited more socializing among themselves than the members of the LENMAR sample, Hypothesis VII is supported.

The progressive care unit, in recognizing the impact of surroundings on patient morale, attempts to create a more cheerful and less institutional hospital setting by providing a pleasant environment with a daybed sector, a dining room, a pantry and a lounge.

HYPOTHESIS VIII: The environment of the progressive care unit will be perceived by its patients as being more pleasant and cheerful than the environment of the surgical unit.

HYPOTHESIS VIII-A: In describing their unit, progressive care patients will use more positive associations between their surroundings and noninstitutional settings (e.g. - "like a hotel", "more

homelike", "not like a hospital") than will patients on the surgical unit.

HYPOTHESIS VIII-B: Progressive care patients will see a more positive relationship between their physical surroundings and their morale than will patients on the surgical unit.

To test these direct environmental hypotheses, patients were asked to describe how they felt about being on a particular unit, how they would describe the atmosphere and appearance there, and how they would rate the unit on a pleasant, cheerfulness scale. (See Questions C 1, A-E, Appendix A). A one way analysis of variance performed on these responses showed a significantly higher patient rating of the KATE Hospital environment than the LENMAR one (See Table 17-A). No significant differences emerged for the KATE daybed comparisons, although the daybed area was perceived as more pleasant and cheerful than LENMAR. The fundamental comparison of the study is between the surgical samples from KATE Hospital and LENMAR. Since significance was reached on this comparison, Hypothesis VIII is accepted.

TABLE 17-A. PLEASANT CHEERFUL RATINGS

	KATE HOSPITAL	LENMAR	KATE DAY	COMPARISONS: KATE HOSPITAL VS. LENMAR	KATE HOSPITAL VS. KATE DAY	KATE DAY VS. LENMAR
M	9.13	7.70	8.73	.05 (Scheffe')	N.S.	N.S.
SD	1.59	2.29	1.79			
N	30	30	30			

F (2,87) = 4.46

P = .014

TABLE 17-B. RATIO OF POSITIVE TO NEGATIVE DESCRIPTORS

	KATE HOSPITAL	LENMAR	KATE DAY	COMPARISONS: KATE HOSPITAL VS. LENMAR	KATE HOSPITAL VS. KATE DAY	KATE DAY VS. LENMAR
M	5.62	3.84	5.12	.05	N.S.	N.S.
SD	2.31	2.48	2.09	(Scheffe')		
N	30	30	30			

F (2,87) = 4.79

P = .010

Patients' responses to the open ended questions designed to test these hypotheses were coded into categories which emerged directly from the interview material. All positive descriptions or references to each unit's appearance and atmosphere were totaled, as were all the negative opinions and descriptions. A ratio of the number of positive to negative descriptions was then calculated. A ratio was used in lieu of straight frequency data to control for the possibility of highly verbal people, with many more comments, skewing the results in a positive or negative direction. The ratios were then treated with a one way analysis of variance. Table 17-B indicates that, consistent with the rating scale data, no differences appeared for the KATE daybed comparisons. However, KATE Hospital bed patients were significantly more positive in describing their environment than LENMAR patients were.

To test the second half of Hypothesis VIII-A, the number of patients who made an association between their unit's appearance

and non-institutional settings was totaled. ("It's homelike here", "it does not feel or look like a hospital", "seems like a hotel", "looks less like a hospital", etc.). These frequency data are reported in Table 18-A. The chi-squares performed on these data were significant at the .05 and .01 levels of confidence for comparisons between LENMAR and both KATE Hospital and Daybed samples(χ^2=15 and 20.2 respectively). Since KATE Hospital bed patients used significantly more positive descriptions and made significantly more noninstitutional references than LENMAR patients in describing their respective environments, Hypothesis VIII-A is also accepted.

TABLE 18-A. NUMBER OF PATIENTS MAKING NON-INSTITUTIONAL COMPARISONS TO THEIR UNIT

	KATE HOSPITAL	LENMAR	KATE DAY		KATE HOSPITAL VS. LENMAR	KATE HOSPITAL VS. KATE DAY	KATE DAY VS. LENMAR
					COMPARISONS		
N	14	1	17	χ^2 =	15.	N.S.	20.2
				P	.01		.01

TABLE 18-B. NUMBER OF PATIENTS ASSOCATING UNIT WITH A SPECIFIC POSITIVE AFFECT

	KATE HOSPITAL	LENMAR	KATE DAY		KATE HOSPITAL VS. LENMAR	KATE HOSPITAL VS. KATE DAY	KATE DAY VS. LENMAR
					COMPARISONS		
N	21	10	18	χ^2 =	8.06	N.S.	4.0
				P	.01		.05

Hypothesis VIII-B was tested by counting the number of patients who felt that their unit environment either: lifted their morale, decreased the reality or possibility of depression, made them feel less sick, or made them feel happy. General positive responses, such as "it's nice, good, etc." were eliminated since their exact affective quality was uninterpretable. Only those patient comments which directly linked the unit to an elevation of a desirable mood or the dimunition of an undesirable one were included in this analysis. Table 18-B reports the number of patients who made this unit-affect association. The chi-square performed on these freequencies were significant at the .01 and .05 levels for the KATE hospital - LENMAR comparison. Both KATE samples made more associations between their environment and a positive mood state, consequently, Hypothesis VIII-B is accepted.

ADDITIONAL DATA

Pearson correlations were performed on a number of dependent variables to determine their inter-relationships. Of particular interest was the degree of correlation between patient responses and behaviors. Since patients were responding so positively to the care on the units, it was important to know if there was a "halo" or "gratefulness" effect in operation which was favorably biasing patient reactions to the environment in general. Correlations between reported and observed data would indicate if patients not only responded to the unit in a positive manner but were also using it in a beneficial way.

Table 19 lists the significant correlations between patients' cheerful-pleasantness ratings, other reported perceptions, and their behaviors. These data indicate that the more pleasant and cheerful the setting, the less boring and confining it seemed, and the faster time passed on it. More importantly, activity patterns also correlated significantly with these ratings. The more positively a patient rated his/her environment, the more actively he/she used that environment. A high rating correlated negatively with amount of time spent lying in bed and positively with amount of time spent in a chair, out of the room, and socializing with other patients. Consequently, active use of the unit accompanied a cheerful-pleasant perception of it. In effect, when patients spoke positively about the unit they confirmed these feelings by using the setting in a beneficial manner (i.e., more mobility, more social activity).

Social activity also correlated negatively with confinement and slow passing of time. Therefore, creating a favorable social

climate on a hospital unit may be an effective way of reducing perceptions of confinement and an interminably slow passing of time there.

The mobility index, being correlated positvely to reported and observed social activity, illustrates that inviting public spaces in a hospital can provide a suitable arena for human contacts. The significance of these contacts and their relationship to setting was an important issue in hospital research and it will be discussed in depth in Chapter VI.

TABLE 19

SIGNIFICANT CORRELATIONS BETWEEN POSITIVE RATINGS OF THE ENVIRONMENT AND:		PROBABILITY
Sense of Confinement	-.42	.001
Sense of Boredom	-.42	.001
Sense of Time Passing Slowly	-.31	.003
Reported Social Activity	+.48	.001
Noise	-.36	.001
Time Spent Lying in Bed	-.35	.001
Time Spent in a Chair	+.31	.003
Time Spent Out of the Room	+.28	.008
Time Spent Socializing	+.35	.001

SIGNIFICANT CORRELATIONS BETWEEN OBSERVED SOCIAL ACTIVITY AND:		PROBABILITY
Sense of Confinement	-.30	.005
Sense of Time Passing Slowly	-.25	.020
Pleasant/Cheerful Environment	+.35	.001
Reported Social Activity	+.48	.001
Time Spent Lying in Bed	-.50	.001
Time Spent in a Chair	+.49	.001
Time Spent Out of the Room	+.36	.001

SIGNIFICANT CORRELATIONS BETWEEN MOBILITY INDEX AND:		PROBABILITY
Reported Social Activity	+.32	.002
Time Spent Lying in Bed	-.34	.001
Time Spent Sitting Up in Bed	-.25	.019
Time Spent in a Chair	+.47	.001
Time Spent Standing/Walking	+.26	.015
Time Spent Socializing	+.36	.001

DISCUSSION

The medical hospital is one of many choice restrictive, total institutions. Like prisons, mental facilities, and long term treatment centers, patients in a medical hospital are confined in a strange, institutional environment where spatial, activity, and social options are highly restricted. Researchers have speculated about the consequences of these restrictions for behavior, perceptions, and the meaning which patients internalize from them concerning their own illness, morale, and sense of autonomy. Brown (1961), King (1962), and Kirsners and Waters (1972) have all emphasized the alien, institutional quality of a hospital surrounding which is minimally reminiscent of the familiar and the comfortable. The physical plant is often dreary and depressing--perceptions often reinforced by the unsettling exposure to the acutely ill and their treatment procedures. Limited facilities and the unvarying routines characteristic of total institutions inhibit, or eliminate, extensive physical and social activity for the ambulatory patient. Concomitantly their feelings of confinement, boredom, and the interminable passage of time are maximized. Faced with these realities of hospital life and their resulting inability to exercise choice in their physical and social environment, patients have minimal opportunities to assume a role that diverges from the traditionally sick and inactive one.

The progressive care unit, on the other hand, through expanded spatial and social options for patients, attempts to stimulate

patient mobility, activity, and social contact. Furthermore, via these options, and possibilities which approximate a more familiar environment, the progressive care unit attempts to tell patients that they still have some health and independence, thereby preparing them for their return to outside life. It tries not to convey a message of sickness, dependency, and passivity. How successful was the unit in meeting its goals? The results indicate that the progressive care environment was effective in reducing some of the negative perceptions, behaviors, and meanings associated with hospital and institutional life.

Before discussing these results, we must re-emphasize the change created by new admission policies on KATE. These changes affected care, the kinds of patients on the floor, and subsequently the entire character of the unit. As previously indicated, immediately prior to the beginning of this study cardiac patients who either had experienced open heart surgery or heart attacks were assigned to the experimental unit (KATE). The KATE staff informally commented that time previously available for talking with and teaching the medical-surgicial patients was now directed toward the cardiac patients. These patients placed considerable demands on them. Furthermore, a change in nursing policy also occurred on LENMAR at this time. Prior to data collection, this unit shifted from team to primary nursing. Patients now had one nurse responsible for them, instead of a team. This alteration in care delivery may have augmented LENMAR patients' perceptions of nursing accountability and individalized care. Both of these changes seem to account for the

comparability in the perceived quality of care on the two units. In addition, the presence of the heart patients on KATE diluted its non-acute atmosphere since serious illness and potential death were now very real possibilities.

In light of these modifications, the strong positive findings of this research regarding patient mobility, activity, interaction, and attitudes are even more impressive. Specifically, the degree to which the physical environment related to these positive findings is particularly striking since it no longer received total reinforcement from care and admitting practice. Patients on KATE, compared to those on a traditional surgical unit, had fewer perceptions of the hospital as an alien, institutional, and drab environment. They also demonstrated more social and mobile behaviors and correspondingly less passive ones; and they rated their stay as less confining. On a conceptual level, these findings cluster into two categories. The unit seemed to have an energizing effect on patients, making them more active, and it had a physical-atmospheric quality which influenced patient affect and the symbolic meaning of the hospital. These findings appear to be a direct consequence of the increased range of spatial and social choices made available to patients by the more homelike, less institutional design of the facility.

Some attributes of hospital life were less affected by the quality of the setting: patients' reports of independence in their treatment, perceptions of nursing care, boredom, the range of active behaviors, the slow passage of time, and patients' anxiety due to

exposure to sick neighbors. The lack of differences in patient reports of care related independence, their ratings of the quality of their nursing care, and their level of anxiety from seeing sick patients seemed related to the policy changes on the units, as discussed above. On the other hand, comparability in the degree of boredom, the rate at which time passed, and the array of active behaviors all seemed to be endemic characteristics of hospital and total institutional life. However, on most of these issues, variations between the two surgical samples were in the predicted direction and approached significance.

A detailed analysis of these areas is imperative for determining where and why the physical environment can support positive behaviors and attitudes in the hospital setting, especially since the goal of the institution is to return patients to healthy, active and independent living in the outside world. However, prior to the analysis, why "More Reluctant Patients" did not respond differentially to the hospital experience than did "More Willing Patients" must be analyzed since this was also a predication of the study.

More-Willing Reluctant Patient Role

The measures used in this study did not reveal a significant effect for the More Willing - More Reluctant patient dimension; the hypothesis predicting differential patient responses along this dimension was rejected. Why did these predicted differences fail to surface? The most plausible explanation is that the differences

among patients along the dimension, as rated by the staff, were not sufficiently pronounced. Consequently, many patients were statistically treated as "More Willing" relative to this particular population, when in an absolute sense they were really on the "More Reluctant" side of the continuum.* The overall profile of the participating patients was therefore one of reluctance to accept the dependent patient role. Failure to confirm Hypothesis I may be a function of this lack of significant patient variation along the More Willing-More Reluctant dimension.

It may also be that the scale developed did not adequately test this dimension, even though it was based on interviews with the nursing staff which identified the relevant patient behaviors and attitudes. In either event, "More Willing" patients may, in fact, respond differentially to the hospital environment than the "More Reluctant" patients. However, the issue was not totally testable in the present study.

Why did the staff rate so many patients in the study as "More Reluctant"? There are two possible explanations, both relating to sample selection. First, "More Reluctant" patients may select themselves into a voluntary study of this nature. This is possible, although not plausible since cooperation was remarkably good given the anxiety which accompanies hospitalization (refusal rate = 16.5%).

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* The median for the population in the study was 5.79-a rating considerably above 4, which is the scale score for expected behavior of an average patient ("patient is progressing according to schedule", "degree of activity varies" etc.). The number of patients who fell below the actual center of the scale was too small for statistical treatment (N=5).

Second, patients were selected according to diagnostic criteria that mandated non-acute illness and ambulation. Perrow (1963), in his critique of Coser's work, noted that those patients with a primary, or hospital orientation (Coser's equivalent to the "More Willing" to accept the patient role) were sicker than patients exhibiting an instrumental, or outside, orientation. Perhaps, then, the real distinction along the Willing-Reluctant dimension is how sick the patient is. This dimension may, therefore, only be meaningful in a study of very ill patients. When dealing with convalescing patients, the dimension may lack relevance. This possibility is supported by the fact that, in the present research, the only difference on this dimension emerged from the daybed patients, who were both less sick and even "More Reluctant" than the surgical samples. Patients with comparable levels of illness (i.e. the surgical samples) were rated as equally "Reluctant" to assume the passive patient role by their staff. The issue, in any event, is an interesting one and merits further research.

Since both surgical samples were similar in both their "Reluctance" to assume a passive patient role and in their diagnoses, it is now appropriate to analyze how environments may differentially affect patients comparable on these two crucial variables. Since hospitalization, by definition, implies confinement, an investigation of this perceptual phenomenon will provide a good departure point for discussing the impact of the units on their patients.

CONFINEMENT

As the mean scores illustrate, patients on all units felt at least slightly confined. However, KATE Hospital bed patients felt less confined than LENMAR. In addition both KATE samples felt their unit was less confining than places of previous hospitalizations. Conversely, LENMAR Patients felt their current hospitalization was a more confining experience than previous ones in other hospital units.

