EVALUATION OF A DROP-IN CENTER PROGRAM FOR THE CHRONICALLY MENTALLY ILL: A FOLLOW-UP STUDY

by

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CHAPTER I

INTRODUCTION

Large numbers of patients with severe mental illnesses have been discharged from mental institutions into communities in the last two decades. As a result of the community mental health movement, the maintenance of the chronically mentally ill (CMI) population in the community has become a major professional concern. Among the CMI, the deinstitutionalized population ranges from 800,000 to 1,500,000 (Goldman, Galtozzi, & Taube, 1981). According to Goldman et al. (1981), the CMI are those who suffer severe and prolonged mental or emotional disorders that interfere with daily functioning, particularly in meeting self-care needs, maintaining interpersonal and social relationships, and time management.

This study is concerned with assessing the effectiveness of a socialization program developed to assist CMI adults to remain in their own communities. According to the Balanced Service System model for mental health program planning, services should be designed to meet the needs of CMI clients in the least restrictive environment possible (Gerhard, Dorgan, & Miles, 1981). In this model, sustenance services are aimed at maintaining intrapersonal, interpersonal, and instrumental coping skills of CMI. A socialization program is an example of a sustenance service that can be provided in a supportive environment. Socialization programs provide a milieu for assisting CMI to meet their needs for social activity and support, and are said to deter further loss of functional capacities and rehospitalization for some.

The socialization program examined in this study is a drop-in center that provides recreation and social activities for the CMI who are residing in a catchment area in a Northwestern metropolitan area. The center is located a few blocks from a county mental health clinic and serves clients of the nearby clinic as well as clients of other mental health agencies in the area. The drop-in center was identified as an essential service in a needs assessment that was conducted with 407 clients of the mental health clinic (Lauck, 1980). The center is a non-threatening, friendly place where people come to meet others, have coffee and snacks, play games, shoot pool, and engage in arts and crafts. Other services are weekly outings, exercise classes and cooking. The clients who attend the center are generally young, single, unemployed, and live in a room and board setting.

Recently, Maghrak (1982) studied clients who used the drop-in center in order to assist in evaluation and program planning by the mental health clinic. The study provided information on demographic data, diagnosis, treatment variables, and rate of hospitalization of the clients. Moreover, the relationship between selected treatment variables, rate of hospitalization, and degree of participation in the program was examined. The study results reported no significant relationships between the three variables. However, Maghrak (1982) identified instability (i.e., frequent location changes and a directorship change in the program) as factors which may have influenced study results. Since September of 1981, the drop-in center socialization program has stabilized and hours of the program have expanded. Thus, it seems appropriate to conduct a follow-up study at this time.

The purpose of this study is to determine whether participation in the drop-in center has a positive relationship to medication utilization and hospitalization patterns of clients who attend the program. It is expected that the drop-in center as a socialization program enhances coping skills of the CMI which may eventually result in decreased hospital use and decreased medication use. Mental health professionals, including nurses, have focused more attention on the needs of deinstitutionalized CMI patients with increased emphasis on developing community-based services. The aim of gathering information about the clients who use the drop-in center program is to evaluate and strengthen the program so that it can more effectively meet the needs of the clients.

Review of the Literature

The chronically mentally ill (CMI) are individuals with various psychiatric disorders, although most clients have a diagnosis of schizophrenia. These patients lack motivation and skills to meet their own needs in daily living in such areas as personal, social, productive, and recreational activities (Cutler, 1980). The number of CMI patients living in the community has increased; therefore, effective treatment to maintain the CMI in the community has become an important issue. Health related literature suggests that chronic mental illness as a negative health outcome may be influenced by support systems (Mitchell & Trickett, 1980).

The Young Adult Chronic Patient

The literature indicates that young chronic patients are increasingly reflected in mental health service delivery statistics

over the past 15 years (Egri & Caton, 1982; Pepper, Kirshner, & Ryglewicz, 1981). Young adult chronic patients represent a group between 18 to 35 years of age who show persistent and severe impairment in their psychological and social functioning. Two major factors account for increased numbers in this age group: (1) deinstitutionalization resulting in large numbers of patients who stay in communities; (2) nationwide changes in the population related to the World War II baby boom (Bachrach, 1982).

The young chronic adult patient represents the same diagnostic categories as older chronic patients; however, they are distinguishable from their elders because they are more likely to have lived in the community since the onset of illness. Second, they are at a developmental stage in which they must deal with independence, succeeding at a vocation, and establishing interpersonal relationships (Lamb, 1982; Pepper et al., 1981).

A number of reports describe the characteristics of young adult chronic patients in various types of mental health care systems (Egri & Caton, 1982; Pepper et al., 1982; Schwartz & Goldfinger, 1981; Sheets, Prevost, & Reihman, 1982). A study conducted by Pepper and others at a suburban New York community mental health center in 1980 illustrated that such patients have few social or vocational skills, respond to stress with rage, are likely to take drugs, and are unable to establish stable relationships with others. Characteristics similar to these of other subgroups are suicidal potential and self-destructive behaviors (Caton, 1981), and criminal acting out (Schwartz & Goldfinger, 1981).

Outcome data on effective treatment approaches for this particular young group is limited. Neffinger and Schiff (1982), from their five-year experience at the Rockland county community mental health center, suggested a program of treatment by objectives situated in a day treatment setting for future treatment of young adult chronic patients. Other studies suggest that a combination of systems and programs which are more individualized and disability-level specific may have a positive treatment effect (Bachrach, 1982; Stein & Test, 1982). Since this group has difficulty in social and coping skills, there is agreement among professionals that community centers need to develop programs which allow the young adult chronic patient to maintain maximum involvement in life within the community (Lamb, 1982; Stein & Test, 1982).

Outcome Evaluation of Supportive Community Program

Community mental health centers (CMHC) should function as self-evaluating organizations by combining planning, service delivery, and assessment (Schulberg, 1981). Schulberg (1981) criticized mental health facilities for their lack of concern about the effectiveness of programs and suggested outcome evaluation. Such variables as client changes in psychopathology, social adjustment, relapse rate, family stress, rehospitalization, and cost effectiveness can be measured (Greene & Cruz, 1981). Schulberg (1981) suggests using measures of personal adjustment and role skills if community mental health programs pursue goals which are socially oriented for chronic mental patients.

Today, federally funded community mental health programs are in danger of becoming extinct because of fiscal constraints (Clark, 1979;

Estroff, 1981; Sharfstein, 1978). Critics suggest that community-based treatments have to be not only therapeutically sound and accountable but cost-effective as well (Estroff, 1981; Greene & Cruz, 1981). Yet only a few studies have addressed the costs and benefits of community programs (Fink, Longarbaugh, & Stout, 1978; Sharfstein & Nafzinger, 1976). Fink et al. (1978) investigated the potential cost-effectiveness of partial hospitalization by comparing groups of day hospital patients and inpatients over a one year period. They found that clinical outcome measures and cost advantages favored the partial hospitalization group. Sharfstein and Nafzinger's (1976) case study of a chronic mental patient suggested a similar conclusion.

Further, the literature indicates that a variety of supportive social treatments for CMI patients can be done effectively in community programs, including social recreational activities (Beard, Malamud, & Rossman, 1978; Stein & Test, 1980). Beard et al. (1978) and Stein and Test (1980) provide evidence that social treatments in community programs are beneficial for CMI patients. Although the effectiveness of supportive social treatments could have been measured by outcome data of reduced psychiatric symptoms or increased psychosocial function of CMI patients, most studies have evaluated the effectiveness of such programs by using the measurement outcome of rehospitalization.

Rehospitalization as a Measurement Outcome of Community Support Programs

Rehospitalization as an outcome measure has been used more than other measures because the goals of community programs have focused on reducing hospital utilization in part to get public support and funding (Wolkon, Karmen, & Tanaka, 1971). Many evaluation studies report

controlled conditions in which discharged patients are assigned either to a supportive treatment setting or to a no-treatment setting. Supportive community-based treatments include day treatment programs, halfway houses, and social rehabilitation programs.

Sheldon (1964) studied a day center and an outpatient department to evaluate effectiveness of after-care programs. Sheldon found a lower readmission rate in the psychiatric after-care group than in the no-treatment group. In addition, the study indicated that good attendance at after-care resulted in lower readmission rates than did poor attendance. Beard, Malamud, and Rossman (1978), in their two controlled studies at Fountain House, also showed a lower rate of rehospitalization for subjects who received rehabilitation program services than for subjects who did not receive such services. Rehabilitation services available at Fountain House were a prevocational day program, evening and weekend social activities, transitional employment, and additional reaching-out services, i.e., phone calls, letters, and home visits by staff and members. The effectiveness of rehabilitation programs have also been reported by others (Stein, Test, & Marx, 1975; Wolkon et al., 1971).

Budson and Jolley (1978), through their experience at Berkley House (a psychiatric halfway house), showed evidence that successful community tenure was achieved for their patients. Using a psychosocial network model, they reported that an important factor in such a program's success was its capacity to strengthen an extended network of neighbors, friends, and other associates in the community. A church-based program, Community Organization for Personal Enrichment

(COPE), also showed reduced hospitalization related to providing on-going support for CMI patients by integrating them into existing community networks (Cutler, 1978). During the first 18 months of the COPE program, only two patients out of 200 required hospitalization.

However, the findings are inconsistent when both the incidence of rehospitalization and days of rehospitalization are used to measure the effectiveness of community programs (Katkin, Ginsburg, Rifkin, & Scott, 1971; Lamb & Goertzel, 1972). In the study by Lamb and Goertzel (1972), a day treatment center and a halfway house were compared with boarding and family-care homes. Lamb and Goertzel (1972) assumed that day treatment and halfway houses, as high expectancy settings, would extend more effort toward social and vocational rehabilitation for CMI patients than boarding and family-care homes. The study revealed that the patients of the high expectancy group showed an early discharge tendency; however, it also showed an increased rate of rehospitalization in the first 6 month follow-up period. In a 2 year follow-up period, the study indicated no difference between the groups. Katkin et al. (1971) found less hospitalization as well as longer hospitalization for the group which had supportive therapy by nonprofessional volunteers than for the group without therapy. Thus whether numbers of hospitalizations versus days of hospitalization is the more useful indicator of positive outcome for the long-term stay of the CMI in the community is unclear. Also, the difference between follow-up periods may be a contributing factor to the inconsistent findings. Finally, no comparison of the effectiveness between drop-in social centers and other social rehabilitation programs have been reported.

Medication versus Social Treatment

A few studies compared psychotropic medication treatment alone with psychotropic medication plus social treatment. Guy, Gross, Hogarty, and Dennis (1969) investigated the use of psychotropic medication alone and psychotropic medication plus milieu treatment to determine the effectiveness of two day treatment programs. The results favored medication plus milieu treatment for schizophrenic patients in contrast to nonschizophrenic patients. In the study, medication plus milieu treatment resulted in shorter hospital stays.