The patients who did not feel that their environment was confining, or who thought it was only marginally so, attributed the perception to the physical and social character of the unit. Their ability to be mobile, to be up and around and walking to places did much to allay confinment feelings:

> "Don't find it (confinement) on KATE ... I've been in different buildings in Berlen and never felt the freedom that I do here... Ambulating and part of the floor has people preparing to go home and they are seeking a little companionship... so stop and pass the time. It makes it less confining." (F, age 70+ heart diagnostic).

More specifically, KATE patients felt that the number of spaces to explore or see - the lounge, dining room, pantry, and large hall - encouraged them to get out of of bed. Potential feelings of confinement were thereby decreased or eliminated:

> "I don't feeling confined here. I can get out of bed and walk around. I poke my head into every place I can here" (M, age 65, Cancer, chemotherapy).
> and "They showed me where everything was (pantry, dining room, showers, lounge) and that I could walk around - that I had the use of everything." (F, age 44, mastectomy).

These environmentally linked responses were the ones primarily predicted by Hypothesis IV since the environment expanded the patients range of spatial choice. However, as the first quote above indicates, patients also gave social reasons for why they did not feel particularly confined: the staff was pleasant, the atmosphere cheerful, and there were people (other patients) to meet and talk to. Thus, the interaction between the physical and the social components of the progressive care setting created an environment that was significantly less confining than a traditional surgical unit.

The finding that patients, on the average, felt their unit to be, at the very least, slightly confining is not surprising. The reality of the situation is that hospitalization, with its restriction of activities and constriction of life space, is confining. Freedom to move within the hospital is curtailed, freedom to move outside the hospital is non-existent. Furthermore, the question asked patients to rate their perceptions of confinement relative to life outside. Once again, reality exerts itself. For practically all people, life is less confining on the outside world than it is in the hospital. Given these realities, the important finding here is that creating a hospital unit that provides spatial and social options for its patients can be quite effective in holding the inevitable sense of confinement to a minimum. Patients also felt that these perceptions would be even further reduced if they could move more freely through the hospital (to the gift shop, cafeteria) or, better yet, go to an outside patio.

"ENERGIZING" EFFECT

Not only did the progressive care environment reduce, in part, patients' perceptions of confinment, but it also affected their behavior. Compared to LENMAR, both KATE samples spent significantly more time out of their room (the index of mobility used in this research), less time engaged in passive behavior, and more time interacting with neighboring patients. This finding is even more significant since KATE patients were older than LENMAR patients and might, therefore, be expected to be less active.

In specific reference to the mobility index, it should be noted that the data represent a conservative estimate of KATE patients' mobility. Since observations were not taken during meal time, the mobility index does not include the amount of additional time dining room users spent out of their room during meals. Similarly, pantry users reported that they used this facility more frequently for bed time snacks. These visits also were not included in the mobility scores since they occurred after observation hour. Consequently, the mobility scores, though significant as they stand now, are in all probability underestimates of the KATE population's actual mobility.

The KATE environment was clearly more effective in promoting patients mobility than was the LENMAR setting. The data also illustrate that patients not only will report using available spaces on a hospital unit to alleviate perceptions of confinement,

but will actually _use_ them, thereby stimulating their mobility in the process. This finding is extremely relevant for hospital treatment and design policy. If one goal of a unit is to get patients out of bed and mobile as soon as possible - a goal which is particularly important for post-surgical patients - then spaces must be provided to encourage this. There is little incentive to leave the room if there is nothing to do or no place to go. Lounges, halls with benches, dining rooms, and pantries seem to function effectively in this capacity, as would libraries, shops, the roof, patios, etc. They gave patients a goal or a destination to seek and in doing so provided physical benefits by increasing mobility while psychologically reducing the sense of confinement for those patients taking advantage of them.

In addition to exhibiting more mobility, the KATE samples also exhibited less passive behavior than did the LENMAR sample. Progressive care patients spent significantly less time engaged in the traditional passive behaviors of sleeping, lying awake, standing, and/or sitting around without a specific activity focus. The fact that there was no difference in the variety of active behaviors between units is most likely a function of institutional life. The hospital setting allows for a finite number of behaviors and the possibility for going beyond this is slight. Patients on KATE, given the range of behavioral options available to patients in general, nonetheless involved

themselves <u>more frequently</u> with the activities that were possible.

Since socializing is also an active, engaging behavior, the more extensive social patterns observed (and reported) for both KATE samples further reinforces the view of the unit as a patient "energizer". The social climate on this floor apparently had a number of beneficial consequences. As previously noted, reduced feelings of confinement had a social as well as a spatial referent. (Some patients felt that because there were additional rooms and spaces to utilize, and people to talk to in these areas, they did not feel particularly confined). The character of the unit lent itself to social activity and this activity led, in part, to a diminished sense of confinement.

The significance of social activity among patients even went beyond its "energizing" and confinment reducing qualities. Patients commented, when asked if they saw any benefit to contact with each other, that the ability to see and speak with neighbors had other distinct benefits. Talking with neighbors provided patients with a diversion and a much needed break in the hospital routine. Patients felt that it would help pass the time and combat the boredom that is endemic to hospitalization. Inter-patient contacts were also a valuable way to increase information about the hospital routine, medical matters and general knowledge and insight into people.

Perhaps the most meaningful value attributed to increased social choices was its potentially therapuetic impact on the patients. Patients felt that socializing with each other helped bolster their

morale. It cheered them up and helped divert their thoughts away from their illnesses and their problems. Patients reported that they did not feel as alone if they were sharing their thoughts and feelings with someone in a comparable situation. In addition, patients felt they occasionally benefited from a social comparison approach to each other. Seeing slightly sicker (but ambulatory) people and talking to them about their maladies made patients feel better, to some degree, about their own illnesses. Williams, et. al. (1973: 958) made a similar "social comparison" observation in their hospital research.

Patients felt that the opportunity to share common experiences also helped reduce some of their illness related anxieties. Knowing that others had undergone the same operation, tests or treatments and had "come through" made patients less anxious about their own scheduled regime. King (1962: 343) noted this same phenomenon when he reported that sharing feelings helped patients in their adjustment to both acute and chronic illnesses.

Finally, some respondents in the study reported that the opportunity to talk to other patients kept them alert. They were stimulated by the contact with other people and this helped undermine the lethargy which can easily accompany hospitalization. In summary, the impact of a favorable social climate on patients' well being was felt in a variety of ways. First of all, it stimulated them, making them more active and less lethargic. Patients felt that it inhibited a sense of confinement, and even helped at times to alleviate boredom and to make the day pass faster. Therapeutically, patients felt that exposure to each other helped reduce some of their hospital related anxieties

by: bolstering their morale; rechanneling their focus away from their own illnesses; providing role models for support, encouragement, and emulation; and reducing the isolating and alienating feeling that they are alone in their illness. (As pervasive as these benefits were, however, they were not generalized to all patient contacts. Rather they were usually restricted to contact with the post-acute ambulatory patient. As will be discussed, most patients desired segregation from the very sick, the very old, and the dying).

What accounted for the pronounced variation between KATE and LENMAR samples on the social variable?* The most plausible explanation for the more extensive social activity on KATE may be its design and its ability to provide a range of social options. The layout of the unit stimulates social overtures and once initiated, it supports them. The race track corridor and lounge encourage patients to leave their rooms, thereby increasing the potential for contacts with neighbors. The dining room and pantry also give patients the opportunity to meet one another while eating - a social event in our society. Contacts made here can easily be renewed in the halls or in the lounge - settings which allow for more extensive visiting. Additionally, KATE was perceived to be more

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* A possible explanation is the census difference between the units. LENMAR has 18 beds, KATE 31. Consequently, KATE patients may socialize more because there is a larger social pool to draw from there. However, the census figures are somewhat misleading since eight patients on KATE were monitored, confined to bed, and thereby eliminated from the social pool. This reduced KATE's social population to 23, a figure comparable to LENMAR's 18. Thus, differences in census can only partially explain the variations in social activity between the units.

cheerful than LENMAR and KATE patients also attributed good morale to their unit. Consequently, if a patient is in good spirits and is placed in a complementary setting, the desire to be socially outgoing may be enhanced. Thus the spatial options interacted with the atmosphere of the unit to tell patients that social activity was not only possible but also desirable. The highly positive correlation between social activity, time spent out of the room and the perceived pleasantness and cheerfulness of the floor supports the plausibility of this interaction.

In summary, all of the observational data illustrate the presence of an "energizing" component to KATE which was not seen on LENMAR. The more active profile of the KATE sample clearly showed that progressive care units, even when operating without full back-up from admitting policies, can coax patients away from behaviors traditionally associated with the passive sick role. They achieve this by guiding patients toward more mobile, active, and social behaviors through the provision of wider ranges of spatial and social options. Progressive care patients can <u>choose</u> to go to a dining room, make a snack in the pantry, or look out the window in the lounge. Once in these spaces, they can also choose to socialize with each other. The data indicated that patients, given these options, will not only exercise them, but will do so to their advantage.

The Physical-Atmospheric Quality of the Unit

A second accomplishment of the progressive care unit was that it helped dissipate the typically institutional aura surrounding nursing floors. It achieved this by providing patients with a familiar setting -- one that bridged the seemingly impassible gap between home and hospital. The provision of a lounge, which resembled a living room; a day bed

area which imitated studio or motel rooms; and a dining room and pantry, whose use reminded patients of home life, all made the setting seem less alien and hospital-like (as did the absence of the usual hospital odor). Patients readily perceived "normalizing" cues from these environmental options. Both day bed and hospital bed patients on KATE made significantly more associations between their hospital surroundings and familiar, non-institutional environments than did their counterparts on LENMAR (e.g.- more homelike, more like a motel, less like a hospital).

In addition members of KATE hospital sample rated their physical milieu as being significantly more pleasant and cheerful than did their matched sample members in LENMAR. They also used more positive terms in describing their environment. While these environmental perceptions are interesting to note, even more important to emphasize is the link patients made between the quality of their physical environment and the quality of their mood, since the relationship between mental and physical well-being is such a delicately interactive one.

In describing the impact of setting upon affect, more positive associations were made between mood and environment by KATE patients. The following quote vividly captures this association:

> "If the appearance is bright, happy, and warm it makes you feel happy ... that you are less sick and that everything is going to be all right." (F, age 52, chemotherapy).

Both groups on KATE attributed either decreased feelings of sickness and/or depression, or increased feelings of happiness and positive morale directly to their environment. They did this significantly more often that did the LENMAR patients. Patients felt that the environment on KATE not only was good - in that it was a cheerful, more familiar one - but that it was also good for them.

SYMBOLIC MEANING OF THE ENVIRONMENT

As the data revealed, the wider range of spatial and social choices available on KATE had a positive impact on its patients perceptions and behaviors. Clearly it made them more active, mobile and social than the counterparts on LENMAR. However, these choices, presented in the form of more homelike environmental options, also created a less institutional atmosphere on the unit, which held strong symbolic meaning for the patients.

The physical and psychological message conveyed by a hospital environment can be a potent one. The hospital milieu can tell its patients they are sick, dependent,and passive people, completely cut off from their normal living environments and behaviors, even though their physical condition no longer requires such a message. Conversely, it can also tell them that while sick, they are not that sick and that, to some degree, they are still active, healthy, and independent agents. One of the most striking components of the progressive care unit was the way it conveyed this latter message to many of its patients.

As the literature indicated, hospitalization for the non-acute and convalescing patient is often a boring, confining, and depressing experience. Feelings of autonomy, freedom and control over one's life may be severely compromised by sickness,the hospital world and its routine. One patient highlighted this loss of independence and autonomy when asked to describe what it was like being a patient:

> "You're reduced to babyhood here. You're infantile and helpless. You can't eat alone, have to be washed and rely on other people. You're reduced to infancy again... I can't get out fast enough." (Male, age 66, hernia).

For many patients, the reality of the hospital experience also signified a separation from the familiar and meaningful things in their life which reinforced their identity. One patient discussed the need for more familiar things in the hospital to help reduce this lack of connection to outside life. In addition, she stressed the need to participate in her own care in order to sustain a semblance of identity and autonomy:

> "My life patterns have been interrupted. Someone else has designed how my life should go. Life here does not have the meaning it has on the outside. If I brought belongings from home, books I like, things associated with home and things I like to do ... it would give me a connection to my life outside." (also) "I'm divorced from my own body and I resent it (I should have access to my charts and x-rays)." (Female, age 36, respiratory surgery).

A certain amount of separation from autonomous outside life is inevitable given the nature of hospitals as total institutions. However, a hospital environment which approximates a more normal living setting with meaningful options available for patients well enough to use them may obviate some of these feelings. Patients on KATE clearly detected an important message via the use of these optional facilities: while we may be sick and in the hospital, we still have some freedom, we are still connected to outside life and home, and we may still exercise some familiar independent behavior. Later in their interviews, the two patients just quoted talked about the symbolic meaning of having access to one such environmental option:

> "There's more freedom here .... It's important to know when I'm in the hospital, I have an illness and I feel helpless part of the time. The idea that you can come down here and make a cup of tea makes you feel very nice"

and:

> "The pantry is a splendid idea ... Like home and raiding the icebox. It's enormously important ... that you can go out and be yourself and get out of babyhood."

SPECIFIC ENVIRONMENTAL FEATURES

Pantry

As these comments illustrate, the pantry was a very important feature of the unit. Even for those who did not use it, the option to use it held strong symbolic meaning. Being able to have a snack, when they wanted to, and in an accustomed manner, not only curtailed patients' hunger and confinement, but also made them feel more at home, more independent, less sick, and even more human. The following patient comments reveal some, or all, of these feelings:

> "It's very important. Even if I don't want it, the fact that I have access to it is important." (F, age 71, daybed, diagnostic - cancer).

> "The pantry makes me feel less confined, more like I'm at home and less sick." (F, age 21, daybed, hernia).

> "Get a snack, gives me back a little freedom taken away from me by being sick". (M, age 28, daybed, burns on back).

> "I use it all the time ... nobody bothers me and I feel like I'm depending on myself and not on anybody .. And that means I'm not that sick". (F, age 52, chemotherapy).

> "Best things in the world...makes you feel more human, less of an invalid." (F, age 73, mastectomy).

The clearly symbolic message of the pantry was that patients could engage in a needed and familiar activity on their own, without having to ask for assistance or permission.

The Dining Room

Patient reactions to the dining room reflected similar internal-

ized meanings. While not all patients chose to use the dining room, those who did, or planned to do so, felt strongly about the option:

> "Best thing in the world (idea of it). Can meet other people and linger over a meal instead of eating at your bed. It means you're on your way home." (M, age 62, diagnostic, Cancer).
>
> "I like it - a different atmosphere ... Meet different people with different conversations. It increases socializing." (F, age 70, breast biopsy).
>
> "Idea is terrific. For a certain amount of your stay, you are isolated in your room with people giving you orders and here it is like a mini restaurant ... Feel less like in a hospital and less sick." (F, age 36, respiratory surgery).