Vaughn and Leff (1976) found that discharged schizophrenic patients who had either low stress in their home environment or medication plus outside social treatment showed reduced symptomatic relapse. In the low intensity setting in their home environment, the study found the same positive results irrespective of whether patients were taking psychotropic medications. While the findings by Vaughn et al. (1976) seem to indicate that a supportive social environment alone can be alternative treatment for the CMI, the findings by Guy et al. (1969) suggest that both treatments are needed to add effectiveness, especially in the treatment of schizophrenic patients. These findings are confirmed by Hogarty and Goldberg (1973).

Social Support and Social Network Research

There is substantial evidence that stressful life events can precipitate psychiatric disorder (Beck, 1978; Hammer, Makiesky-Barrow, & Gutwirth, 1978; Mitchell & Trickett, 1980; Mueller, 1980). Specifically, the loss of social support or social ties is a stressful life event which may precede psychiatric disorders. Cassel (1974) reported

that changes in the social environment act as precipitating factors which increase the host's susceptibility to disease. For example, under conditions of distress, inadequate feedback and disruption of meaningful social contact may lead to ill health (Cassel, 1974).

Moreover, social support may serve as a mediating factor to reduce the risk of psychiatric illness and physical illness (Andrews, Tennant, Hewson, & Vaillant, 1978; Cohen & Sokolvsky, 1978; Dean & Lin, 1977; Hammer et al., 1978). Norbeck's (1982) summary of the underlying assumptions of social support theory suggest that people need supportive relationships with others throughout life to deal with role demands and to cope with various stressors. Stressors are likely to be derived from situations that create imbalances between demands and perceived capacity of the individual to respond to such demands (Dimond & Jones, 1983). Both emotional and tangible resources, provided in times of crisis or related to health maintenance, are relevant to individual well-being.

Andrews et al. (1978) studied the effect of stressful life events, coping style, and social support on psychiatric impairment in a suburban setting in Australia (N = 863). Findings indicated that the availability of support from relatives, friends, and neighbors in times of crisis was associated with lower rate of psychiatric impairment. Turner's study (1979) on discharged schizophrenics (N = 103) also showed that inadequate social functioning was associated with a lower rate of psychiatric impairment. Turner's study (1979) on discharged schizophrenics (N = 103) also showed that inadequate social functioning was associated with low levels of perceived social support.

However, there is a lack of consensus on the conceptual definition of social support and on the relationship between social support and the course of psychiatric illness. More studies are needed to explain the nature of stressor, the nature of support offered, and the short and long term responses to the stressful situation (Dimond & Jones, 1983).

According to Mitchell and Trickett (1980), social networks are mediators of social support and a "useful tool in examining both the functional and dysfunctional influences of one's primary group on individual adaptation" (p. 27). "Social network" refers to the direct and indirect connections among a set of individuals and groups (Hammer et al., 1978). Characteristics of networks are size (i.e., number of members), density or connectedness (the degree to which the individuals in a person's network are related to or are in contact with each other), and reciprocity (the directionality of relationships) (Hammer, 1981). Studies comparing psychiatric patient groups with normal control groups have reported that psychiatric groups have networks characterized by fewer linkages, fewer intimate relationships, and instability (Cohen & Sokolvsky, 1978; Pattison, DeFrancisco, Ward, Frazier,& Grower, 1975; Tolsdorf, 1976).

Although studies have shown differences between the network characteristics of psychiatric and non-psychiatric groups, findings on which type of network structures associated with psychiatric disorders are inconsistent. For example, network size was found to be an important factor in the study by Pattison et al. (1975). Reciprocity and multiplex relationships were identified as useful

structural variables which distinguish the social connections of schizophrenic and non-schizophrenic groups in studies by Cohen and Sokolvsky (1978) and Tolsdorf (1976) (Hammer, 1981). Mueller (1980) raised the question of whether differences in network characteristics occurred after the onset of illness.

Several studies suggest that disruption of network structure and interconnectedness can contribute to rehospitalization, relapse, and help-seeking behaviors. In a study of 44 residents in a single room occupancy hotel, Cohen and Sokolvsky (1978) found that schizophrenic residents with residual symptoms who had smaller networks as well as dependent and limited interconnected relationships showed an increased rate of rehospitalization over the schizophrenic group who had reciprocal and extended network relationships.

Hammer (1963) examined sequence of events leading to hospitalization of patients in New York City. Patients with close interconnected ties were more likely to receive personal care, to have hospitalization initiated by those close to them, and to maintain those relationships throughout their hospitalization than were patients with less frequent contact and non-symmetrical ties. These findings suggest that patients without supportive and interconnected ties may have a higher risk of relapse after they are discharged from the hospital.

Finally, Vaughn and Leff (1976) examined the influence of family on the course of psychiatric disorder for 43 schizophrenic and 32 depressed patients. The study found that patients who were exposed to intensive emotional responses of key relatives in their homes appeared to show symptomatic relapses.

Thus, the literature suggests that improvement in the quality of social network structure and ties can be a preventative intervention for the chronically mentally ill. Yet, more careful consideration of methodology in future studies, including use of longitudinal designs and control of socio-demographic factors, is needed if the causal relationship between social networks and psychiatric disorder is to be determined (Mueller, 1980).

The Concept of Chronicity

Although it is widely used, the concept of chronicity has not been consistently defined in the literature. Generally the meaning of chronicity refers to the long duration of illness and its consequential disabilities due to social disadvantages, disturbed interpersonal relationships, and emotional and behavioral maladjustment (Cutler, 1980; Goldman et al., 1981).

As discussed in a previous section, young patients are a growing group of chronically disabled. Wing (1978) identifies three factors which seem to cause the chronic status: (1) psychological impairment due to the recidivism of illness, such as schizophrenia, (2) social disadvantage which excludes the opportunity to develop social or vocational skills, and (3) lack of confidence or self-esteem resulting from both impairment and disadvantage. Emphasis must be given to the psychosocial aspect of the chronic illness state because the "intrinsic component" of chronic impairment is one that may not disappear (Wing, 1978).

Although it is known that people with chronic disorders are at risk of developing chronic disabilities, some evidence supports the

idea that this risk can be reduced if the mental health service system responds adequately to the needs of the mentally ill (Cutler, 1980; Gruenberg, 1982; Stein & Test, 1982). Peele and Palmer (1980) suggest that focusing on needs as a basis for definition of chronicity, instead of on negative concepts such as deficit, diagnosis, or life style, will lead to better services for the mentally ill population. Cutler (1980) categorized needs of the chronically mentally disabled into five areas: recreational, productive, social, service and personal. For example, the social category includes activities designed to strengthen the interpersonal support system.

Social support and network theories do not conceptualize or define chronicity directly. Studies, however, address the relationship between social support and social networks and health outcomes. As an example, Turner (1979) found a positive relationship between inadequate social functioning of CMI patients and a low level of perceived support. Cohen and Sokolvsky (1978) focused on how differences in social network structure may influence exacerbation of psychiatric disorders. Thus, the process of chronicity may be seen as a negative health outcome related to insufficiency of social support or disruption of supportivė interpersonal ties.

The Concept of Supportive Social Environment

The social environment plays an important role in the course of a CMI-related disability (Gruenberg, 1982). Successful social functioning of the CMI patients depends on the capacity to cope with the environment and on the supports available in the social environment (Mechanic, 1980). Gerhard et al. (1981) suggest that three types of

environments vary according to their degree of restrictiveness: protective, supportive, and natural environment. According to these authors, providing support in the least restrictive environment possible is an important principle to follow in addressing the needs of mentally ill patients. A protective environment is the most restrictive setting, including institutions such as hospitals and prisons. A supportive environment provides a moderate degree of restriction, including clinics, halfway houses, and day-treatment facilities. A natural environment is the least restrictive situation, including homes, jobs, and schools. It is suggested that community programs organize services by the type of environment which then allows selectivity appropriate to the patient's illness and disability level.

In a study of schizophrenics, Wing (1978) characterized the relationship between stress and psychopathology using the concept of "understimulation" and "overstimulation." He noted that an understimulating social environment tends to increase symptoms such as social withdrawal, apathy, and lack of initiative in schizophrenics. Overstimulation in the social environment is also likely to increase acute relapse (Wing, 1978). Thus the optimal social environment suggested is natural stimulation in which patients can perform achievable goals which do not emphasize complex decision-making and allows patients some degree of control over the amount of social stimulation in the environment.

The chronically disabled person tends to have difficulty dealing with the basic needs of daily living (Cutler, 1980). These individuals

require personally designed programs which provide support and neutral stimulation in which patients have the opportunity to learn coping skills to manipulate their environment.

Summary and Conclusions

In summary, there is a compelling need for supportive social treatment for the chronically mentally ill who reside in the community. The young chronic patients are a group in particular need of such services. Chronicity may be viewed as a negative health outcome related to the insufficiency of social support or disruption of supportive interpersonal ties. Several studies support the idea that social treatment in a supportive environment provides a means of sustaining coping skills including interpersonal ones. Social treatment may reduce the need for psychotropic medication and hospital utilization for CMI. Other studies report inconsistent findings when both the number of rehospitalizations and hospitalized days were used as outcome measures to determine the effectiveness of social treatment. In conclusion, a drop-in center, as a socilization program, can be predicted to have a positive effect on maintaining CMI patients in the community because the program is designed to meet social support needs of CMI in a low-key, supportive environment. The drop-in center provides access to social life, recreation, and the benefits of an expanded social network (Maghrak, 1982).

Statement of the Problem

The problem addressed in this study is the extent to which changes occur in usage of psychotropic medication and hospitalization for the chronically mentally ill as a function of participation in a drop-in

center program. To address the problem, the following questions and hypotheses have been formulated:

1. On what demographic characteristics do frequent participants in a drop in center program differ from infrequent participants and nonparticipants?

2. What factors do participants identify as influencing their degree of participation in a drop-in center program?

3. What is the relationship between degree of participation in a drop-in center program and readmission to the hospital? Hypothesis 1: The degree of participation in the drop-in center program will vary inversely with hospital utilization.

4. What is the relationship between degree of participation in a drop-in center program and usage of psychotropic medication? Hypothesis 2: The degree of participation in the drop-in center program will vary inversely with usage of psychotropic medication.

Definition of Terms

Chronic mental illness: A condition characterized by the need for supportive treatment due to long standing mental or emotional disturbances which interfere with the individual's functional capacity in daily life, such as self-care, interpersonal relationships, and social and recreational activity.

Drop-in center: A place where people are free to visit. It is a low-key, non-threatening environment which is also supportive and stimulating (Maghrak, 1982). It is a source of socialization and recreation.

Participation: Participation is determined by clients' attendance at the center. Regardless of the amount of time spent, just dropping in is accepted. "Frequent participation" is defined as attendance at the center once per week or more. "Infrequent participation" is defined as attendance at the center at least once a month but less than once a week. "Nonparticipation" is defined as attendance at the center less than once a month.

Socialization: Any supportive environment activity geared toward the sustainment of an individual's capacity for social or recreational involvement (Gerhard et al., 1981).

CHAPTER II

METHODS

Design

The study reported here is a follow-up of a study conducted by Maghrak (1982) concerning the characteristics of participants and non-participants in a drop-in center program. The present study focused on changes in clients' utilization of psychotropic medications and rehospitalization as a function of participation in the drop-in center program. The study is a retrospective, exploratory study, using pre-existing and survey data to determine the possible influence of the drop-in center program on the participants.

Setting

The study program, the drop-in center, is located in a church near a county mental health clinic and serves clients who are referred from the clinic. The clinic serves about 400 clients out of about 117,000 people in the catchment area of a Northwestern metropolitan area. The clinic serves only CMI clients who have been hospitalized and are considered "at risk" for rehospitalization. The clinic is located in a neighborhood which has a high percentage of black residents; and thus, approximately 40% of the clinic's clients are black. The clinic provides two major treatment modalities, individual or group therapies and psychotropic medications therapy. The drop-in center, instead, provides access to socialization and recreation for the clients. The center is a place where patients can go to talk; have coffee and snacks; do arts and crafts; and play games such as cards, backgammon, and pool. Every Tuesday there is an outing to places such as the zoo,

a museum, or a bowling alley. On Thursdays clients prepare lunch together. Hours of operation are 10:00 a.m. to 3:00 p.m., Monday through Thursday.

Subjects

The study sample consisted of clients who attended the drop-in center at least once during the early months of 1982 (January 11 to February 22). These subjects were followed throughout the year from January 1982 through January 1983. From the 61 clients who met this criteria, only 36 subjects were included in the study. About 41% of the total sample (n = 25) were excluded due to various reasons. Fourteen people were not identified as patients by staff at the clinic or were non-CMI patients. Seven clients moved out of the clinic's catchment area, and four persons were terminated by the clinic in the early part of 1982 because of client failures to keep follow-up appointments.

The sample was divided into three groups according to their degree of participation for a 1 year period. Group I (n = 10) included clients who attended the drop-in center less than once a month and are classified as nonparticipants. Group II (n = 13) included clients who attended the center at least once a month but less than once a week and are classified as infrequent participants. Group III (n = 13) included clients who attended the center once per week or more and are classified as frequent participants.

Data Collection Procedure

A letter approving the study and confirming access to the clinic was obtained from the clinic director (see Appendix A). A list of

study subjects and information on attendance was obtained from drop-in center records of daily attendance. Once the list of subjects was obtained, days of attendance were counted for the period of January 11, 1982 to January 25, 1983. Other information was obtained by the researcher by reviewing clients' records at the mental health clinic. The information included was age, sex, ethnicity, marital status, diagnosis, type of living situation, number and degree of changes in neuroleptic medication dosage and number of hospitalizations and number of hospital days. Further, follow-up data were obtained by the researcher through a short interview with subjects in an attempt to gain insight into factors which might have contributed to their degree of participation. The researcher conducted 15 minute personal interviews with 20 clients after subjects gave informed consent to participate (see consent form in Appendix B). The interviews were conducted either at the clinic or at the drop-in center when privacy was assured.

Data Collection Instruments

The instrument which was used to collect data from client records at the mental health clinic was a Client Information Form (Appendix C). The form was developed by Maghrak (1982) for the drop-in center study in 1981. From the 12 original items, eight items were retained and two items were modified. The revised items include: demographic information (items 1-4); diagnosis (item 5); type of living situation (item 6); the number of medication changes, including total amount of increase or decrease in dosages (item 7); the number of hospitalizations and hospital days for the year 1982 (item 8); and

the total number of days in attendance at the drop-in center from January 11, 1982 to January 25, 1983, except the days the center was not open, such as holidays, vacation, snow days, etc. (item 9).

A structured interview guide titled "The Follow-up Interview Guide" (Appendix D) was used to collect follow-up data. It contained nine questions developed by the researcher. The itesm are: degree of participation perceived by subject (item 1), the ideal amount of participation perceived by subject (item 2), favorite programs in the center (item 3), number of friends at the center and maintenance of friendship outside the center (item 4), supportiveness of people living with subject (item 5), additional social activities (item 6), and factors contributing to attendance rate (item 7-9).

Protection of Human Subjects

The study was approved by the Oregon Health Sciences University (OHSU) Committee on Human Research. Subjects were given a consent form (Appendix B) with an explanation of the proposed study. In the consent form, respondents were assured confidentiality. Information regarding the purpose and expectations of the study was given. Subjects were informed that they were free to choose not to participate and that their attendance at the drop-in center was not jeopardized. The consent forms were placed in a locked file until the study was completed.

Data Analysis Procedure

Descriptive statistics were used to compare characteristics of clients who participated in a drop-in center program versus those who did not. Frequencies were derived for each variable. Cross

tabulations were obtained for age, sex, ethnicity, marital status, diagnosis, type of living situation. Pearson Correlations were the procedures used to determine the magnitude and direction of associations between each combination of the variables relative to demographic characteristics, medication changes (numbers and amount of medication, increase and decrease of medication), hospitalizations (the number of times hospitalized and the number of days spent in the hospital), and participation. Significance was set at the $\leq .05$ level.

Comparisons were made between the three groups of participants on hospitalization variables and medication variables. A student's *t*-test was used as a test of proportion to test for differences between group means with significance set at the $\leq .05$ level. A one-way analysis of variance (ANOVA) was used to further assess the variability within and between groups. Significance was set at $\leq .05$ level.

The interview data were used to describe what factors participants identified as influencing their degree of participation in the drop-in center program. Frequencies were derived for factors identified, and comparisons were made between the three groups of participants.

CHAPTER III

RESULTS

The results are presented in four sections addressing each research question and related hypothesis: (1) On what demographic characteristics do frequent participants in a drop-in center program differ from infrequent participants and nonparticipants? (2) What factors do participants identify as influencing their degree of participation in a drop-in center program? (3) What is the relationship between degree of participation in a drop-in center program and readmission to a hospital? Hypothesis 1: The degree of participation in the drop-in center program will vary inversely with hospital utilization. (4) What is the relationship between degree of participation in a drop-in center program and usage of psychotropic medication? Hypothesis 2: The degree of participation in the drop-in center program will vary inversely with usage of psychotropic medication.

Findings for Research Question 1

> On what demographic characteristics do frequent participants in a drop-in center program differ from infrequent participants or nonparticipants?

Of the 36 clients who were followed throughout the year, 27.8% (n = 10) attended the drop-in center less than once a month (Group I), 36.1% (n = 13) attended more than once a month but less than once a week (Group II), and another 36.1% (n = 13) attended at least once a month or more (Group III). The mean number of days attended was 51.5 for the total sample, with the range from 1 to 174 days. Overall, the demographic characteristics of the three groups, regardless of the

degree of attendance, were quite similar. Characteristics of these three groups are shown in Table 1.

For the total sample, the mean age was 34.5 years, with a range from 21 to 61 years. The age differences between the three groups were not significant ($F = 2.17$, $df = 2$, $p < .065$). However, when Group I and Group III are compared, the findings suggest a trend toward frequent participants being younger than nonparticipants ($t = 1.91$, $df = 33$, $p < 0.064$). A more detailed age distribution of the total sample is given in Figure 1.

Of the 36 clients, 75% ($n = 27$) were male and 25% ($n = 9$) were female. It is to be noted that male participation in the drop-in center is much greater than its counterpart. However, the differences between the three groups of participants did not prove to be statistically significant ($X^2 = 3.15$, $p < .173$). The ethnic composition consisted of equal proportions of black subjects ($n = 18$) and white subjects ($n = 18$). In regard to ethnicity, the three groups also did not differ ($X^2 = .15$, $p < .926$).

Insofar as marital status is concerned, 72.2% ($n = 26$) of the subjects were single, 22.2% ($n = 8$) were divorced, 2.8% ($n = 1$) were widowed, and only 2.8% ($n = 1$) were married. Thus, the vast majority of the study population were not married; however, the difference between groups was not statistically significant ($X^2 = 2.67$, $p < .263$). In regard to the type of living situation, 22.2% ($n = 8$) of the subjects lived alone, 2.8% ($n = 1$) lived with spouse, 27.8% ($n = 10$) lived with parents or relatives, 2.8% ($n = 1$) lived with foster parents, and 44.4% ($n = 16$) lived with friends or others, mostly in

Table 1

Characteristics of Nonparticipants (Group I), Infrequent Participants (Group II), and Frequent Participants (Group III)

Variable	Group			N	%
	Group I n = 10	Group II n = 13	Group III n = 13	36	100
Sex					
Male	6	12	9	27	75
Female	4	1	4	9	25
Age (mean)	38.2	47.3	25.7		
Ethnicity					
White	5	7	6	18	50
Black	5	6	7	18	50
Marital Status					
Single	5	10	11	26	72.2
Married	1			1	2.8
Divorced	4	3	1	8	22.2
Widowed			1	1	2.8
Living Situation					
Alone	3	3	2	8	22.2
Live with Spouse			1	1	2.8
With Parents or Relatives	3	4	3	10	27.8
Foster Parents			1	1	2.8
Friends or Others	4	6	6	16	44.4