The dining room, in presenting patients with a choice of where to eat, increased the possibility for social contacts, and decreased the hospital feeling of the unit. Once again a familiar activity - eating - was conducted in a more natural physical and social setting: around a table with people, not at bed by yourself. The environment was used effectively to convey a message of health and normalcy rather than illness.

<u>Lounge</u>

The lounge also served a social function which helped pass the time by providing patients with the opportunity for discussions and social contact:

> "I sit there and get talking ... before you know it the time has gone by. It's a nice cheerful area and you meet people there. - I love to meet people." (F, age 67, radial nerve surgery).
>
> "Lot of socializing in the lounge, discussions. Great. Makes time fly. Get out and talk to people ... If not have a lounge would be boring. I'd be sleeping all day and not at night. (M, age 62, diagnostic, cancer).

As these quotes indicate, the lounge was an arena for potential social contacts, which in turn kept patients active and helped counteract boredom and monotony. Like the pantry and dining room the lounge provided yet another area to use, thereby widening the range of available choice behavior on the unit.

Daybeds

While the central focus of the study is on the comparison between the surgical samples, the less acute atmosphere of the unit was created, in part, by the presence of the day beds and their patients. Consequently, it is meaningful to look at representative comments from the daybed sample. These spaces, like the dining room and pantry, also fostered a homelike feeling and many of the daybed patients attributed psychological benefits to them:

> "This floor and this room is terrific - like a motel. Takes away a lot of the trauma of the fact that it is a hospital. I come into this room and I don't feel like I'm in a hospital. I don't feel sick at all." (M, age 28, shoulder burns).

> "It's like a hotel room. I don't feel like I'm in a hospital. If I'm sick, I don't care where they put me. But this time I told my doctor 'If you put me anywhere but Kate Day bed, you're going to have trouble getting me in the hospital.'"(F, age 71, Cancer, diagnostic workup).

Once again, a physical feature of the environment, reinforced by the program of the unit, made the reality of hospitalization, with its separation from outside life, more comfortable and palatable.*

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* Some patients, while not liking this particular form, liked the concept. Others who were less enthusiastic about the day beds, still preferred them to the hospital bed area. A minority did not like them at all, either in form or in concept.

These comments all focus on the specific qualities and meanings of the particular spaces and the options which they provided. However, while the pantry, dining room, lounge and day beds were important in and of themselves, their collective meaning was even more significant.

Each of these spaces contributed toward the larger message of the unit, which in isolation, they could not effectively convey. Acting in tandem, they all provided more spatial and social options, and created a less institutional atmosphere on the unit. These options and this setting in turn told the KATE patients that they still held some independence, some freedom, and that they were not that sick and confined, even though they were in the context of a total institution. Patients perceived this totality and commented on the "Gestalt" created by the unit:

> "The dining room, and pantry, and motel side - creates a good atmosphere, good for patients to get out and make something for themselves. Uplift to get out of the room and go to the dining room. Makes you feel better. That you're not that sick." (F, age 75, skin cancer).

> "(The whole set up) makes me feel happy, free - that I know I can come and go as I please. Do it at my own discretion ... You can get a peace of mind. It's an incentive to get better because they give you that feeling" (F. age 67, radial nerve surgery).

and

> "You don't feel as confined here - that's important. Some people may like to sit in their room all day and not bother. But for me, as long as I can get up and move a bit, I feel like I'm part of the human race and I'm doing something ...To me, the more homelike you make it, the better" (pilot interview, F, age 43, ileostomy patient with disc problem).

The strong psychological meaning of this environment cuts through all of these comments. This importance of the "more freedom and less confined" themes which emerged repeatedly during the KATE Interviews was even more striking when compared with the following quote from a LENMAR patient:

> "They don't let you do anything. Can't go anywhere without a body guard. Outside no one tells me what to do, I can go anywhere. Here you have to tell everyone all the time. It's like a jail." (M, age 20, esophagus surgery).

While KATE patients continually felt these environmental and social options were important for creating a link with their outside home life, making them feel more free, independent, and less sick, analogous comments from the LENMAR sample were non-existent.

Thus, the less institutional, higher option progressive care environment of KATE was not only effective in making its patients more mobile, active, and social than their counterparts on LENMAR, but also the symbolic meaning conveyed by these enviromental and social cues was a beneficial one. The environment consequently reinforced the programatic goals of the progressive care unit by emphasizing mobility, and implying a return to health and independence.

THE MEANING OF THE ACUTELY ILL PATIENT

The implication of these comments and feelings is that patients clearly perceive cues from their hospital environment which tell them where they are, who they are and what is permissible in the setting. While the KATE environment through its physical design and the familiar, reassuring behaviors which this design allowed, made patients feel less sick, the physical characteristics of a

setting create only a part of the total message conveyed by an environment. The appearance and the conditions of those sharing your space also contribute to a sense of how sick you are and what you can and can not do.

As noted above, the presence of the cardiac patients on KATE dissipated its previously pervasive non-acute atmosphere. Consequently, no differences emerged between units on the amount of patient depression or disturbance originating from exposure to sick neighbors, although the difference between KATE hospital bed and LENMAR approached significance in the predicted direction. There were also no differences on the other behaviors relating to the disturbing presence of the very sick (e.g., requests for room change, reports of sleep disruption, and use of sleeping medication). During data collection two patients died on KATE and there were also occasional cardiac arrests. Patients interviewed during these periods were understandably upset, and their responses affected the mean rating. The mean "upset, disturbed" score for both KATE samples indicated that patients there were slightly upset by the presence of sick people on the floor. This rating was comparable to the one LENMAR patients gave. Similarly, the presence of the cardiac patients obviated the positive impact of being surrounded by non-acute neighbors. During the pilot interviews, patients commented on the positive effect of seeing healthy, ambulatory patients around them. One patient compared this with what it meant to see a very sick surgical patient:

> "It's helpful to get off the floor with the critically ill. I found it very upsetting to be in a post-surgical floor, past surgery, and to see people going in and returning from surgery. They're in bad shape and

there's some reaction in myself that I have difficulty getting a hold on...It's just upsetting. ... It's not hurting so much but your saying - good heavens - I went through that and then you start to wonder what's happening to you." (M, age 40, diagnostic workup).

Another interviewee made a similar comment on how illness in neighboring patients reflects back onto oneself:

> "If all the people were confined to bed, I would feel not as well seeing them always in bed ... I feel it could be me - kind of like my own fears". (F, age 39 mastectomy)

Clearly the message of the non-acute floor was one of personal non-acute illness for these two patients. They felt better not seeing seriously ill people around them. However, since there were now sick patients on KATE, these impressions emerged from only 10% of the sample.

While the mean rating for both units represented only a slight amount of disturbance on the "sick neighbor" issue, it does not mean exposure to the very ill and the dying is an inconsequential event for the hospitalized. Ratings on this question varied considerably according to patient composition at any given time. Patients were not upset when their neighbors were not severely ill. However they were considerably disturbed when neighboring patients were terminal or in acute distress. Responses given at the time of the two deaths on KATE and when there were several burn and amputee cases on LENMAR, clearly revealed the stressful nature of exposure to such sights. After one death, a KATE patient reported:

> "We all broke up when we heard he died...You don't like to see people go through a lot of pain" (F, age 70, breast biopsy).

and the LENMAR Patient described his reaction to seeing the burn victim:

> "It definitely makes me upset ... Since I saw him I can't sleep at night." (M, age 20, esophagus surgery).

Patients were quite verbal about their reluctance to share either a room or a floor with people who were very sick, dying, or not in complete possession of their faculties. Seeing the critically ill would be depressing. Patients felt that this would contaminate their own morale, by either making them feel more sick:

> "I know I'm not that sick and if I were on a floor with moaning and groaning patients, I'd talk myself into being sick" (F, age 40, burn surgery)

- or by creating a negative identification with the sick patient:

> "If I'm in a room with a very sick roommate, its very depressing. You say 'I'm going to be like that'- It's not a good atmosphere" (F, age 58, mastectomy).

In addition, the noise originating from the very sick, either personally, or from their equipment or/and the staff's treating them, would create both a disruption and an infringement on freedom ("Their moaning and groaning, it's annoying and depressing" - M, age 45, hernia). Patients felt that having a very ill roommate would interfere with their sleep, use of media, and ability to socialize, and ambulate:

> "On other floors .. everybody is sick, you can't talk to people, can't get around too much, can't always put your TV on because people are sick ... that's why I don't want to be in that part of the hospital" (F - age 71, diagnostic, cancer).

Patients, consequently, opposed being mixed indiscriminately with the severely ill for practical and psychological reasons.

They also preferred, whenever possible, segregation by age and common interest.

The implication of these findings, on the surface, are obvious. Non-acute, ambulatory patients wanted to be segregated from the seriously ill or dying. The progressive care unit, if it is functioning in its fullest meaning, will do this. However, for the acutely ill and dying patient, the issue is more complicated. What would be the effect on seriously ill, but not terminal, patients who were now on a floor populated exclusively by the senile and the dying? What message would they read from their surroundings concerning their prognoses? Perhaps carrying the concept of unit segregation by severity of illness one step further would solve the problem for those patients who are seriously ill but who are expected to recover. Creating a hospital where patients continually moved through different settings as they progressed (e.g. - from surgery or intensive care unit > recovery room > an acute floor > ambulatory floor > or progressive care unit with a separate unit for the terminal) would help alleviate some of the stress created by negative contact with others. Patients would constantly be surrounded by comparably ill, but not necessarily sicker, patients. Such systems of graduated care have already been proposed (Abdellah, 1960; Grace, et al 1975).

This, however, creates an added problem for the very old and the dying. Their unit, in effect, would be a dumping ground for patients no one else wants to see. Consequently, the process of dying would be separated still further from that of living - a

separation created in our society by hospitals in the first place. How these patients, and their families and those caring for them would react to placement on such a unit is a complex question and beyond the scope of the present research. For the non-acute patients in the study, actual or potential contact with acutely ill or dying patients had a very real physical and psychological meanings, and it was a negative one. However exactly what to do for the very ill, the dying, and those who must relate to them, is a difficult issue, reflecting larger societal values about death and suffering, and it clearly warrants further study. In summary, the progressive care unit, as studied, did not totally eliminate patient anxiety originating from exposure to sick neighbors. Other areas were the progressive care unit was no more effective than the traditional surgical unit was <u>increasing</u> care related independence, which <u>already existed</u> to some degree in both samples, and completely alleviating perceptions of boredom and slow passage of time.

<u>Patient Reported Care Independence</u>

In addition to asking staff to rate patients along a "More Willingness-More Reluctance" to assume the passive patient role, patients were asked to report behaviors and attitudes which we felt may have represented their exercising some independence in their care. They were asked to report their attitudes about self-medications, their degree of knowledge about their medications,

illness and treatment regimes, their degree of confidence at discharge and their degree of depression or distress after discharge. They were also asked to note how many times they questioned staff and/or complained about any undesirable medical or non medical situation.

The lack of variation on these measures is probably attributable to patients' orientations and the care given to them on both units. As reported, there were no statistical differences between surgical samples on their Willingness-Reluctance to assume the patient role, as rated by the staff. Since Reluctance-Willingness did not vary between surgical units, and most patients were rated as being relatively independent, the lack of differences between the surgical samples in their own reports of care related independent behaviors and attitudes is not puzzling. Both samples had equally independent orientations and they reported this accordingly, even though they acted differently on the behavioral measures.

The second factor is that the care on both units was rated as comparably good, supportive, attentive and individualized. These attributes of care would inevitably keep post discharge anxiety to a minimum and stimulate patients confidence in caring for themselves. This, in fact, is what happened. Patients on KATE and LENMAR reported, on the average, feeling only slightly depressed or upset after discharge. Simultaneously, they felt slightly to fairly confident about caring for themselves at this point in time.

The relatively low number of complaints voiced by the samples (25% medical complaints, 20% non-medical) may also reflect the high degree of patient satisfaction with care. Since care was favorably rated on both units, it is possible that there just was not that much to complain about in the two units.

The lack of variation in the number of patients asking questions between the units also seems to be a function of the care delivered. If confidence in staff is comparable on both units, and patients are receiving equal degrees of staff support and interest, then presumably the nurses would volunteer similar amounts of information on both units. Consequently, there is no reason to assume that the need to ask questions is more pronounced on one unit than on the other.

In addition to not asking more questions, patients on KATE were not significantly more familiar with their diseases than were LENMAR patients. Both samples were given comparable (but slightly insufficient) amounts of information. One-third of the total sample wanted to know more about their diseases and one-fourth wanted to know more about their treatment -- an indication that doctors and nurses were not sharing enough knowledge with their patients. The lack of information is a critical area and will be discussed in the implications section of this paper.

There was also a pronounced lack of enthusiasm for the concept of self-medications in all these samples, and the lack of variation between units on this issue may be a function, once again, of the

policy changes on KATE. The concept of self-medications, as once practiced, is no longer in effect. Only seven patients on KATE (two from the hospital beds, five from the day beds) took any medication by themselves. Five of the LENMAR patients also took self-medications. Consequently, these figures are probably rough estimates of the number of patients allowed to administer some of their own medicines on any floor without the self medication philosophy. (Many of these medicines were non-prescription items such as antacids, eye drops, etc.) Overall, less than one-third of the population in the study thought the idea of self-medication was a good one. Most patients expressed a fear that they would forget to take them, or else they would overdose or underdose themselves. Most patients thought that administering medications in the hospital was clearly the nurse's province. Patients either did not want this responsibility or else they enjoyed the contact with the staff which occurred at medication time.

In summary, KATE patients did not report any more independent care behavior than the LENMAR patients did. They were not more informed, more confident, or more at ease at discharge, nor did they pose more questions for the staff or exhibit more readiness to take their own medications. Reasons for this lack of variation seem to be the equal level of independent predispositions (as measured by the "More Willing-More Reluctant" score) between the samples, and the perceived high quality of care on both units.

Boredom and the Slow Passage of Time

There was a high correlation between slow passage of time and a sense of boredom (+.55, $p = .001$), suggesting that these two issues are different sides of the same dimension: the quality of the hospital day. The fact that patients gave comparable responses when asked why the day went fast/slow, and why it was boring/interesting, also reveals the interrelationship between the two variables. Consequently, they will be discussed as one issue.

As the data show, the quality of the days on both units was variable. Some days passed fast, others went by slowly. Similarly, time spent on the unit was noted as intermittently boring and interesting. However the days on KATE were rated as passing faster and being more interesting than on LENMAR. The literature reviewed in Chapter One and the lack of strong variation between any of the samples imply that these may be inevitable characteristics of institutional life, although the progressive care concept was somewhat more effective in combating these perceptions than the surgical unit.

The perceived quality of the day seemingly depended upon unit and patient variables. Time went fast when the patient was involved in some physical or social activity. Patient time spent talking, watching television, ambulating around the hall, or involved in some treatment all passed quickly and was somewhat interesting. But the character of the day also depended, in part, on the hospital routine. Days replete with tests, therapies, x-rays, and treatments went fast; as did periods when the general activity level on the floor was high. This made spectating a workable diversion as long as it did not involve watching

something threatening. Patients identified mornings as particularly busy times while afternoons and evenings fluctuated according to whether or not visitors came. Weekends were generally boring, again when no visitors appeared. At times, there was very little to do and the days seemed both boring and endless: "I'm bored and there's nothing to do ... the time goes slowly, especially the afternoon, same routines over and over" (M, age 19, hernia). Patients also felt that the resulting inactivity, in a somewhat or very confining setting, created a nerve shattering contrast to their normally productive and active lives. The following patient's complaint illustrates this point:

> "It's terribly monotonous, there's nothing to do. I've always been a very busy person and its hard to just sit and flop and do nothing ... I have to be productive, can't waste time day dreaming" (F, age 50+, mastectomy).