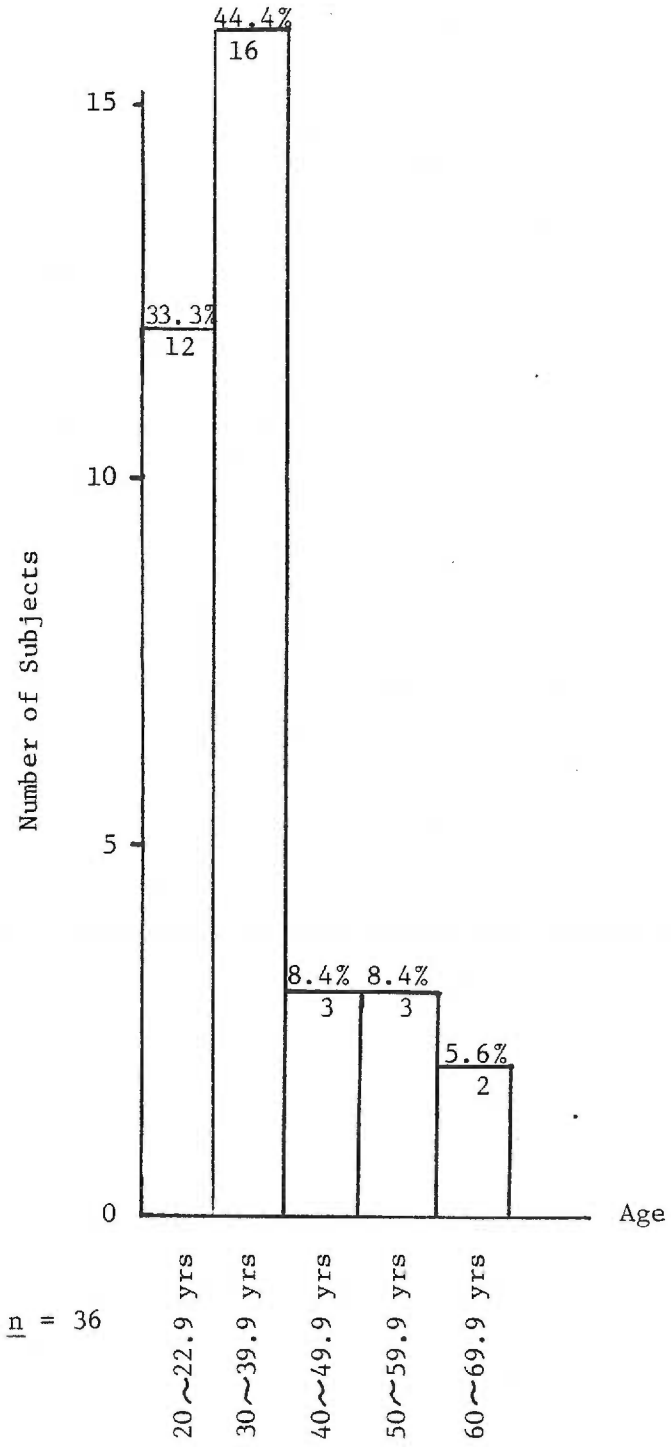


Figure 1. Age distribution of the study sample.

a room and board setting. It is evident that large numbers of the study sample lived with parents or friends. When living situations were collapsed into two categories, living alone vs. living with others, the three groups of participants did not differ ($\underline{X}^2 = .71$, $p < .702$).

There were eight different diagnoses in the review of the clients' charts: schizophrenia, paranoid type; schizophrenia, residual type; schizophrenia, chronic undifferentiated type; schizophrenia, disorganized type; schizoaffective disorder; manic-depressive illness; major depression; and psychosis with borderline mental retardation. Distribution frequencies of diagnoses are presented in Figure 2. The most frequent diagnoses were schizophrenia, chronic undifferentiated type (33.3%), ($\underline{n} = 12$) and schizophrenia, paranoid type (36.1%), ($\underline{n} = 13$). About 80% of the study subjects ($\underline{n} = 27$) were diagnosed to have schizophrenia.

In summary, demographic data suggested that clients who attended the drop-in center program tended to be young males. Otherwise, there were no group differences found in demographic variables based on the degree of participation.

Findings for Research Question 2

What factors do participants identify as influencing their degree of participation in a drop-in center program?

From the original sample of 36, 25 individuals (69.4%) were contacted by the researcher. Of these, six had been terminated by the clinic because of their failure to keep follow-up appointments. Two were out of town, and three were difficult to contact despite repeated efforts. Of the 25 clients who were contacted, 20 individuals (80%)

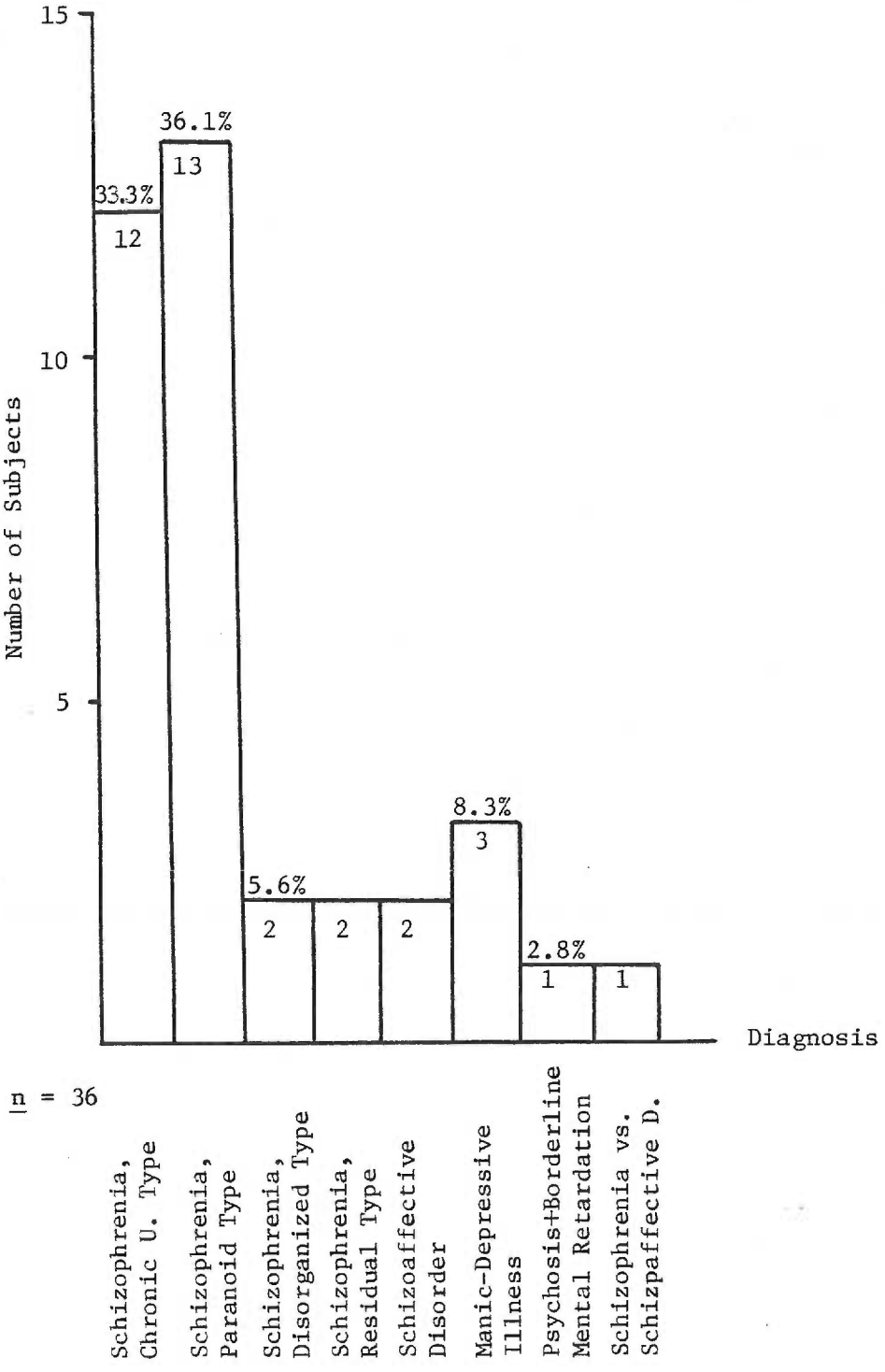


Figure 2. Distribution frequency of diagnosis.

agreed to be interviewed. Thus, the following findings reflect 55.6% of the original study sample. Dividing these respondents into groups according to their attendance, three responded and three refused in Group I, six responded and one refused in Group II, and eleven responded and one refused in Group III. It should be noted that the majority of Group III were able to be contacted (92.3%) and responded to the interview (84.6%), unlike the other two groups. A summary of findings that addresses each question in the Follow-Up Interview Guide (Appendix B) is described in this section.

Question 1: How Often Did You Attend the Drop-In Center in 1982?

Thirteen individuals reported their participation in the center as once a week or more. Three reported their participation as at least once a month but less than once a week. Another two reported participation of less than once a month. Two of the remaining respondents reported "unsure" because of difficulty remembering the past events. Comparing these with their actual attendance rates obtained from the daily attendance record, 11 clients reported accurately. Dividing these into groups, only one reported accurately in Group I, one in Group II, and nine in Group III. It is interesting to note that more clients in Group II reported their participation to be higher than the actual amount. Four of six clients in Group II reported, "once a week or more," i.e., the criteria for frequent participants (Group III). An unexpected finding was that this question was difficult for clients whose participation patterns were sporadic. Thus, inaccurate reports regarding participation may be, in part, explained by the irregular pattern of participation.

Question 2: How Often Would You Like to Attend the Drop-In Center?

Of the total respondents, thirteen reported once per week or more; two reported less than once a week; and the five remaining reported less than once a month. Dividing these into groups, it is evident that the majority of Group II reported a tendency of wanting to participate more than they had in the past, while some of Group III showed contrasting findings. Only one (33.4%) in Group I wanted to participate a little more, five in Group II (83.3%) desired to participate more; but in group III, 27.2% wanted less participation, i.e. less than once a month.

Question 3: What Programs in the Drop-In Center Did You Like?

All the clients in Group II and Group III reported at least one program, one client in Group I reported none. Free food and coffee was reported to be the most favored program by 17 clients. The second most frequently reported program, socialization and meeting people, was reported by 16 clients. This was followed by outings, games, and arts and crafts. Music was an unlisted program reported by one client. With respect to group differences in favored programs, the three groups appeared similar. The range between the most frequently reported program and the least frequent program was small.

Question 4: Did You Make Any Friends at the Drop-In Center?

Of the total respondents, 17 clients (85%) reported that they made friends. Dividing these into groups, two were in Group I, six were in Group II, and nine were in Group III. In response to the question, "How many friends did you make?", the mean number of friends for the total respondents who made friends was 5.4 friends, excluding one who

reported "unsure." Dividing these into groups, Group I reported a mean of 3.75 friends, Group II reported 5.4 friends, and Group III reported 7 friends. In response to the question, "Did you stay in contact with these friends outside the center?", ten (62.5%) reported that they stayed in contact. Dividing these into groups, only one was in Group I (50%), four were in Group II (66.7%), and five were in Group III (62.5%). Thus, slightly fewer clients in Group III maintained contact with friends than clients in Group II, although they reported making more friends than the others.

Question 5: Did the People Who Lived With You Last Year Support Your Participation in the Drop-In Center?

Of the total respondents, 13 clients (65%) reported support by people with whom they lived. Between the three groups, none reported to have support in Group I, four (66.7%) reported positive support in Group II, and nine (81.8%) reported positive support in Group III. Thus, Group III reported the most support, while Group I reported none.