As King (1962: 389) has pointed out, this inactivity, set amidst the unvarying routine of the hospital, with its early awakenings and meals, presented patients with a regime that was difficult to adjust to since it varied so much from normal life.

However, the quality of the patient day depended on personal as well as environmental variables. Patients felt that a slow, boring day was also a consequence of their mood and activity level. On days where they felt depressed, tired, or just lethargic, time seemed interminable and quite boring. Ennui set in and it was difficult to engage in any attention diverting activity.

To a certain extent, the roots of boredom and a protracted sense of time are inextricably tied up with the quality of hospital life. It is inevitable that the tides of unit activity and patient mood

will rise and fall on a daily basis. Furthermore, the intrinsic reality of institutional life is that behavioral options are limited. (Rivlin 1976). The array of behaviors available to the patient is more restricted than that available to the non-patient, just as the range of available activities are more limited to the prisoner than they are to the non-prisoner (Wener & Olsen, 1977). To what degree then can the environment, with added choice behaviors, be successful in alleviating intermittent perceptions of boredom and slow passage of time?

Suggestions from patients indicated that all of the environments studied could have been more effective in reducing boredom and dragging time. As far as the KATE concept went toward bridging the gap between home and hospital life, it still did not go far enough. Patients on both KATE and LENMAR expressed the need for more diversions. A KATE patient said: "They need something for the patient - there's nothing to do here - need a knitting class, pool, checkers, diversions" (F, age 47, mastectomy) and a LENMAR patient echoed her sentiments: "Very boring here, nothing to do. They need places to go walk around, shops to make things" (M, age 22, abdominal cyst removed).

Diversionary activities and spaces were desirable not only for their potential to reduce boredom, but also because they have therapeutic value in and of themselves. Games, public television, card rooms, and recreational therapies were all desired. Patients on both units felt these diversions would promote mental stimulation, serve as a catalyst for social contacts, and lure them out of their beds--and the sick role--by providing some form of productive activity, and increasing their sense of behavioral choice.

IMPLICATIONS/SUMMARY

The findings from the present study have direct bearing on hospital design and policy and also on the nature of choice - restrictive, total institutions. The KATE patients not only rated their environment as more pleasant and cheerful than did their counterparts on LENMAR, but they also saw a more positive relationship between their setting and their mood. The non-institutional quality of KATE in particular was perceived by the patients as a positive feature of the unit. Consequently the utility of pleasant, cheerful, less alien appearing hospital environments for ambulatory, convalescing patients was clearly demonstrated.

The data also indicated unequivocally that patients on KATE were more mobile, more social, less passive, felt less confined, and attributed specific positive affect to their unit and its options more frequently than did a diagnostically comparable sample on a traditional surgical unit. Furthermore, the KATE environment, primarily through these options, told its patients that they could still exercise some autonomy, familiarity, and freedom of choice in their behaviors - all of which symbolically told them that they were not desperately sick and dependent. This message, coupled with the increase in patient mobility and activity, comprises the major goal of the progessive care unit (and of all hospitals): to prepare the patient for healthy, independent, outside life. Consequently, if hospitals wish to reach this goal as expeditiously as possible, more homelike, mobility stimulating facilities must be provided.

The fact that patients responded so positively to the less institutional features of the KATE environment raises a fundamental question concerning the nature of institutional spaces. Clearly the "normalizing" components of the environment conveyed a positive message to the patients. This message, in turn, impacted favorably on both levels of activity and on certain hospital related perceptions. The question this finding ultimately initiates is whether or not there should even be hospitals or total institutions for certain types of treatment? Clearly, the question is not a salient one for acutely ill patients, who need and want all the security and comfort acompanying the traditional hospital unit. During the study patients frequently commented that when or if they were severely ill, they did not care how the hospital looked, as long as they knew the staff and the facility would give them the care they needed.

However, should non-acute patients, convalescing patients, and patients for whom further treatment is futile be subjected to the hospital and its limitation of activities and denial of human choices? The growing trend toward ambulatory care clinics, home births, convalescing centers, residential treatment facilities, and hospices all indicate that alternatives to hospitalization are being explored for diagnostic, maternity, minor surgical, emotionally disturbed, and dying patients. Perhaps it is not enough just to create more homelike facilities within the larger hospital complex. In order to maximize behavioral choice and patient perceptions of autonomy, competence, and health, perhaps hospitals, as we now know them,

should only exist for the extremely ill. Less severe treatment should take place in more natural, less institutional settings, separated from the total environment of the hospital. The present research, along with the growing acceptance of other types of "normalized" treatment facilities, implies that a de-institutional approach to medical care may not only be feasible but also highly desirable. Just how far this concept should be applied is an area which clearly deserves investigation, as it brings into question the desirability of the current physical form assumed by our primary medical environment: the hospital.

Where the unit was less successful was in the degree of diversionary opportunities it presented to its patients. The KATE sample, as well as the LENMAR one, cited occasional feelings of boredom and a concomitant perception of time periodically passing slowly, although the KATE patients cited them less intensely. Patients attributed these intermittent feelings primarily to the nature of hospital life and the lack of enough things to do on their units. They repeatedly expressed a desire for more mind occupying therapies. If a hospital truly wants to discourage passivity in its ambulatory patients, then it must provide more stimulating diversions as well as more spatial, homelike options.

The study also demonstrated the potential for anxiety which accompanies exposure to the very sick and the dying. This exposure also gave a strong symbolic message to patients, and it was a negative one. Patients reported that having acutely ill or dying neighbors would either depress them, imply that they too must be very sick, or restrict their already limited activity range even further by curtailing their ability to sleep, socialize, ambulate or watch television.

Patients accordingly emphasized the need to segregate patient floors by severity of illness, at the very least, and if possible, also by age and common interest. This, however, clearly creates added problems for the sick, the dying and the meanings which they will in turn extract from their surroundings.

The final critical implication from this study concerns patients and the amount of information the staff gives them. The data suggest that as much information as possible should be given to the patients who desire it, a finding consistent with other hospital research.

For example, Hall and Pill (1975) reported that most patient studies reveal a high degree of satisfaction with care but also a strong concern over the lack of information. A majority of patients want to know as much as possible about their condition, treatment and progress. Houston and Pasanen (1972) reported that 93% of their sample desired such information and that 25% of them did not get it.

What is the significance of sufficient knowledge? Why do patients want it? First of all, knowledge helps reduce stress. Volicer and Bohannon's (1975) patients rated not receiving enough information as the second most potentially stressful event in the hospital (second only to having a serious illness). Houston and Pasanen in the research cited above, felt that patients considered themselves to be more improved when less irritated by admitting procedures, the environment, <u>and</u> the lack of information. They found that satisfaction with one's physician was directly related to the amount of information he or she gave to the patient. Similarly Wriglesworth and Williams (1975) found that the amount of information given to patients correlated positively

with their confidence in the staff. Finally, Glaser (1976) hypothesized that illness creates a disturbance in the patients personal identity. Questioning, therefore, represents an attempt to rearrange this identity and recapture a sense of self.

As the above researchers all emphasize, adequate information serves a vital role for the hospitalized. With it patients know about their situation, and what to expect. Patients can then order their lives accordingly. This gives them a sense of control over their situation. As such, having sufficient knowledge not only bolsters confidence and reduces stress and the fear of the unknown for the hospitalized but it also serves a crucial ego function: the partial restoration of a sense of control in a setting which frequently inhibits feelings of self-determination and choice.

FURTHER RESEARCH

The present research focussed upon the experiential components of hospital life: patients' perceptions and uses of hospital environments. It did not study the direct medical effects of those environments -- a fruitful area for future research. How the concept and practice of progressive care influences the patients' length of stay, their adjustment to outside life, their ability to care for themselves, and their need for rehospitalization are all important questions which require answers. The need for larger subsample sizes, based solely upon similar diagnoses (i.e. 15 mastectomies on each unit), prevented these questions from being addressed in this research, since individual reactions to surgery or treatments did occasionally vary (e.g. adverse reactions to chemotherapy prolonged the hospital stay for certain

mastectomy patients, as did the need for double surgery among several hernia patients). Also, future studies of the progressive care philosophy will require a unit which practices the concept in its totality. As mentioned above, new admitting policies created a profound change in the character of the unit. In effect, the physical environment no longer received total reinforement from the care and patient population existing on KATE. A controlled comparison study, similar to the present one, attempting to document the outcome benefits of progressive care, should have both larger same-diagnosis sub-samples and a unit which embraces all components of the progressive care concept (e.g. segregate all acutely ill patients from the floor so that nurses can spend more time with patients in a totally non-acute atmosphere).

The present study found that care on both units was not only rated comparably but also comparably well. When considering these data, however, it should be emphasized that they rest solely on patient reports of care quality. Naturally perceptions of medical care are of a different order than actual physical indicators of care gathered from patient charts and medical evaluations. Since patients generally lack the sophistication needed to effectively evaluate the physical components of care, measuring actual quality of care is a complex task. From a purely medical perspective, the quality of the care may have differed between units, even though the perception of it did not. Consequently, evaluating the _actual care_ given on the unit, in con_junction with the patients' perceptions_ of its quality, would be another interesting, albeit difficult, research area to pursue.

A third research question concerns boredom and the slow passage of time in a hospital. Just how endemic to hospitalization are these

perceptions? If patients are given more spatial and behavioral options for diversionary and therapeutic activity, can these negative reactions to hospital life be eliminated? Or are they too intrinsic to institutionalization to ever totally disappear? A setting which provides game rooms, card rooms with extensive recreational and occupational therapy - all the diversionary tactics desired by the patients in this study - should be compared with one which provides none of these amenities. The potential of these features to reduce boredom, monotony,and the sense of endless days could then be documented. Since these issues clearly affect the quality of patient life, with its attendant stresses and malaise, all roles which the environment can play in reducing these feelings deserve exploration.

The beneficial effect of a less institutional setting which this study documented also points to a fourth interesting research area. As mentioned, the concept of de-institutionalization is currently being employed in a number of medical and semi-medical settings. Residential treatment centers for disturbed children; group homes for abandoned, neglected children or those in need of supervision; hospices for the dying; satelite dialysis clinics; as well as the growing popularity of home births are all conceptually linked to a de-institutionalizing of the treatment or medical environment. Clearly, evaluations of these "normalizing" attempts should be conducted to determine how successful they are in creating medically viable, yet habitable and non-acute environments for the sick.

CONCLUSION

The Importance of Patient Satisfaction

The final question on the in-patient interview asked patients to discuss whether or not their physical environment was important to them, and if so, why. Ninety-five percent of the total sample felt the design and atmosphere of their hospital unit held some degree of importance; most, in fact, thought the appearance of the unit was either important or very important to them for their overall satisfaction with their hospitalization (Olsen, 1978).

Amidst the medical expediencies of the hospital experience, is patient satisfaction really a critical issue? Various hospitals researchers feel it is, for they see a link between patient satisfaction and hospital outcome. Wriglesworth (p. 122) commented that:

> A patient who is satisfied will be more contented and relaxed. A patient who is dissatisfied will tend to lose confidence in the staff and maybe in himself. The patient could then withdraw . . . feel resentful or become aggressive.

Francis, et. al. (1969) also saw a significant relationship between patient satisfaction and a positive attitude toward staff. This relationship had clear medical overtones since patient satisfaction correlated highly with compliance with physicians' instructions. Cartwright (1964; in Houston and Pasanen, 1972) also saw a connection between patient satisfaction and medical outcome since medical care hinges upon patient attitudes and cooperation to a large degree. Consequently any feature of the hospital setting which augments patient satisfaction and sense of well-being holds direct therapeutic implications. While the present research did not

directly relate medical outcome to setting, it did show that physical design can be instrumental in increasing mobility, sociability, positive affect, and a sense of health, freedom, and autonomy - all desired end products of hospitalization. The environment aided the achievement of these ends by reducing the perceived distance between hospital and home via an approach and design aiming at a de-institutional message and increased social choices.

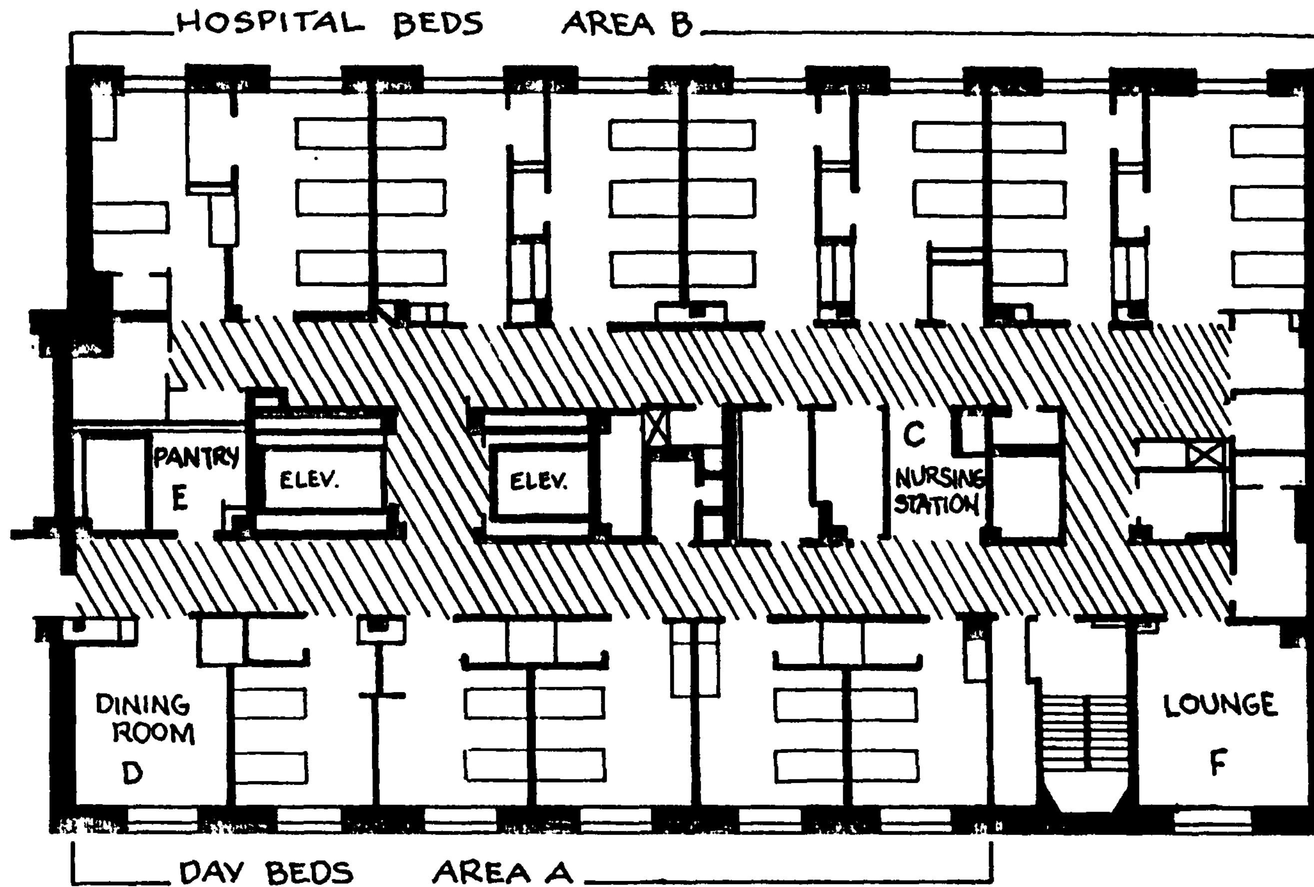
In summarizing the reality of the hospital experience, King stated that: "the hospital is a unique world to which patients must adapt. To the extent that patients are succesful in their adaptation, healing is facilitated" (1962: 39). Anything which supports patients in their adaptation by making this a less unique and threatening world is vitally important to them. As the present research, and these final quotes indicate, the environment can either hinder this adaptation:

> "When I went to see that hospital (not Berlen) with the dirt and the paint chipping, I didn't want to go in. I felt like death, itself" (F, age 55, lung diagnostic).

or support it:

> "When I first came into this room, I felt like I was on a cruise ship. The comparison was so great from that other hospital ... it gave me a terrific lift ... the brightness of the room, its cheerfulness .... I got the feeling that I'm here and everything is going to be all right." (F, age 64, mastectomy).

FIGURE 1: KATE, THE EXPERIMENTAL UNIT



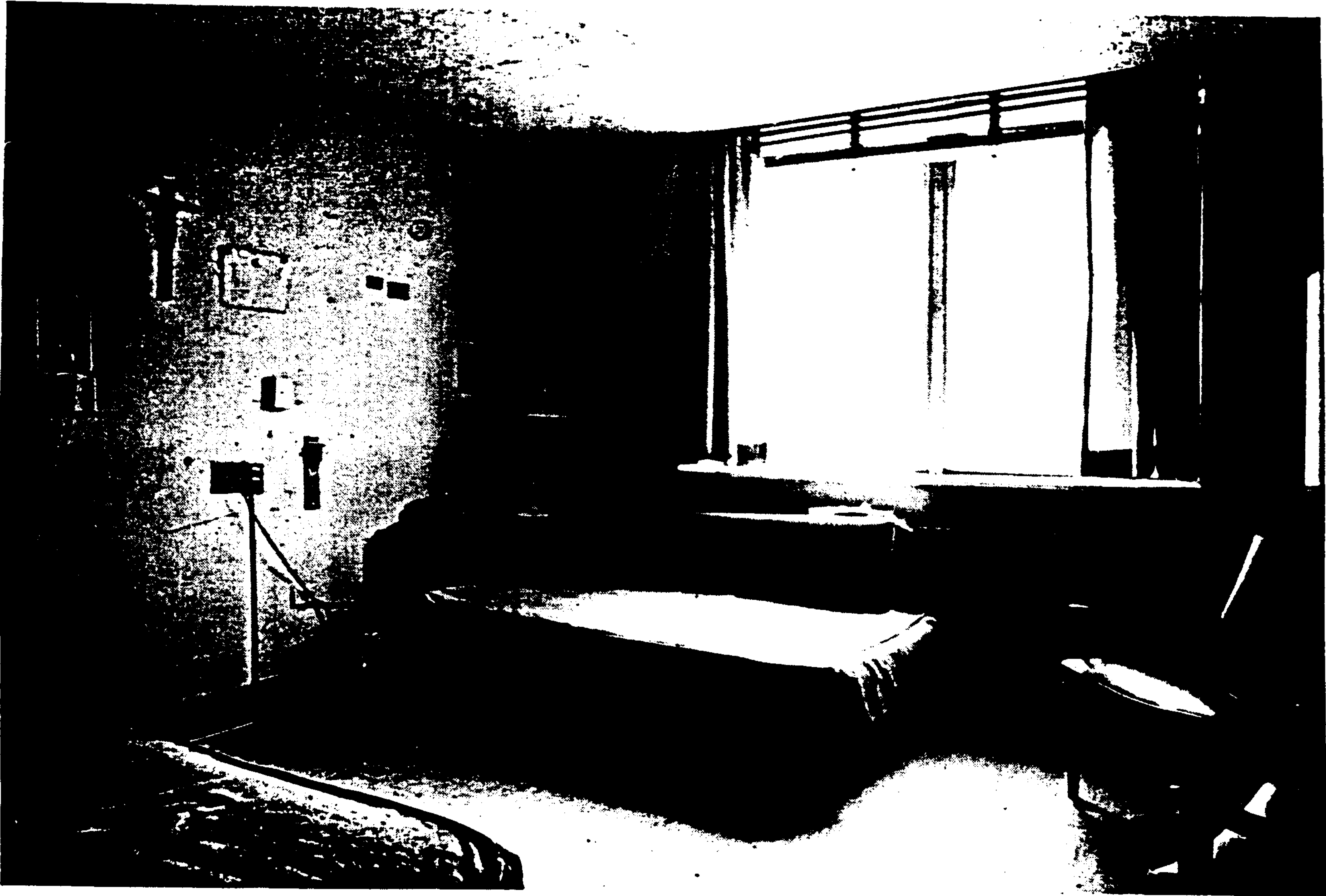


Figure 2: KATE Daybed Room

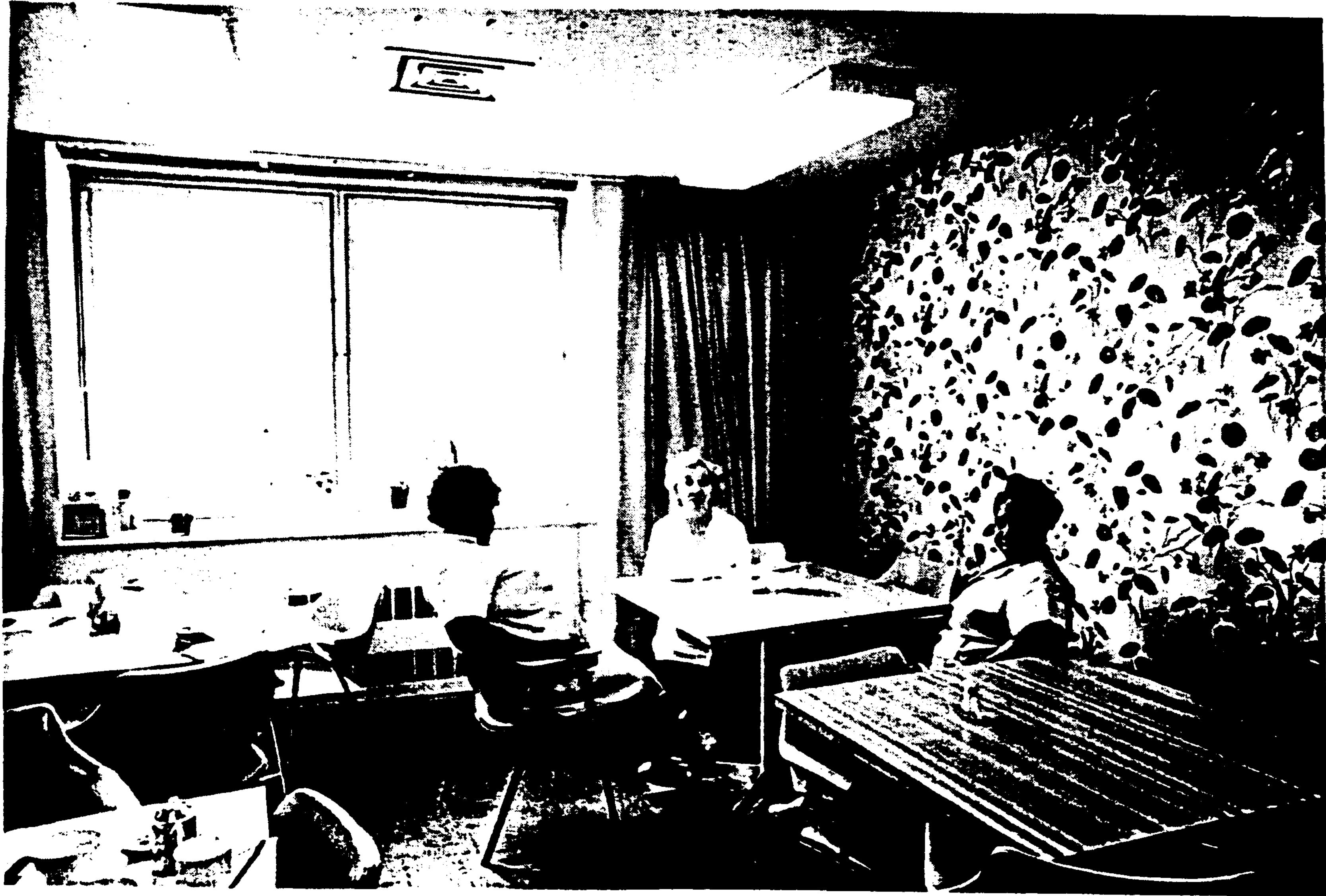


Figure 3: KATE Dining Room

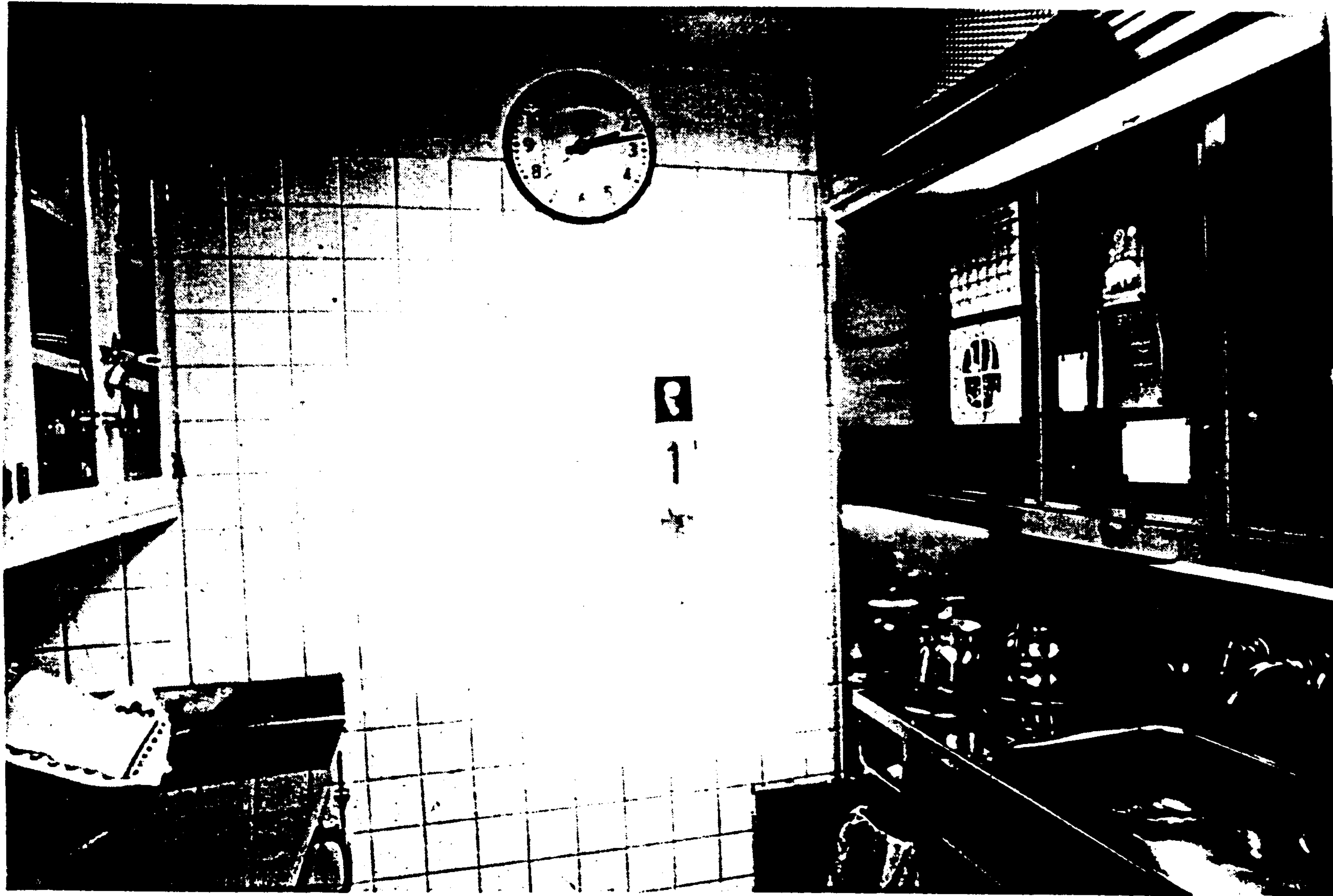


Figure 4:KATE Pantry

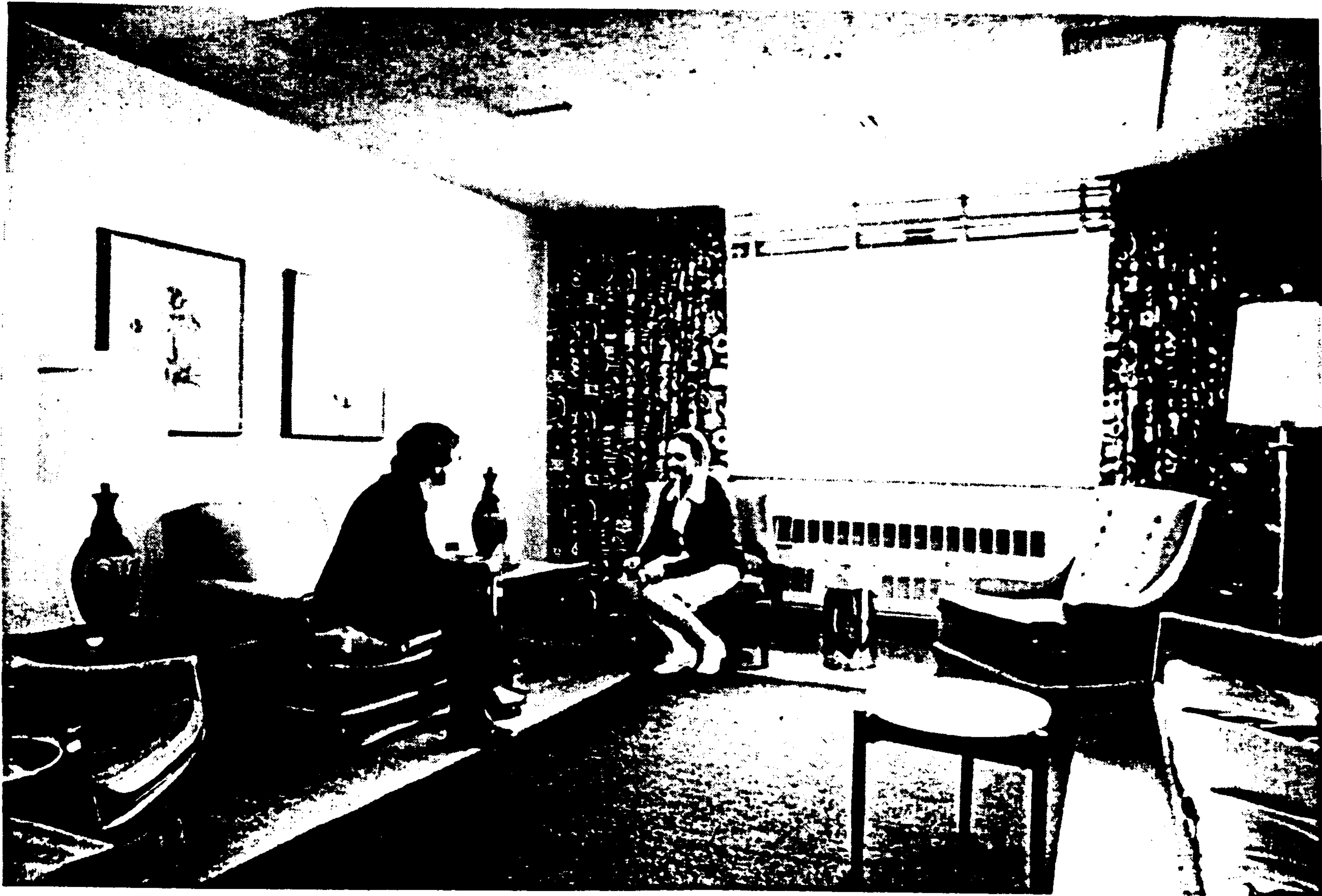


Figure 5: KATE Lounge

Figure 6: KATE Hospital Bed

Figure 7: KATE Hallway

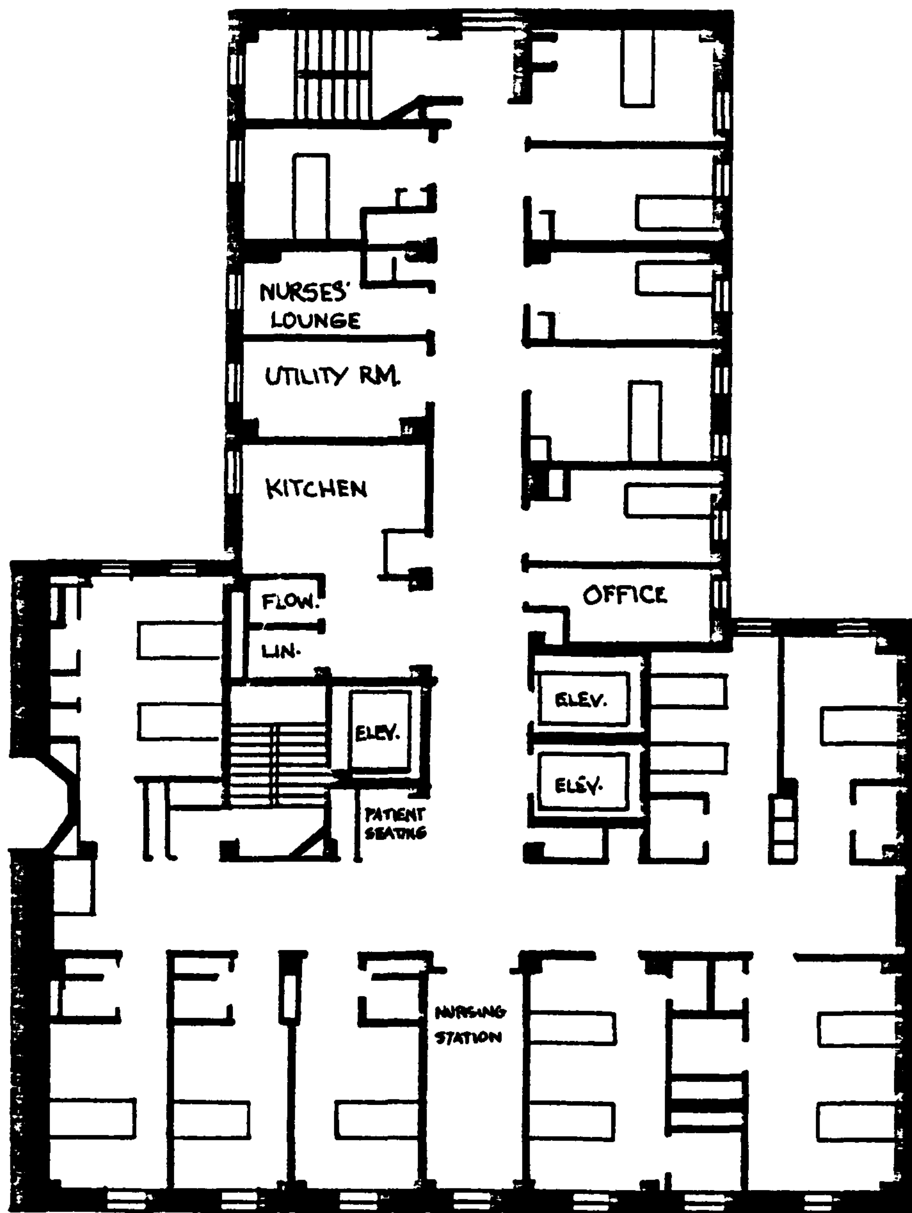


FIGURE 8: LENMAR, THE CONTROL UNIT

Figure 9: LENMAR Bedroom

Figure 10: LENMAR Hallway

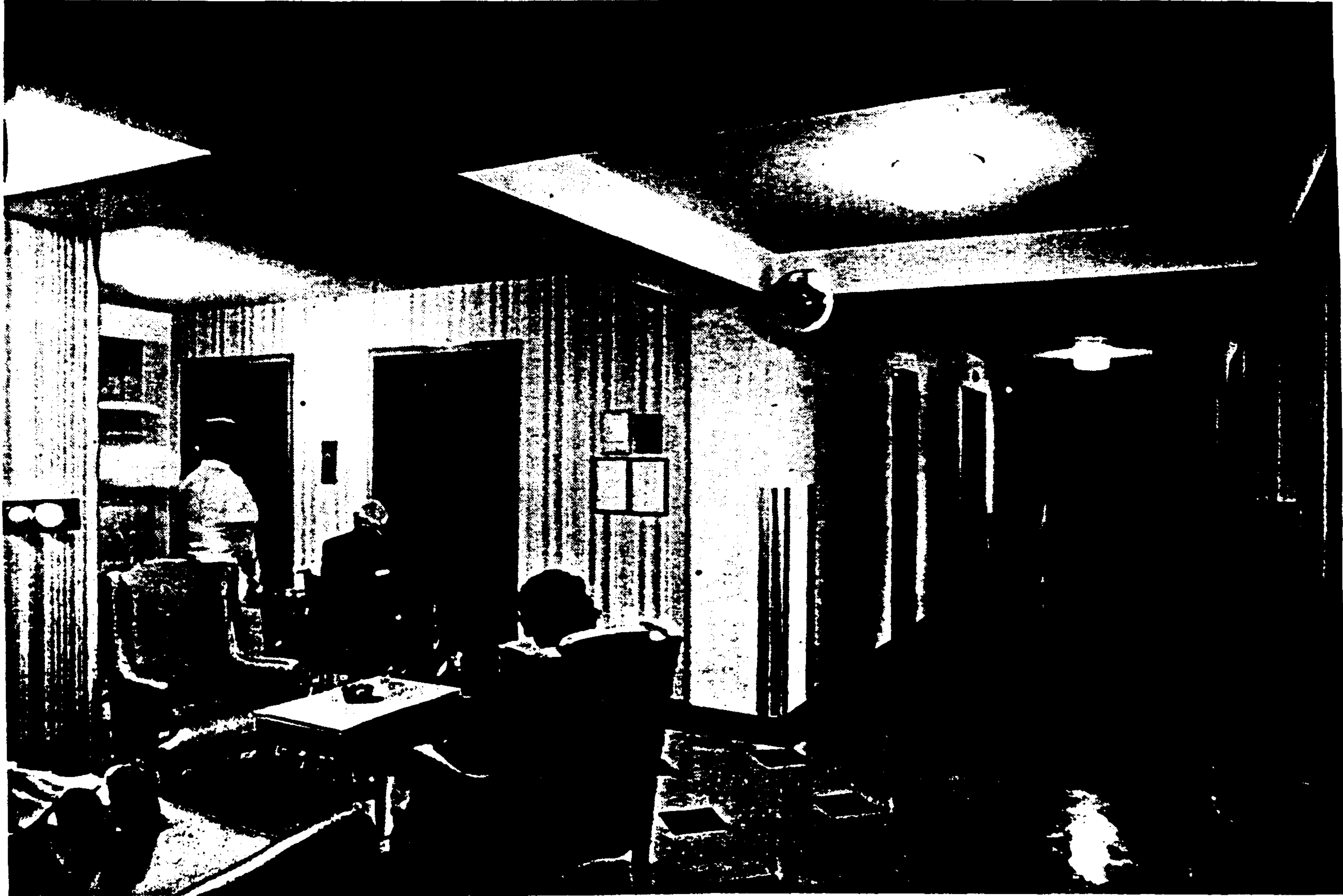


Figure 11: LENMAR Seating Area

APPENDIX A

PATIENT IN-HOSPITAL INTERVIEW

1. Could you describe what it's been like for you in the hospital? How has it been so far?

   A. Probe for something pleasant and something unpleasant.

   B. Could you describe how being in the hospital is different for you than not being in the hospital? People frequently say that one of the things about being in the hospital is that it is very different from their outside life, and I was wondering if you could tell in what ways being here is different for you than not being here.

   C. What do you miss most? Why? Would you like to wear street clothes? Why?

   IF BOREDOM, INACTIVITY, OR CONFINEMENT MENTIONED, GO TO NEXT PAGE. OTHER COMMENTS PROBE BELOW.

   D. How do you feel about that?

   E. IF NEGATIVE: Could you think of anything could be done which would lessen some of these feelings or problems?

2. How do you spend your day, what kinds of things do you usually do?

   A. If not mentioned, are you allowed off of the unit by yourself (other than to go for tests or X-rays)? Do you go?

3. How about the days, do they seem to go fast, slow or fast and slow? Why is that?

   A. Would you please rate on this scale how fast or slow the days generally go? (Compared to your life outside)

/ 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 /

very fast | somewhat fast | both fast and slow | somewhat slow | very slow

If boredom and monotony or inactivity not mentioned by this point, give the following introduction and then the scale. If issues already mentioned, go right to the scale.

4. Patients sometimes mention that being in the hospital can be a very boring and monotonous experience. How do you feel about this? How has it been for you?

   A. Compared to your life outside, would you say that being on S-8/C-7 is:

   /___/___/___/___/___/___/___/___/___/___/

1	2	3	4	5	6	7	8	9	10
very interesting		somewhat interesting		boring and interesting			somewhat boring	very boring, monotonous	

5. Have you ever gotten confused about what day it is, or what time of day it is?

   A. If no: How do you orient yourself?

   B. If yes: (Find out if day, time of day, or both)
   Why do you think this happens?

   C. About how often has it happened?

   D. Do you find this annoying?

   E. Could you think of anything that could be done to avoid this?