Question 6: Which of the Activities Listed Below were you Involved in During 1982?

Of the total respondents, 11 individuals (55%) reported no activities outside the drop-in center. Nine reported that they were involved in activities such as work, job training, school, and other social clubs. One person reported involvement in church activities which was not listed in the interview guide. Dividing into groups, none in Group I, four in Group II (66.7%), and five in Group III (45.5%) reported outside activities.

Question 7: If You Were Involved in Any of the Activities in 1982, Did They Make it Difficult for You to Attend the Center?

Of the total of nine who had activities outside the center, three (33.3%) reported that activities interfered with their attendance at the center. Dividing these into groups, only one in Group II and two in Group III reported interference. Thus, the lack of participation in the center did not seem to be due to activities outside the center.

Question 8: What was the Main Reason You Came to the Drop-In Center?

The reason that clients reported were categorized as follows: seven reported "socialization and making friends," five reported "something to do," three reported "being asked to go by others," two reported "learning experience," two reported "recreation," and two reported "free meals." Thus "socialization" was the main reason reported by the largest number of clients. However, there appeared to be no major differences between groups in their reasons.

Question 9: What was the Main Reason You Did Not Come to the Center?

Only 12 (60%) answered this question. Group III clients (n = 6) reported the following reasons: "to go to other socialization programs," "problems with transportation," "to avoid arguments with others," "I wasn't feeling well," "just wanted to stay home," and "when I smoked marijuana." Group II clients (n = 3) reported: "hospitalization," "something was on my mind which made me confused," "didn't feel like it," and "I was ill." Group I clients (n = 3) reported: "age differences because of too many young people," "I wasn't feeling well." There was no group differences in reasons why they did not come to the

center. The majority reported different reasons except for "being ill."

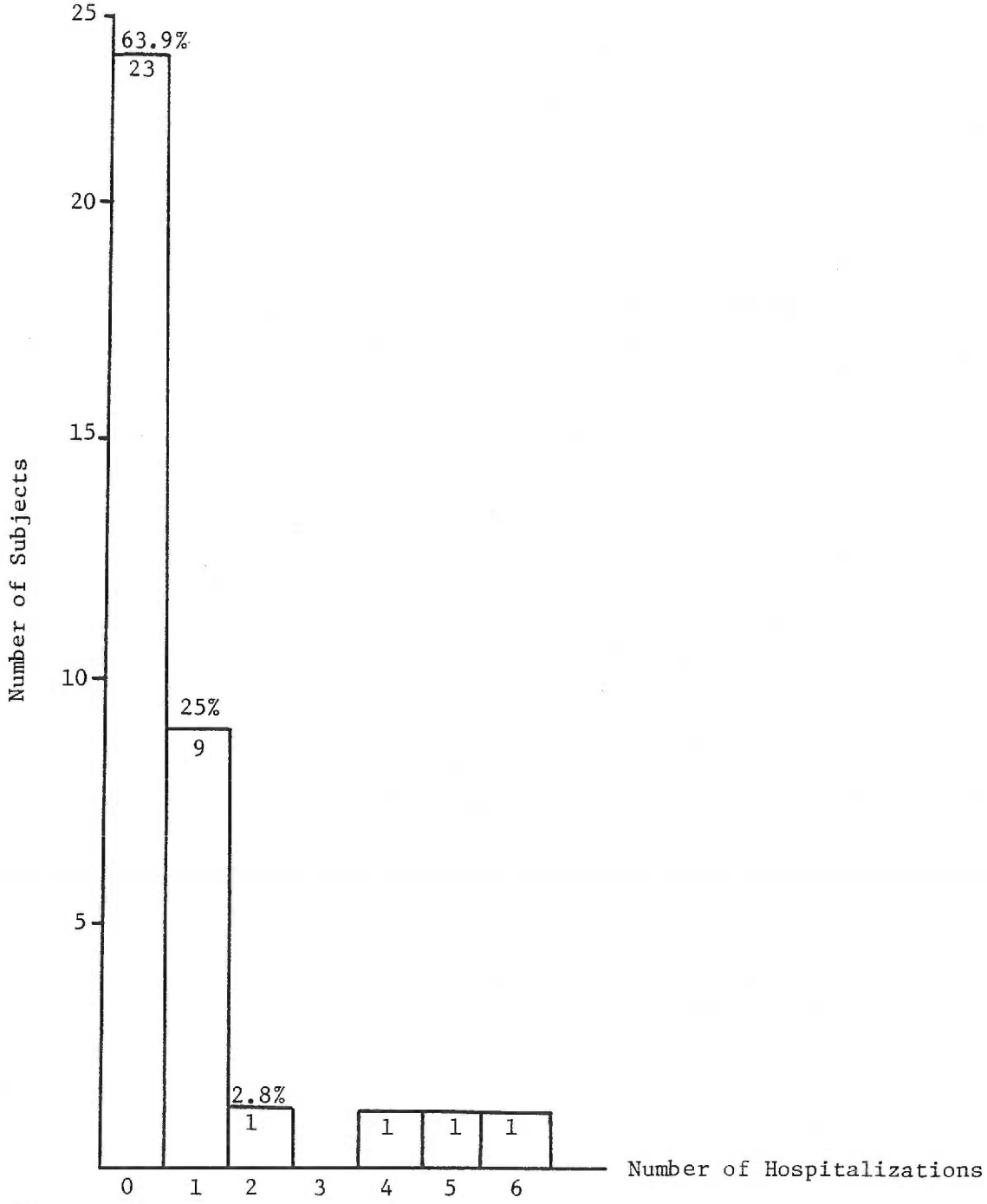
Findings for Research Question 3

> What is the relationship between degree of participation in a drop-in center program and readmission to the hospital?
> Hypothesis 1: The degree of participation in the drop-in center program will vary inversely with hospital utilization.

The range of hospitalizations was from zero to six. The frequency distribution for number of hospitalizations is represented in Figure 3. Of the total subjects, 63.9% (n = 23) had no hospitalizations, 25% (n = 9) had one hospitalization, and 11.2% (n = 4) had two to six hospitalizations.

In Table 2, the means and standard deviations of the three groups of participants based on hospitalization variables are shown. Of the groups, Group I had the highest frequency of hospitalizations followed by Group II and then Group III. However, a one-way analysis of variance indicated no statistically significant differences between degree of participation and number of hospitalizations (F = 1.41, df = 2, p < .129). However, a one-tailed t-test indicated differences between Group I and Group III in the hypothesized direction (t = 1.63, df = 33, p < .056). In other words, those clients who did not attend the drop-in center tended to be hospitalized more often than frequent participants. The number of hospitalizations was significantly correlated with the ethnicity variable. Black clients had more hospitalizations than white clients (r = -.36, p < .034).

The mean number of hospitalization days was 22.3, with a range from 3 to 189 days. The frequency distribution of hospitalized days



n = 36

Figure 3. Distribution for the number of hospitalizations.

Table 2

Differences in Hospitalization Between Groups of Nonparticipants (Group I), Infrequent Participants (Group II), and Frequent Participants (Group III)

Variable	Group					
	Group I $n = 10$		Group II $n = 13$		Group III $n = 13$	
	Mean	SD	Mean	SD	Mean	SD
Number of Hospitalizations[a]	1.2	1.81	.85	1.68	.23	.44
Days of Hospitalization[b]	44.7	66.31	26.4	54.32	.9	1.80

Note:

[a] Between groups, $F = 1.41$, $df = 2$, $p < .129$

Between Group I and Group II, $t = .597$, $df = 33$, $p < .278$

Between Group II and Group III, $t = 1.11$, $df = 33$, $p < .137$

Between Group I and Group III, $t = 1.63$, $df = 33$, $p < .056$

[b] Between groups, $F = 2.46$, $df = 2$, $p < .051$

Between Group I and Group II, $t = .71$, $df = 17.2$, $p < .244$

Between Group II and Group III, $t = 1.69$, $df = 9$, $p < .059$

Between Group I and Group III, $t = 2.09$, $df = 12$, $p < .034$

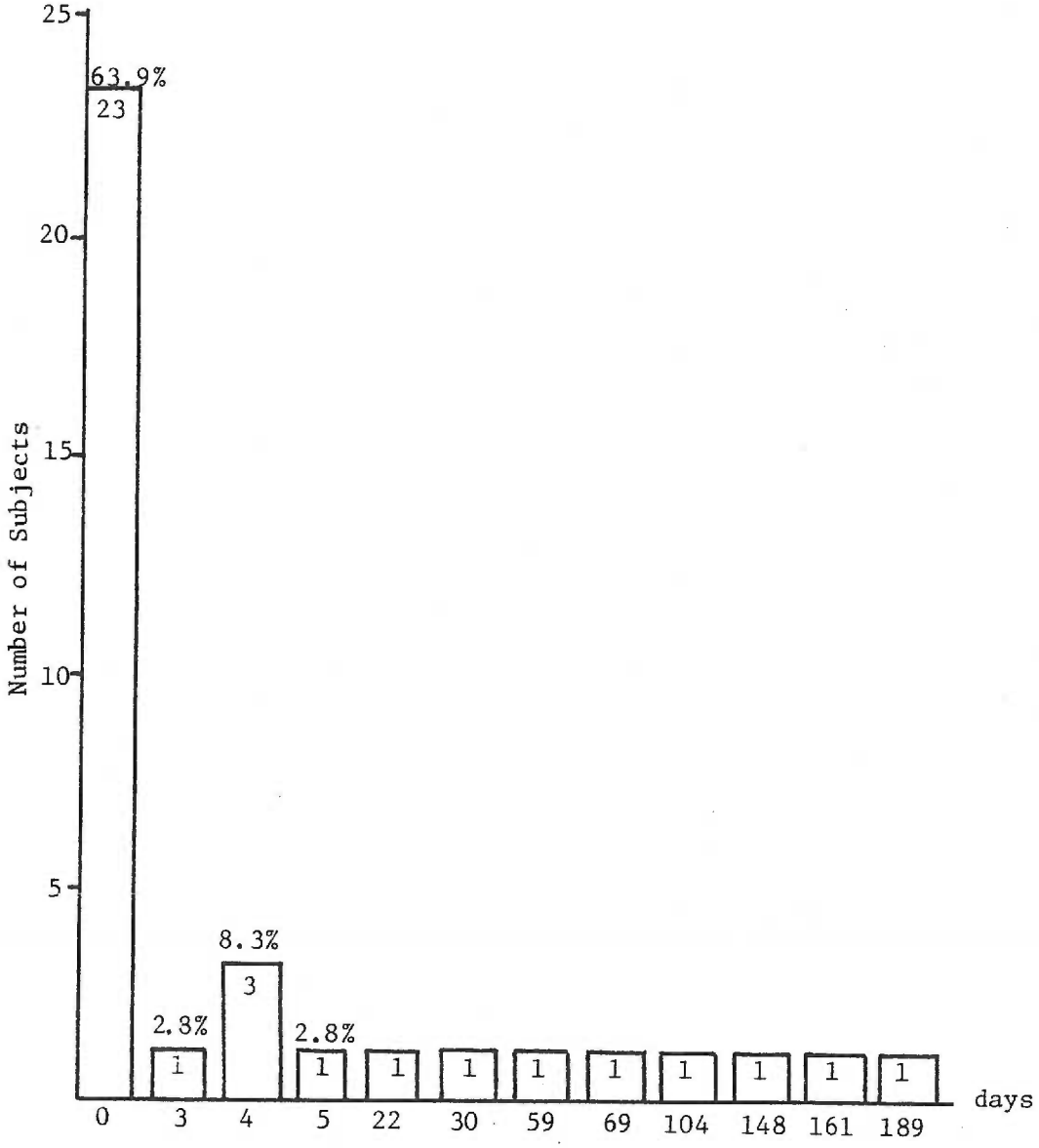
is shown in Figure 4. As shown in Table 3, Group I had the highest mean days of hospitalization, followed by Group II and then Group III. An analysis of variance showed a trend of differences between the three groups ($F = 2.46$, $df = 2$, $p < .051$). Further, paired comparisons were used to determine group differences. Contrasting Group I with Group III, a significant difference in the length of hospital stay was found between frequent participants and nonparticipants ($t = 2.087$, $df = 33$, $p < .034$, one-tailed test). In short, those clients who did not attend the drop-in center tended to be hospitalized longer than frequent participants. Thus, this finding supports the hypothesis. Also, there was a statistically significant correlation between hospital days and number of hospitalizations ($r = .85$, $p < .002$). Clients who were hospitalized more often also tended to be hospitalized longer.