6. Another thing patients sometimes mention is that they may feel confined or cooped up while they are in the hospital. How do you feel about that on C-7/S-8?

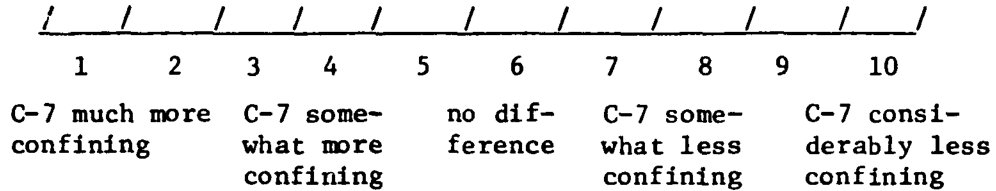
   A. Relative to your life outside, how confined do you <u>feel</u> here on C-7/S-8?

   /___/___/___/___/___/___/___/___/___/___/

1	2	3	4	5	6	7	8	9	10
Not confined at all			Slightly confined				Fairly confined		Very confined

   B. If <u>not</u> feel confined, ask: Why do you think other patients feel this way?

C. How about relative to other hospital units you have been on, how would you compare being on C-7?



D. Is there anything that you feel could be done to make hospitals less confining for patients?

UNIT SPECIFIC

C1. How do you feel about being on Kate-7/Lenmar 8?

Probes:

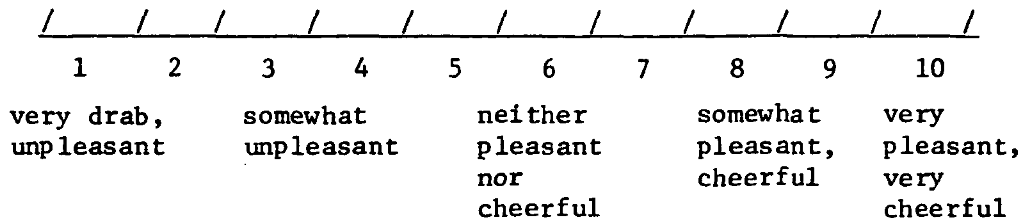
A. If someone asked you to describe what it was like on C-7/S-8, how would you describe it?

B. In terms of its atmosphere?

C. How about in terms of its appearance?

D. How do you feel about that?

E. Would you please rate the appearance of this unit on the following scale?



C2. Do you ever use the dining room?

If yes: How often, and how do you feel about having a dining room on the unit?

If no: Is there a dietary or mobility restriction that prevents you from using the dining room?

If yes: Do you intend to use the dining room when you are able to? If yes, ask how the patient feels about having a dining room on the unit.

If patient doesn't use the dining room and has no intention of ever doing so, ask why.

If uses or does not use ask:

Are there any changes in the dining room that would make you consider using it? or

Are there any suggestions you could make for improving the dining room?

C3. How about the pantry, do you ever use that?

If yes: When do you use it?
For what purposes? (Probe for socializing)
(If response is positive but vague, ask why having a pantry is nice or why that is important.)

If no: Why don't you use the pantry?

If restricted ask if patient intends to use the pantry and how they feel about having a pantry on the unit.

C4. Do you ever go to the lounge?

If yes: Find out how often in the course of a day.
When do you use it?
What do you use it for?
Do you have any suggestions for how the lounge could be improved?

If no: Why don't you use the lounge?
If the lounge was changed in any way, would you use it then?

BEDROOMS - DAYBED

C5. How do you feel about being in a daybed?

Probe:

Do you like it or would you prefer to be in a hospital bed? Why is that?

Could you think of any ways to improve the daybeds or the daybed rooms?

Which bed do you have?
Would you prefer the other bed or do you like the one you have?
Why is that?

BEDROOMS - HOSPITAL

C6. What bed are you in?
Do you like that bed or would you prefer to be in one of the others?
Why is that? (Probe for attitude about middle bed.)