Findings for Research Question 4

> What is the relationship between degree of participation in a drop-in center program and usage of psychotropic medication? Hypothesis 2: The degree of participation in the drop-in center program will vary inversely with usage of psychotropic medication.

It was necessary to standardize different antipsychotic drugs to be equivalent to one type of drug because they were different in potency per milligram. Cain and Cain (1979) provided equivalent doses of anti-psychotic drugs which guided the medication management of the clinic and was used in the study. For example, if 100 mg of Thorazine is used as a standard, the equivalent dose of the other common anti-psychotic drugs is as shown in Appendix E.

However, medications such as Lithium, antidepressants, and sedatives were not convertible to Thorazine equivalents. Due to the



n = 36

Figure 4. Distribution for the length of hospital stay.

difficulty in comparing dosages of these types of medication, only antipsychotic medications were included and measured equivalent to Thorazine.

Of the 36 subjects, three persons were excluded because of incomplete medication information. For the remaining 33 subjects, the mean number of medication changes was 3.97, with a range of 1 to 12 changes (see Figure 5). Nine percent of the subjects (n = 3) had no medication changes and 91% had medication changes. Table 3 shows the mean changes of medication for each group. The three groups did not differ statistically in numbers of medication changes (F = .11, p <.449).

For the number of increases alone as shown in Figure 5, the mean change was 1.67 increases, with a range of one to six increases. For the sample, 33.3% (n = 11) had one increase and 39.4% (n = 13) had two to four increases. The mean increase was 2 for Group I, 1.4 for Group II, and 1.7 for Group III. There were no significant differences between the three groups in number of medication increases (F = .28, p <.381).

The number of medication decreases had a mean of 2.3 decreases, with a range of 1 to 7 decreases (see Figure 5). For the sample, 27.3% (n = 9) had one decrease, 24.2% (n = 8) had two decreases, 18.2% (n = 6) had four to seven decreases. As shown in Table 3, the mean medication decreases were almost identical between the three groups. Again, significant differences for the number of medication decreases were not found between the groups (F = .01, p <.495). However, there was a statistically significant correlation between decreases and increases of medications (r = .72, p <.002). Those clients who had frequent medication decreases also had frequent medication increases.