How would you feel about being moved to one of the daybed rooms?
Would you like it or not? Why?

How do you feel about the idea of having daybeds in the hospital?

BEDROOMS - BOTH AREAS

C7. How is the lighting in your room and around your bed? Any problems?
How about in terms of being able to reach things that you need,
is that ever a problem or inconvenience? If so, what?

Could you think of any ways that the bedrooms or their furnishings
could be improved to make them more pleasant or comfortable for
patients? Say if you were able to redesign the rooms, what kinds of
things would you do?

HALLS

C8. How about the hallway, could you think of anyway it could be improved?
(Probe for more benches, better lighting, brighter paint, etc.)

Do you walk in the hall very much? (Get estimate of how often
the patient takes walks in the course of a day and if important.)

How about the benches, do you ever come out here and sit down?

If yes, about how often and for what activity?

7. How would you describe the patients on C-7/S-8?

A. Probe: What kinds of patients are up here?

B. Probe (if necessary): In general, how sick do they seem?

very sick ______
slightly sick ______
not very sick ______
not sick at all ______

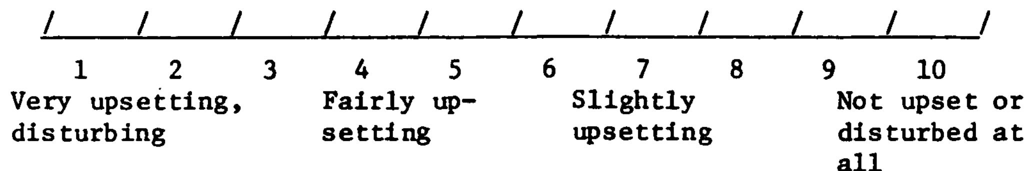
C. How do you feel about being on a unit with these kinds of patients?

D. Does this make any difference to you at all? (If necessary,
add, say in terms of your morale, or in terms of how you see
yourself and your illness?)

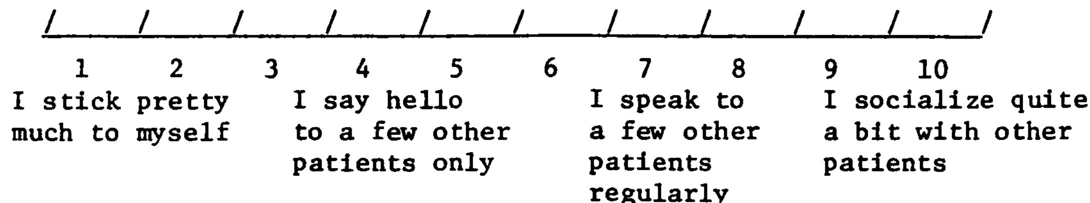
IF NECESSARY ASK:

E. Patients have mentioned that being with other patients who are very sick or who are sicker than they are can be upsetting to them. How do you feel about this? How has it been for you here?

F. Considering the level of sickness of the people around you, how would you rate your feelings on this?



8. How much do you have to do with other patients on the unit?



A. IF CHECKED 4 OR LESS ASK:

Would you like to socialize more with other patients? Why is that? What seems to prevent that from happening?

B. Do you see any benefit to socializing with other patients?

9. Have you ever changed rooms? Why is that?

Did you ever request a room change? If yes: Why is that?

Did you ever want to change rooms? If yes: Why?

10. How about roommates? Sometimes sharing a close space with a stranger can be a good or a bad thing. How has that worked out for you? Why is that?

A. Have you had any particular problems?

If yes: How did it work out?
How did you feel about that?

Could you think of any ways this could have been prevented?

11. If the cost was the same, would you have wanted a private room? (Or would you want a private room if you were to be hospitalized again?)

    Why or why not?

IF ISSUE NOT MENTIONED YET ASK PRIVACY QUESTIONS

12. How has your experience been with privacy on the unit?

    Have you been able to get the privacy you need?

    If yes: How have you worked that out?

    If no: What seems to be the difficulty?

13. Have you ever wanted just to be alone for a little while - to sit and think, rest, smoke, etc.?

    If yes: Were you able to do this?

    If yes: Where did you go or what did you do?

    If no: Was this annoying to you? How annoying? very ______ somewhat ______ not at all ______

    Could you think of ways that this could be done?

14. Do you ever have any trouble sleeping? What seems to be the problem?

    A. Do you take any sleeping medications? Why is that?

    B. Do you ask for it, or is it just given to you?

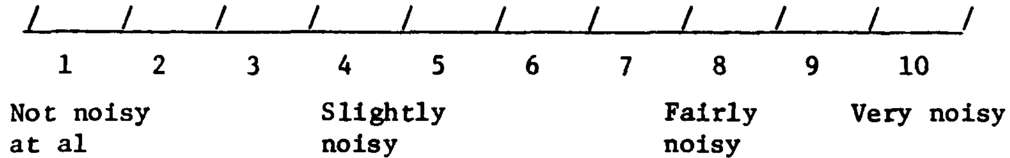
    C. Do you take sleeping medications in general? Why is that?

    D. Has the presence of other patients ever disturbed your sleep? (For example: their moaning, or the noise of their equipment, or the traffic of staff in and out of the room to take care of them?)

    If yes: How often have you been kept awake, independent of personal discomfort or worries?
    several times a night ____
    usually once a night ____
    once every few nights ____
    happened once or twice ____
    never happened ____

E. How about to block out the noise of the unit in general?

15. How would you characterize this unit in terms of noise?



Not noisy at al	Slightly noisy	Fairly noisy	Very noisy

Probe for sources of noise:
- hall ____
- equipment ____
- staff conversations ____
- pat. conversations ____
- t.v.'s ____
- patient moans or screams ____
- telephones ____
- other

A. Does this ever interfere with things you would like to do, such as sleep, read, visit, etc.?

16. Returning briefly again to medicine, what medications are you on?

A. Do you know what they are for?

B. Do you take your own meds?

C. How do you feel (or how would you feel) about patients taking their own meds?

17. Generally, how important are your physical surroundings to you while you are in the hospital? For some patients, they are very important, for others surroundings count for very little. How do you feel about this?

Would you say they were:
- very important ____
- important ____
- neither important nor unimportant ____
- relatively unimportant ____
- not important at all ____

Why is that?

18. If you were going to redesign this unit, say you could do anything that you wanted in addition to what you said about ____________, what would you do to make it more pleasant or comfortable for patients?

Why would you do that?

19. And suppose you could design the best of all possible hospitals, what kinds of things would you do, in addition to what you mentioned about __________, to make being in the hospital more pleasant?

    Why would you do that?

20. When do you think you will be going home?

    How do you feel about that (if day given)? Will you be ready to leave?

    IF DAY NOT GIVEN: When do you think you will be ready to leave?

21. Is there anything else that we haven't talked about which you feel may be important for me to know about, either in terms of your general experiences in the hospital or specifically about being on C-7/S-8?

Appendix B: Observation Form

TIME & ROOM	DOOR	CUR.	ACT	BODY POS L/B	S/B	SA/B	Chr.	Stnd.	PAT.	NUR.	AIDE	OTHER STAFF	DR	VIS	Comments
[illegible]															
[illegible]															
2 20															
[illegible]															
[illegible]															
[illegible]															
[illegible]															
[illegible]															
[illegible]															
[illegible]															
[illegible]															
[illegible]															
Room	Door	Cur	ACT	L/B	S/B	SA/B	Chr.	Stand	PAT	NUR	AIDE	OTHER STAFF	Dr	Vis	Comments
[illegible]															
[illegible]															

Room	Door	Cur	ACT	L-U	SUS	SAB	Chr.	Stand	PAR	NUR	AIDE	Other staff	Dr	Vis	Comments

Appendix C: Patient Scale

PATIENT SCALE
(C.U.N.Y. STUDY)

Nurse rater ________

Patient room and bed # ________

Patient Age ______, Sex ______

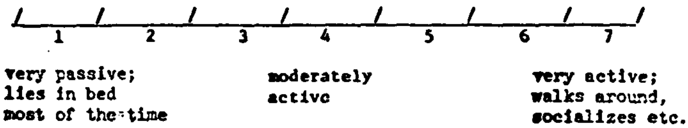
Patient diagnosis ____________

# of days ambulatory ________

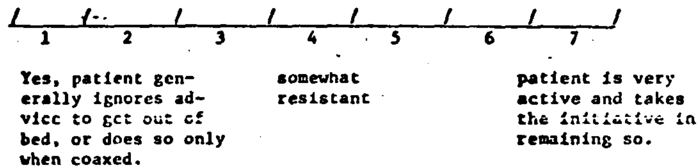
Length of time on unit ________

Date of rating ________

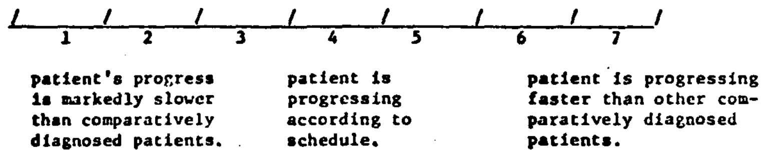
1. CONSIDERING THE PATIENT'S CONDITION, HOW ACTIVE HAS SHE/HE BEEN ON THE UNIT?



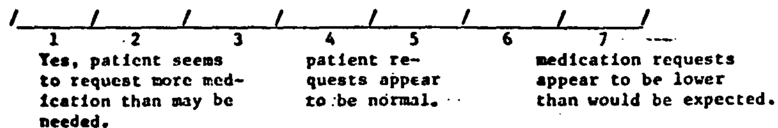
2. DOES THE PATIENT SEEM TO RESIST BECOMING MORE ACTIVE? (FOR OTHER THAN PHYSICAL REASONS, SUCH AS PAIN OR RECOVERING FROM A DIFFICULT PROCEDURE)



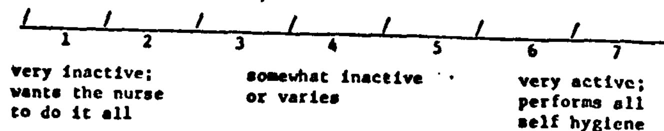
3. OVERALL, HOW WOULD YOU COMPARE THIS PATIENT'S PROGRESS TO OTHER PATIENTS WHO HAVE HAD THE SAME SURGERY OR ILLNESS?



4. DOES THE PATIENT SEEM TO REQUEST A LOT OF PAIN KILLING OR SEDATING MEDICINE?



5. HOW ACTIVE IS THE PATIENT IN INITIATING SELF HYGIENE (PERFORMING OWN A.M. CARE, TAKING OWN BATHS ETC.)?



Appendix C: Patient Scale

PATIENT SCALE
(C.U.N.Y. STUDY)

Nurse rater ________

Patient room and bed # ________

Patient Age ______, Sex ______

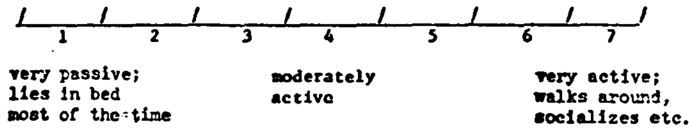
Patient diagnosis __________

# of days ambulatory __________

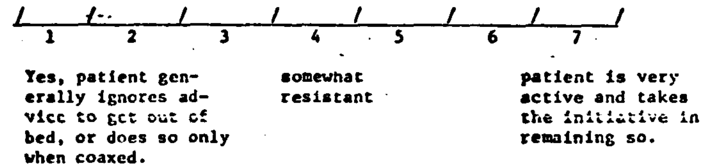
Length of time on unit ________

Date of rating ________

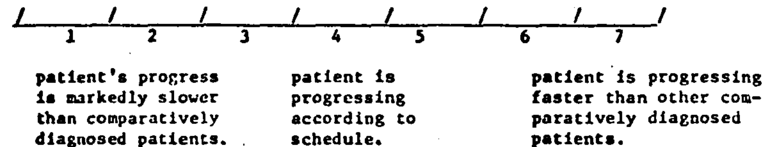
1. CONSIDERING THE PATIENT'S CONDITION, HOW ACTIVE HAS SHE/HE BEEN ON THE UNIT?



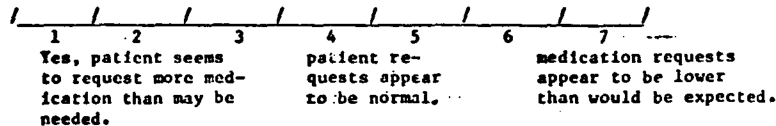
2. DOES THE PATIENT SEEM TO RESIST BECOMING MORE ACTIVE? (FOR OTHER THAN PHYSICAL REASONS, SUCH AS PAIN OR RECOVERING FROM A DIFFICULT PROCEDURE)



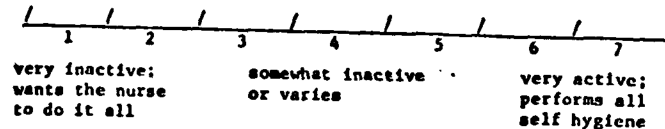
3. OVERALL, HOW WOULD YOU COMPARE THIS PATIENT'S PROGRESS TO OTHER PATIENTS WHO HAVE HAD THE SAME SURGERY OR ILLNESS?



4. DOES THE PATIENT SEEM TO REQUEST A LOT OF PAIN KILLING OR SEDATING MEDICINE?

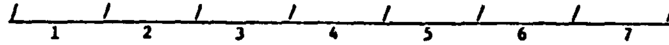


5. HOW ACTIVE IS THE PATIENT IN INITIATING SELF HYGIENE (PERFORMING OWN A.M. CARE, TAKING OWN BATHS ETC.)?



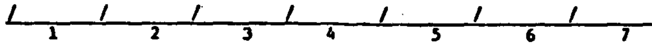
2

6. HOW WILLING IS THE PATIENT TO LEARNING ABOUT HIS/HER TREATMENT, ILLNESS, AND THEIR POTENTIAL IMPLICATIONS?



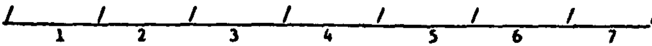
not willing at all; patient refuses to discuss or ask questions about treatment	somewhat unwilling	very willing; wants to know what is wrong and what has to be done.

7. WHEN THE PATIENT IS ASKED HOW THEY ARE DOING, IS THERE EXTREME EMPHASIS ON PAIN, DISCOMFORT, SUTURES, ETC.?



yes, patient always seems to respond in the negative	the negative is somewhat emphasized	patient gives balanced replies

8. DOES THE PATIENT SEEM TO DEMAND A LOT OF ATTENTION? (e.g.-ASK THE SAME QUESTIONS REPEATEDLY, INTERRUPT CONVERSATIONS WITH OTHER PATIENTS TO TALK ABOUT HIM/HERSELF, MAKE CONSTANT REQUESTS TO HAVE THINGS DONE FOR HIM/HER, STAND AROUND THE NURSING STATION WITH NOTHING TO SAY ETC.)

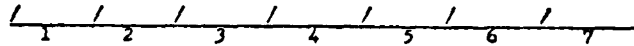


yes, patient seems to want a lot of attention.	patient occassionally seems to want a lot of attention.	patient demands no more attention than other patients.