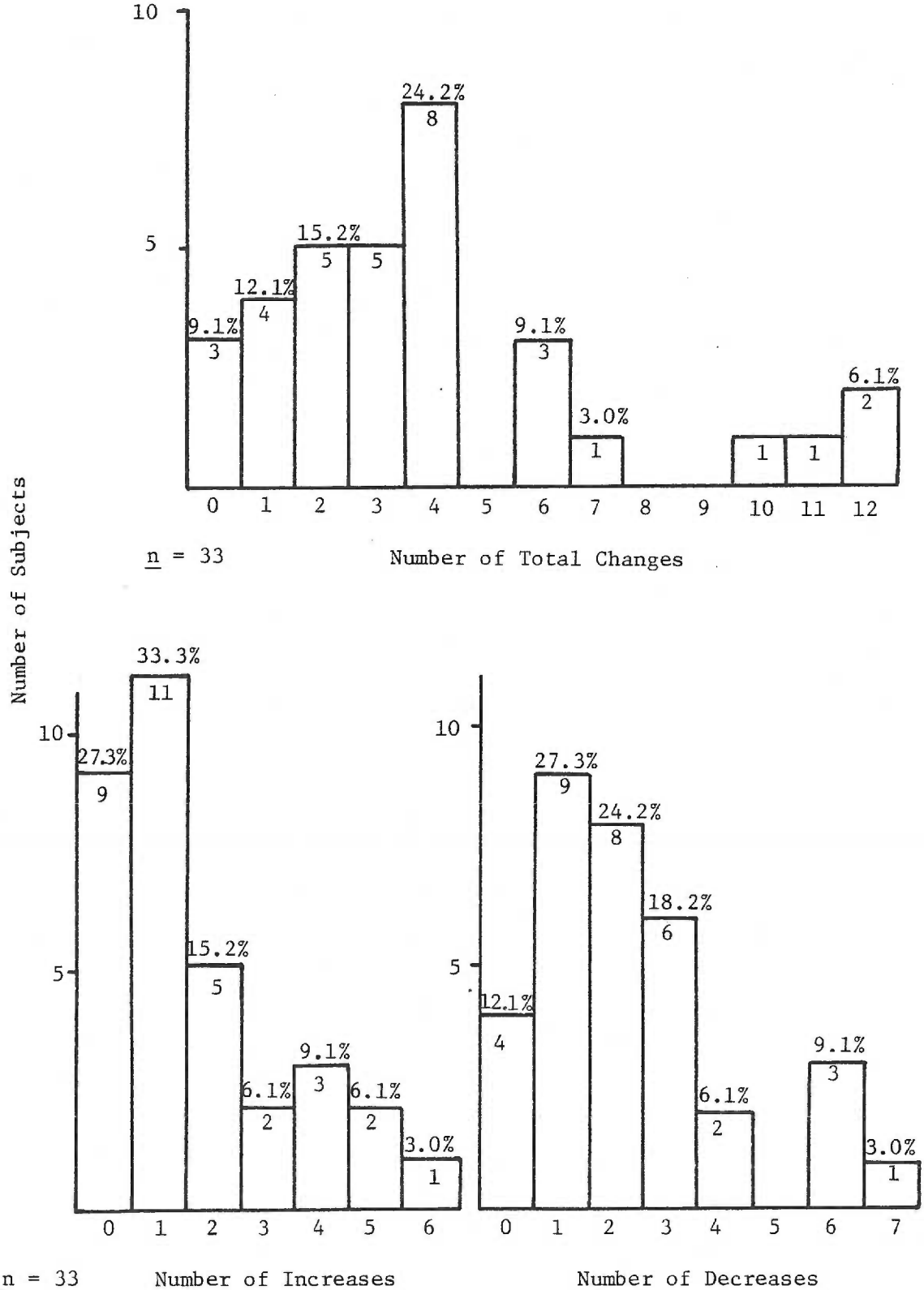


Figure 5. Distribution of total medication changes

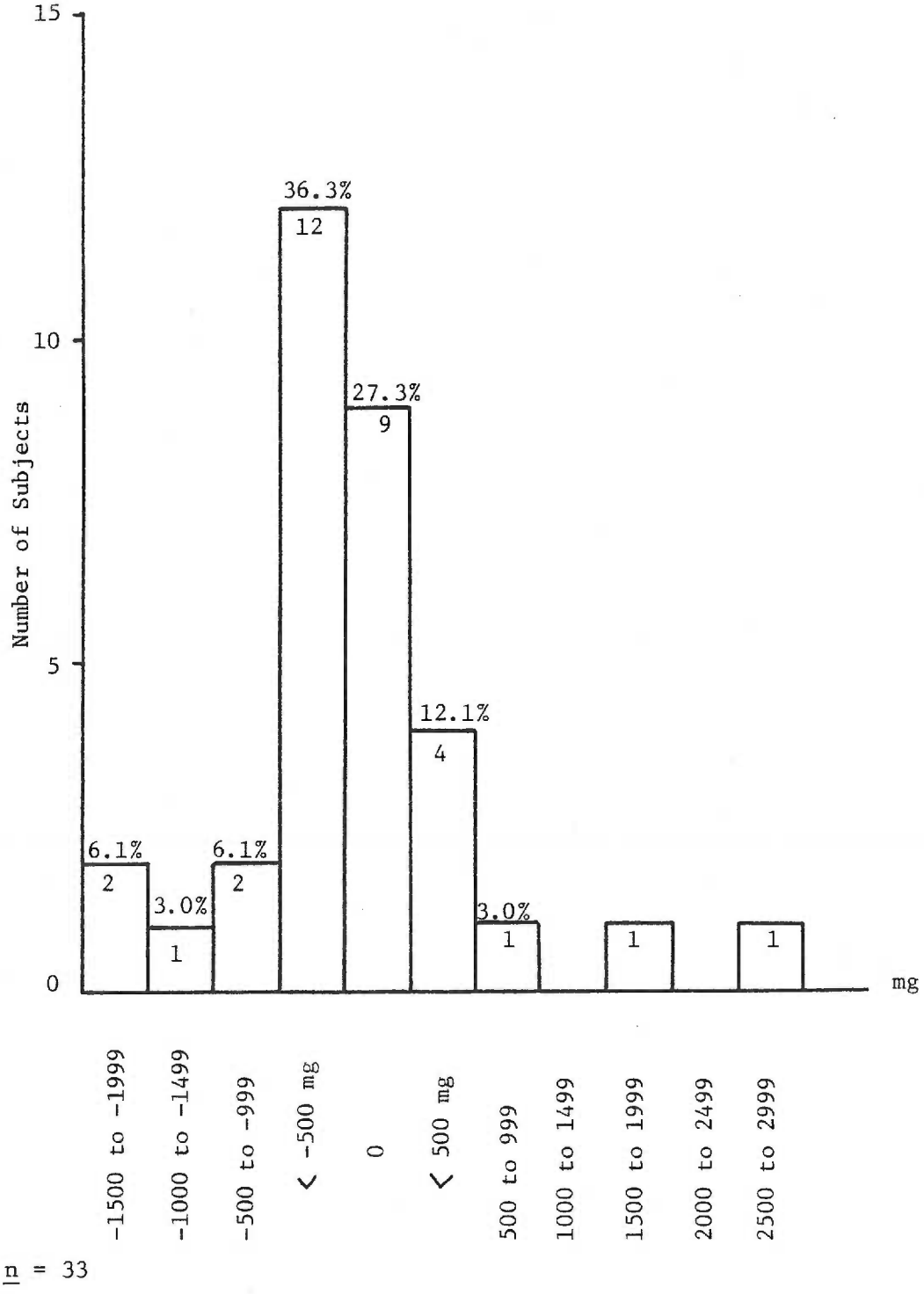
Table 3

The Mean, Standard Deviation, and Range of Medication Changes Between Groups

Variable	Group								
	Group I n = 8			Group II n = 12			Group III n = 13		
	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range
Number of Medication Changes	4.38	3.16	2 - 11	3.67	3.17	0 - 12	4.0	3.65	0 - 12
Number of Increases	2	1.6	0 - 5	1.4	1.9	0 - 6	1.7	1.65	0 - 5
Number of Decreases	2.38	1.77	1 - 6	2.25	1.66	0 - 6	2.3	2.18	0 - 7
Amount of Medication Change (mg)	-172	642	-1650 - 500	-157	996	-1500 - 2500	54	535	-600 - 1700

Total amount of medication change had a mean of 77 mg decrease, with a range of 1650 mg decrease to 2500 mg increase (see Figure 6). For the total sample, 51.5% of clients had decreases in dosage which ranged from 25 mg to 1650 mg, whereas the other 21.2% (n = 7) had increases which ranged from 80 mg to 2500 mg. Table 4 shows the mean amount of change for each group. There were no significant differences found between the three groups based on the amount of change (F = .324, p <.363).

The hypothesis of changes in medication variables was not supported. There were no significant differences found between the three groups of participants based on medication changes. The insignificant findings in medication variables may be due in part to the difficulty in converting different types of psychotropic medication into Thorazine equivalents.



n = 33

Figure 6. Distribution for the total amount of medication changes.

CHAPTER IV

DISCUSSION

The purpose of this study has been to examine the extent to which changes occur in the usage of psychotropic medication and hospitalization as a function of participation in a drop-in center program. Further, it was the purpose of this study to explore the clients' perception of the factors which might have contributed to their participation in the drop-in center program.

The findings were based on a small sample from the total number of participants of the drop-in center program. From the original sample of 61, information on 36 subjects was available for the main part of the study and 20 subjects for the follow-up interview. Because of the nonrandom method of selection and the possible non-representative nature of the sample, the findings of this study may not be generalized to the total population of the drop-in center program. Thus, the conclusions may only be taken as suggestions. The discussion will focus on findings for the four research questions, limitations, implications for nursing practice, and recommendations for future study.

Discusion of Findings for Research Question 1

Although no significant differences between groups were found on demographic variables, there was a trend for the frequent participants to be younger than other groups. Thus, clients using the drop-in center appear to be largely a group termed the "young chronics" in the current community mental health literature (Egri & Caton, 1982; Pepper et al., 1981). The increase in the number of young chronic patients has resulted from the deinstitutionalization movement and

population increases in the generation born after World War II (Bachrach, 1982).

The majority of the subjects were single, a finding consistent with the literature. Although no group gender differences were found, male participation in the drop-in center is more apparent than female participation. These findings are also consistent with past studies of young chronic groups (Egri & Caton, 1982; Pepper et al., 1981). This pattern was also noted in the previous study of the drop-in center by Maghrak (1982). Gender differences in the client populations in the community mental health system is not known. To explain male attendance at the drop-in center, Maghrak (1982) suggested that drop-in types of socialization programs are more appealing to male clients whereas more structured social programs are preferred by females. The ethnic composition was equally divided between black and white subjects. The black population in this study is expected to be higher than other studies in the literature since the drop-in center is located in the black community.

The majority of the subjects were diagnosed as schizophrenic. Thus, the drop-in center serves the client population who are described in the literature as lacking motivation and skills to meet their own needs in daily living. These young client groups have more problems in daily living skills, social isolation, psychiatric symptoms, and alcohol and drug abuse than the older clients (Sheets et al., 1982). To meet social needs, the drop-in socialization program seems appropriate, providing the opportunity to socialize with others and to develop skills necessary in daily living.

The large number of clients living with parents or friends in a room and board situation may reflect the fact that no group homes exist in this geographic area. Lamb and Goertzel (1972) note that room and board settings and family-care homes, as low expectancy settings, are not likely to direct their efforts toward patient's social-interpersonal and vocational needs. Thus, these patients need opportunities for involvement in community activities including social recreational activities, skill training programs, and drop-in socialization programs.

No attempt was made to measure amount of annual income, distance of the living situation from the drop-in center, and job status. According to Maghrak (1982), distance of the living situation was not associated with the degree of participation at the center. Most of the clients who participated at the center were known to be poor and unemployed, receiving Welfare or Social Security Income (Maghrak, 1982).

In summary, the characteristics of this study sample can be described as male, single, and young. The majority had a diagnosis of schizophrenia, and they tended to live with family or in a room and board situation. Demographic characteristics of the present sample did not differ significantly from the previous sample used by Maghrak in 1982. Both studies revealed no significant differences in demographic variables for the degree of participation in a drop-in center program. However, the present study reflects more younger people in the sample than the previous study.

Discussion of Findings for Research Question 2

This research question focused on clients' perceptions about the drop-in center program and factors which might have contributed to their degree of participation. Of the three groups, frequent participants showed more willingness to be interviewed. This most likely reflects easier access to these subjects because the majority of them were still attending the drop-in center at the time of interview. Further, their awareness of the importance of the study might have contributed to higher participation. Additionally, the researcher was known by most of the frequent participants because of her previous clinical placement at the center. Only three nonparticipants responded to the interview.

Of particular interest is that Group II reported their participation to be higher than the actual amount. This may be explained in part by their sporadic pattern of participation. For a few clients, the question itself was difficult to answer because of their irregular pattern of participation. Group II also indicated a desire to participate more than they had in the past. Thus, more encouragement directed toward this group by clinic and drop-in center staff may increase their participation.

It is not surprising to find that the most frequently reported programs were "free food and coffee" and "socialization and meeting people." Of interest is that 85% of the respondents reported that they made friends at the center, and 62.5% maintained contact with these friends outside the center. According to research literature, network characteristics of persons with psychiatric disorders are fewer in size, fewer in intimate relationships, and unstable (Cohen & Sokovsky, 1978;

Pattison et al., 1975; and Tolsdorf, 1976). Thus, exploring whether or not clients made more friends and maintained contact with them outside the center was an attempt to identify if participation in a drop-in center program expanded clients' social networks. The between group differences are somewhat confusing in that more frequent participants made friends but fewer maintained contact with them compared to infrequent participants.

Regarding perceived support from others, it should be noted that Group III reported the most support by the people with whom they lived. Thus, the presence of perceived support seems to be a factor which contributed to the participation of clients in the center. However, activities outside the drop-in center did not seem to influence their participation at the center. In general, there was no consensus on the reasons clients gave for not attending the center. Each individual reported different reasons except for illness. The reasons which seemed to interfere with participation were lack of transportation, age difference due to increase in number of younger participants, arguments with other participants, and participation in other socialization clubs.

Discussion of Findings for Research Question 3

The relationship between the degree of participation and the utilization of the hospital was explored. If an individual's functioning is improved by various social treatments in a supportive environment, the chances for the individual to remain in the community should be greater. Overall, the majority of clients who attended the drop-in center stayed out of the hospital for the 12 month period between January 1982 and January 1983. The findings support an

association between participation in the drop-in center and length of stay in the hospital. Those clients who attended the socialization program more frequently spent fewer days in the hospital than less frequent participants. Also, frequent participants tended to be hospitalized less often than infrequent participants. These positive outcomes of the study are similar to other findings in the literature (Sheldon, 1964; Beard et al., 1978). For example, Sheldon (1964) found that clients who received psychiatric after-care regardless of the type of care (i.e., day center care or outpatient care) had lower readmission rates to the hospital than clients who had no psychiatric after-care. In the study, shorter hospital stay was also evident by clients who had psychiatric after-care.

Further, the findings from this study differ from Maghrak's (1982) findings in which no significant association between hospitalization variables and degree of participation were found. Also, both the mean number of hospitalizations and of days of hospitalization were smaller for the present study groups. Overall, participation in the drop-in center for the sample increased from that reported for the previous sample. The difference in the findings between the two studies may be explained by the stabilization of the program since the previous study. Changes in the drop-in center in the first year of operation, that is, changes in locations and directorship, may have influenced the stability of the program.

Discussion of Findings for Research Question 4

For the purpose of this study, changes in psychotropic medications (including increases and decreases of number and amount of medications)

were documented to observe whether or not participation in the drop-in center program helped clients to reduce their need for medication. It is expected that the drop-in center as a socialization program would improve clients' functional ability in community living, thus, eventually decreasing the use of psychotropic medication. The study findings, however, failed to support the hypothesis that there is a relationship between the degree of the drop-in center participation and utilization of medication.

All of the 36 subjects were receiving some type of psychotropic medications. No significant differences were found when decrease or increase of medications was compared with the three different levels of participation. These findings are similar to those of Maghrak (1982). In the current study, the total amount of medication change was measured in addition to the number of medication changes. Again, there was no relationship between amount of medication change and the degree of attendance at the center. The findings, however, suggest that those who have medication increases also tend to have decreases. Also, no significant relationships were found between medication adjustments and the number of hospitalizations or days of hospital stay. These findings differ from an earlier study in which shorter hospital stays were associated with medication and social treatment (Guy et al., 1969), but are congruent with a recent nursing study reported in the literature. Although they included other outcome variables, Slavinsky and Krauss (1982) used similar outcome measures to compare medication usage by CMI clients in a nursing social support

program and CMI clients in a control group. Their study did not find differences in medication usage between the two groups.

Several explanations may account for the outcomes of this study regarding medication usage. The drop-in center, even though a low-key socialization program, could be overwhelming for some disabled clients. Other extraneous variables such as stressful home situation and interactions with family members, perhaps lead to increased psychiatric symptoms, and then to increased requirements for medication. In changing psychotropic medications to Thorazine equivalents, some medications such as antidepressants and Lithium were excluded due to incomparability with psychotropics. One might expect this methodological problem to account for the insignificant findings. Another possibility is that prescribed dosages written in the charts may not be the same dosages that the subjects take. In general, research that demonstrates a relationship between social treatment and medication usage is inconclusive.