9. DOES THE PATIENT WANT TO BE WAITED ON A LOT? (e.g."GET ME COFFEE," "FIX MY HAIR" ETC.)

patient frequently wants things done that he/she is capable of doing on his/her own.	patient sometimes wants to be waited on.	patient takes care of all the things he/she is able to do.

10. DOES THE PATIENT COMPLAIN A LOT ABOUT NON-MEDICAL THINGS(e.g.- FOOD, HOUSEKEEPING, NOISE, ROOMMATES ETC.)?



yes, frequently	sometimes	no

If yes or sometimes, would you please list the complaints.

____

____

11. DOES THE PATIENT COMPLAIN A LOT ABOUT HOSPITAL PROCEDURES AND ROUTINES. (e.g.-BEING WOKEN UP EARLY, LONG WAITS AT X-RAY, LACK OF PRIVACY, FREQUENT BLOOD TESTS AND TEMPERATURE AND BLOOD PRESSURE READINGS)

yes, frequently	sometimes	no

If yes or sometimes, would you please list the complaints.

____

____

12. HAS THE PATIENT EVER BEEN UNCOOPERATIVE, CHALLANGED YOU OR OTHER HOSPITAL STAFF OR POLICIES, OR REFUSED TO DO SOMETHING HE/SHE WAS ASKED TO DO?

/ 1 / 2 / 3 / 4 / 5 / 6 / 7 /

yes, frequently — sometimes — no

If yes or sometimes, would you please cite the incident(s).

____

____

13. IN GENERAL, HOW WOULD YOU CHARACTERIZE THE PATIENT'S DISPOSITION TOWARD BEING IN THE HOSPITAL?

/ 1 / 2 / 3 / 4 / 5 / 6 / 7 /

very negative, resents being here very much, is hostile. — mixed — fairly positive, realizes there is a problem and must be in the hospital to solve it. (but does not seem to enjoy being here)

14. IF POSSIBLE, HOW WOULD YOU CHARACTERIZE THE PATIENT'S ATTITUDE ABOUT GOING HOME?

/ 1 / 2 / 3 / 4 / 5 / 6 / 7 /

patient does not seem to want to go home (is afraid, has relapses, or finds excuses to stay in the hospital.) — mixed attitudes about leaving — patient very anxious to go home.

15. HAVE YOU EVER NOTICED THE PATIENT ACTING DIFFERENTLY WHEN HE/SHE HAS COMPANY?

/ 1 / 2 / 3 / 4 / 5 / 6 / 7 /

yes, patient seems to get sicker, has relapses, or lies in bed after being very active all day. — patient occasionally seems to get worse when has visitors. — no noticable change in behavior.

IF APPROPRIATE, PLEASE ANSWER THE REMAINING 3 QUESTIONS:

16. DOES THE PATIENT SEEM RELUCTANT OR RESISTANT TO LEARNING ABOUT HIS/HER MEDICATIONS AND HOW TO TAKE THEM ON HIS/HER OWN?

/ 1 / 2 / 3 / 4 / 5 / 6 / 7 /

yes, strong resistance, refuses to do so or makes repeated, avoidable mistakes.	moderate resistance.	no resistance, patient willingly learns about meds and how to take them.

17. HOW RESPONSIVE HAS THE PATIENT BEEN TO LEARNING NECESSARY SELF-TREATMENT PROCEDURES? (e.g.- DOING PROPER EXERCISES, LEARNING SELF-IRRIGATIONS, INJECTIONS, ETC.)?

/ 1 / 2 / 3 / 4 / 5 / 6 / 7 /

patient seems particualarly resistant to learning self-treatment (wants nurse to do everything, or just refuses to care for self.)	patient exhibits some hesitantcy	patient eager to learn self care.

18. HOW RESPONSIBLE IS THE PATIENT IN LEARNING ABOUT AND FOLLOWING ANY DIETARY RESTRICTIONS?

/ 1 / 2 / 3 / 4 / 5 / 6 / 7 /

patient not responsible at all, insists that the nurse fills out menu or makes repeated mistakes if patient does it on his/her own.	patient exhibits some irresponsibility in this area.	patient very responsible, knows restrictions and follows them in selecting own menu.

ADDITIONAL COMMENTS ABOUT THE PATIENT:

____

____

____

____

APPENDIX D

PATIENT HOME QUESTIONNAIRE

1. In general, how did you feel about the way the <u>nursing staff</u> prepared you for discharge?

   Were you:

   A. Over prepared, given more preparation than needed? ___
   B. Very adequately prepared? ___
   C. Adequately prepared? ___
   D. Only slightly prepared? ___
   E. Not prepared at all? ___
   F. Did not need any? ___

2. Is there anything the nursing staff could have done which would have made the transition from the hospital to your home a little easier?

   Yes ____

   No ____

   If yes: What could they have done? ______________________________

   ____

   ____

3. How did you feel about taking care of yourself when you left?

   Would you say you were:

   A. Very worried ____
   B. Fairly worried ___
   C. Slightly worried ___
   D. Neither worried nor confident ___
   E. Slightly confident ___
   F. Fairly confident ___
   G. Very confident ___

4. If you were on medications while you were in the hospital, were they explained to you by the nursing staff? (That is, were you told what medications you were taking and what they were for?)

   A. I was <u>not</u> on any medications in the hospital. ___

   B. My physician explained my medicine to me, <u>not</u> the nurses. ___

   C. The staff explained my medication to me <u>too carefully</u>; they kept repeating the directions over and over again. ___

CONTINUED ON NEXT PAGE

D. The staff explained the directions and the purpose of my medications very carefully. ___

E. The staff explained the directions and the purpose of my medications, but not too carefully. ___

F. Sometimes the staff explained my medications to me and sometimes they did not. ___

G. I was taking medications and the staff never explained them to me. ___

5. Did you take your own medications while you were in the hospital?

   A. Yes, I took my own medications. The pills were in my room and I took them at the appropriate time. ___

   B. No, the nurse gave me my pills each time I had to take them. ___

   C. Yes and no; some pills I took by myself and some the nurse gave me. ___

6. Do you think it was good for you to take your own medications while you were in the hospital? (If you were not on self-medications, do you think it would have been good for you?)

   A. Yes, all of the time. ___
   B. Yes, most of the time. ___
   C. Sometimes it was good, sometimes it wasn't. ___
   D. No, taking my own medications was not good for some reason. ___

7. How about at discharge, were your medications explained to you then?

   A. Yes, but they were explained too carefully. I did not need all of that explanation. ___
   B. Yes, very carefully. ___
   C. Yes, but not very carefully. ___
   D. Yes, but very casually. ___
   E. No, my medications were not explained at all. ___
   F. I was not on any medications after I left the hospital. ___
   G. Doctor explained medications. ___

8. Has there been any mix-up or confusion with your medications since you have been at home?

   Yes ____

   No ____

CONTINUED ON NEXT PAGE

If yes: What happened? (For example: took too much or too little medicine, etc.?)

____

Could this have been avoided? If so, how?

____

9. On the following scale, how would you rate the care you received on Kate-7/Lenmar-8?

/___/___/___/___/___/___/___/___/___/___/

1	2	3	4	5	6	7	8	9	10
excellent		very good	good	varied	neither good nor bad		poor		very poor

10. While you were in the hospital, were any mistakes ever made in your diet, medications, tests, etc.?

    Yes ___

    No ___

11. Did you ever fear that a mistake would be made - that you might be given the wrong diet, medications, tests, or that you would receive something that was intended for another patient?

    A. Yes, a number of times. ___
    B. Yes, I felt this way once or twice. ___
    C. No, I never thought of this. ___

12. While you were in the hospital, did you get enough information or explanations about your treatment plan or your care?

    A. Always, in fact I got too much information and explanations too often. ___

    B. Always, and I liked this very much. ___

    C. Most of the time and I liked it that way. ___

    D. Most of the time, but I would have liked more information. ___

    E. Sometimes, and I liked it that way. ___

    F. Sometimes, but I would have liked more information. ___

    G. Rarely, and I liked it that way. ___

CONTINUED ON NEXT PAGE

H. Rarely, and I would have liked more information. ___

I. Never, and I liked it that way. ___

J. Never, and I would have liked to have had the information. ___

K. I did not need any. ___

L. They did not know what was the matter. ___

13. How did you get this information from the nurse(s)?

A. I always asked for it. ___

B. Sometimes I asked for it, sometimes it was given to me. ___

C. Most of the time it was given to me without asking for it. ___

D. It was always given to me without asking. ___

E. I did not need any. ___

IF YOU REQUESTED INFORMATION FROM THE NURSES, PLEASE ANSWER #14.

14. How often did you request information from the nurses?

A. Frequently. ___
B. Sometimes. ___
C. Rarely. ___
D. Never. ___
E. Did not need any. ___

15. In general, how receptive were the nurses to your questions?

A. The nurses gave information willingly and acted as if it were my right to know the answer. ___
B. The nurses gave the information willingly. ___
C. The nurses gave the information indifferently. ___
D. The nurses were very cheerful, but never seemed to answer my questions. ___
E. The nurses gave the answer begrudingly, as if I were bothering them; or as if the information was none of my business. ___
F. I did not need any. ___

16. Did you feel that you received enough attention from the nursing staff?

A. Yes, in fact I received too much attention, certainly more than I needed. ___

CONTINUED ON NEXT PAGE

B. Yes, I received all of the attention that I needed, and more than I expected. ___

C. I received a sufficient amount of attention. ___

D. I received some attention, but could have used more at times. ___

E. The nurses were fairly inattentive. ___

F. The nurses were very inattentive. ___

17. How would you rate your nursing care in terms of its emotional supportiveness?

A. The nurses were <u>too supportive</u>. Considering my condition, I did not need all of that support. ___

B. The nurses were very supportive. They gave me encouragement and reassurance and allowed me to express my feelings. ___

C. The nurses were fairly supportive. ___

D. The nurses were somewhat supportive but could have been a little more so. ___

E. The nurses were not supportive at all. They gave no encouragement or reassurance. ___

18. Did the nurses show <u>personal interest</u> and concern in caring for you?

A. Yes, but they showed too much interest. I did not need or want all of that concern. ___

B. Yes, the nurses showed a lot of interest in me as a person. I was not treated as just another illness. ___

C. The nurses showed some personal interest in me. ___

D. The nurses showed a small amount of personal interest in me, but they could have shown a lot more. ___

E. The nurses treated me very impersonally, like I was just an illness and not a person. ___

19. How familiar were you with your illness when you were in the hospital? (Did you know what was wrong, what was going to be done, and what to expect in terms of treatment and recovery?)

A. I was <u>too</u> familiar. I would have preferred to have known less. ___

B. I was very familiar. I knew all there was to know, and I liked it that way. ___

CONTINUED ON NEXT PAGE

C. I was somewhat familiar but would have liked to have known more. ___

D. I was somewhat familiar and liked it that way. ___

E. I knew very little and would have liked to have known more. ___

F. I knew very little and liked it that way. ___

G. I knew nothing at all and wanted to know a lot more. ___

H. I knew nothing at all and liked it that way. ___

I. They didn't know what was wrong with me. ___

20. When you were in the hospital, did you ever question (to the staff) the reasoning behind certain procedures or complain about medical things? (For example, did you ever complain to the staff about temperature taking, blood pressure taking, x-rays, blood tests, or other tests and procedures?)

Yes ____

No ____

If yes: About how many times did you do this? ____________

Would you please list what you questioned or complained about? ______________________________

____

____

21. How about non-medical things? Did you ever complain to the staff about things like noise, roommates, lack of privacy, food, etc.?

Yes ____

No ____

If yes: How many times did you do this? ____________

Would you please mention the things you complained about?

____

____

22. How would you rate the food in the hospital?

/____/____/____/____/____/____/____/____/____/____/

1	2	3	4	5	6	7	8	9	10
excellent (like home cooking)		good, for a hospital			mediocre		poor		very poor

23. In general, how would you rate your accomodations, the comfort and the quality of the furnishings?

/____/____/____/____/____/____/____/____/____/____/

1	2	3	4	5	6	7	8	9	10
very satisfactory		satisfactory			somewhat satisfactory			very unsatisfactory	

24. Sometimes sharing a close space with strangers can be good or a bad thing. How did things go with your roommates?

   A. Things went beautifully. I could not have had better roommates. ___

   B. Things went pretty well. We got along, but we were not particularly close or compatible. ___

   C. It was difficult. My roommates were very sick. ___

   D. Some were easy to get along with, some were not. ___

   E. We had some differences or problems, but nothing serious. ___

   F. It was somewhat difficult. There was a problem with my roommate(s). ___

   G. It was very difficult. My roommate(s) were very hard to get along with. ___

25. If you had to be rehospitalized, would you like to have the same roommates?

   A. Yes. ___

   B. Some of them, but not all of them. ___

   C. Not sure. ___

   D. No. ___

26 Patients frequently say that being in the hospital can be a very upsetting or depressing existence for a variety of reasons. Stress seems to be a natural and understandable reaction to hospitalization, considering the nature of hospitals and what happens inside them.

On the following scale, would you please rate how upset or depressed you were about being in the hospital. Naturally these feelings change during the course of a patient's stay, so please rate your overall feelings up to the point before you found out when you were going home.

1	2	3	4	5	6	7	8	9	10
overall, being in the hospital was very upsetting or depressing		pretty upsetting or depressing		fairly upsetting or depressing			slightly upsetting or depressing		not upsetting or depressing at all

27 Patients have also commented that the first week or so after coming home from the hospital can be a stressful or upsetting time also, at least until their normal routines are re-established.

Consequently, on the following scale, would you please rate how upset, stressed, or depressed you felt during the first week that you were home?

1	2	3	4	5	6	7	8	9	10
in general, I seemed to be very upset or depressed		pretty upset or depressed		fairly upset or depressed			slightly upset or depressed	not upset or depressed at all	

28 If you had to be rehospitalized, would you return to Berlen?

Yes ___

Not sure ___

No ___

29 How about to Kate-7/Lenmar-8, would you want to return to that unit?

Yes ___

Not sure ___

No ___

32. Do you have any additional comments about what it was like being in the hospital for you, or how hospitals could be changed to make the patient's stay more comfortable or pleasant?

____

____

____

____

THANK-YOU FOR YOUR COOPERATION. YOUR ASSISTANCE HAS BEEN INVALUABLE.

Appendix E:List of Active Behaviors

	KATE HOSPITAL	LENMAR	KATE DAYBED
Talking With Staff	X	X	X
Talking With Patients	X	X	X
Talking With Visitors	X	X	X
Reading	X	X	X
Crossword Puzzles	X	X	
Writing	X	X	X
Card Playing		X	X
Telephone	X	X	X
Needlepoint/Sewing/Crochet	X	X	X
Make-up			X
Television With Patient	X	X	X
Television With Visitor	X	X	X
Food (Non meal time)	X	X	X
Personal Hygiene	X	X	X
Radio/Television Alone	X	X	X
Hospital Routine	X	X	X
Trafficking	X	X	X
Looking At Belongings	X	X	X
Looking Out The Window	X	X	X
Looking Around		X	X
Smoking	X	X	X
Watching an Activity	X	X	X
Patio		X	X
Receiving Communion	X		
TOTAL	20	22	22

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