Limitations

Since only a small convenience sample from the total population of the drop-in center was used, generalizing the findings to other settings is limited. Data collected from the clients' record at the clinic and from the follow-up interview were assumed to be valid. Information on other background characteristics such as living distance from the center, length of illness, and number of previous hospitalizations were not included. Only three nonparticipants consented to the follow-up interview. Thus, nonparticipants' perceptions about the center and reasons for not attending are limited.

A methodological flaw in defining participation may be that all visits to the center were counted regardless of the actual amount of time the client spent at the center. Different outcome findings may have been obtained with a different definition of participation (e.g., intensity, duration). Further, limiting the outcome measure to rehospitalization precluded other possible positive outcome information of clients (e.g., satisfaction, social competence, and reduced psychiatric symptoms).

The validity of medication information is subject to question. It was impossible to explore whether clients took medication or not. As another methodological flaw, changing psychotropic medication equivalence to Thorazine to compare dosages may account for the insignificant findings in medication variables.

Nursing Implications

For the drop-in center under study, the results suggest the following actions: the development of a well-planned orientation to ease client entrance into the program, the assessment of the social environment to analyze the degree of distress imposed upon a client, and a focus on improving interpersonal skills needed by clients to expand their social networks.

Several nursing implications can be drawn as a result of this study. Mental health nurses need to assess the nature and strength of the support that clients receive from the community in which they live. Mental health nurses could make contact with family members and room and board operators to facilitate their support for clients' participation in community activities. Additionally, more active participation

in developing and maintaining socialization programs by mental health nurses could benefit the increasing numbers of young chronic patients.

Recommendations for Further Study

Study findings suggest a number of positive modifications and extensions for further research. Since the sampling method of the present study is limited, replication of the study with a similar drop-in socialization center in a different geographical location would be helpful. To make more distinct comparisons, future studies may compare participants of the drop-in center with clients at the clinic who received only medication tratement. The degree of participation should be carefully defined including other levels in participation such as duration and intensity.

The impact of social treatment should be studied using additional measures such as client satisfaction with the program, symptom change, improvement in social network, and coping strategies. Studies that focus on the relationship between these sets of variables and the hospitalization variables are needed to increase both the effectiveness of the service program and the validity of program evaluation. Other studies could focus on the relationship between the degree of participation and support that clients perceived from their networks. In addition, studies might explore the cost effectiveness of programs comparing other social programs with the drop-in center socialization program. Further, the treatment effectiveness of the drop-in center should also be compared with other social programs.

Summary

Maintenance of the chronically mentally ill population in the community is a major mental health service goal. Sustenance services such as socialization programs provide a milieu for assisting the chronically mentally ill to meet their needs for social activity in a supportive environment. This study examined the extent to which changes occur in client utilization of psychotropic medications and hospitalization as a function of participation in a drop-in center socialization program. The literature suggests that socialization programs reduce the need for psychotropic medications and hospitalization because they enhance the chronically mentally ill's adjustment to community living.

Using pre-existing and survey data, the study was a retrospective, exploratory study. The study sample consisted of clients who attended the drop-in center at least once during the early months of 1982 (January 11 to February 22). Thirty-six subjects were followed throughout the year until January 1983. Pre-existing data were obtained from daily attendance records at the drop-in center, and clients' charts from the community mental health clinic. In an attempt to gain insight into factors which might have contributed to their degree of participation, each client was interviewed briefly by the researcher using a structured interview guide. Results were analyzed using appropriate statistical methods. Significance level was set at $\leq .05$.

No significant differences were found between demographic variables and the degree of participation in the drop-in center program. However, male participation in the center was higher than female participation.

There was a trend for the frequent participants to be younger than infrequent participants.

A statistically significant relationship between participation in the drop-in center program and length of stay in the hospital in the hypothesized direction was found. However, there was no significant relationship found between the degree of participation and utilization of medication. Results of the follow-up interview revealed that the majority of clients came to the center to socialize with others and made friends with whom they maintained contact. Their degree of participation seemed to be influenced by the presence of perceived support from the people with whom they lived.

In conclusion, the results of the study indicate that mental health nurses need to assess the nature and strength of the support that clients receive from the community in which they live. Additionally, more active participation in developing and maintaining socialization programs by mental health nurses could benefit the increasing numbers of young chronic patients.

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APPENDICES

APPENDIX A

Correspondence from Clinic Director

MULTNOMAH COUNTY OREGON

DEPARTMENT OF HUMAN SERVICES
HEALTH SERVICES DIVISION
5022 N. VANCOUVER AVENUE
PORTLAND, OREGON 97217
(503) 248-5183

DENNIS BUCHANAN
COUNTY EXECUTIVE

TO: WHOM IT MAY CONCERN

SUBJECT: YOUNGSOOK KIM

FROM: RAYMOND ALLEN, R.N.
Clinic Director

DATE: August 23, 1983

Youngsook Kim has been given approval by me to use Mental Health client records to conduct research associated with her graduate thesis work. The focus of her thesis is on evaluating mental health care received by clients at the Northeast Primary Care Center (5022 N. Vancouver, Portland, Ore.) and to review outcomes of that care.

The requirements which I have imposed in granting permission to use client records are the following:

1) That a copy of the research design be provided to me in advance of the study;

2) That the research design ensure client confidentiality; and

3) That a copy of pertinent findings be shared with me.

RA:ssh

cc: Bob Pallari
Nemie Dario, M.D.
Billi Odegaard, Director

APPENDIX B

Informed Consent

The Oregon Health Sciences University

School of Nursing

Informed Consent

Title of the study: Evaluation of a drop-in center program for the chronically mentally ill: A follow-up study.

Responsible investigator: Youngsook Kim, R.N., B.S. Tel: (503) 245-5845.

I,_____, agree to be a subject in the study mentioned above. This study is to determine if there is a relationship between clients' participation in a drop-in center program and usage of medication and rehospitalization. The study is being conducted under the supervision of Dr. Beverly Hoeffer, R.N., D.N.Sc.

I understand that if I agree to be in this study, I will answer some questions about attending the drop-in center. This will involve about 15 minutes of my time. I may ask for information or not answer any question if I experience any discomfort regarding the questions.

I understand that I may not receive benefit directly from participating in the study; however, others may be helped by the results of this study in the future.

I understand that confidentiality will be maintained. My name will not be associated with my answers or in any report of the project.

I understand that I may refuse to participate or withdraw from this study at any time without affecting my relationship with, or treatment at, the Oregon Health Sciences University, the drop-in center, or the Northeast Primary Care Center.

Date _____

Signature of Subject _____

APPENDIX C

Client Information Form

Client Information Form

1. Record Birthdate:

   Month _____ Year _____

2. Record Sex:

   Male = 1

   Female = 2

3. Record Ethnicity:

   White = 1

   Black = 2

   Other = 3

4. Record Marital Status:

   Married = 1

   Single = 2

   Divorced = 3

   Separated = 4

   Widowed = 5

5. Record diagnosis as listed in chart:

   Schizophrenia Chronic Undifferentiated Type . . . . = 1

   Schizophrenia Paranoid Type . . . . . = 2

   Schizophrenia Disorganized Type . . . . . = 3

   Schizophrenia Residual Type . . . . . = 4

   Schizoaffective Disorder . . . . . = 5

   Manic Depressive Illness . . . . . = 6

   Psychosis . . . . . = 7

   Major Depression . . . . . = 8

   Borderline Mental Retardation plus one of the above = 9

6. Record Type of Living Situation:

   Alone = 1

   Live with spouse = 2

   Parents or relatives = 3

   Foster parents = 4

   Friends or others = 5

7. Record Neuroleptic Medication Changes:

   A. Number of medication changes: increase _____ decrease _____

   B. Amount of increase (equivalent to Thorazine) _____

      Amount of decrease (equivalent to Thorazine) _____

8. Record:

   A. Number of hospitalizations in 1982 _____

   B. Number of hospital days in 1982 _____

9. Record the total number of days in attendance at the drop-in center _____

APPENDIX D

Follow-up Interview Guide

Follow-up Interview Guide

1. How often did you attend the drop-in center in 1982?

   Less than once a month _____

   At least once a month but less than once a week _____

   Once per week or more _____

2. How often would you like to attend the drop-in center?

   Less than once a month _____

   At least once a month but less than once a week _____

   Once per week or more _____

3. What programs in the drop-in center did you like?

   Socialization and meeting people _____ Games _____ Outings _____

   Arts and crafts _____ Free food and coffee _____ Other _____

   None _____

4. Did you make any friends at the drop-in center?

   Yes _____ No _____ If yes, how many _____ Did you stay in contact with these friends outside the center? Yes _____ No _____

5. Did the people who lived with you last year support your participation in the drop-in center? Yes _____ No _____

6. Which of the activities listed below were you involved in during 1982?

   Job training _____ School _____ Work _____ Other social clubs _____

   None _____ Other _____

7. If you were involved in any of these activities in 1982, did they make it difficult for you to attend the center? Yes _____ No _____

8. What was the main reason you came to the drop-in center?

   I came because _____

9. What was the main reason you did not come to the center?

   I did not attend because _____

APPENDIX E

Equivalent Doses of Antipsychotic Drugs

Equivalent Doses of Antipsychotic Drugs

(Adapted from Cain and Cain, 1979)

Generic Name	Some Brand Names	Size Dose Equiv. to 100 mg Thorazine
Fluphenazine injectable	Prolixin decanoate	1 mg
Fluphenazine tablets	Prolixin permitil	2 mg
Haloperidol	Haldol	2 mg
Thiothixene	Navens	4 mg
Molindone	Lidone, Moban	10 mg
Perphenazine	Trilafon	10 mg
Loxapine	Loxitane	10 mg
Piperacetazine	Quide	11 mg
Prochloperazine	Compazine	15 mg
Mesoridazine	Serentil	55 mg
Chlorprothixene	Taractan	100 mg
Thioridazine	Mellaril	100 mg
Chlorpromazine	Thorazine	100 mg

AN ABSTRACT OF THE THESIS OF

YOUNGSOOK KIM

FOR THE MASTER OF NURSING

DATE OF RECEIVING THIS DEGREE: June 1984

TITLE: EVALUATION OF A DROP-IN CENTER PROGRAM FOR THE CHRONICALLY MENTALLY ILL: A FOLLOW-UP STUDY

APPROVED: _____
BEVERLY HOEFFER, R.N., D.N.Sc. THESIS ADVISOR

This study is a follow-up and extension of a study conducted by Maghrak (1982) regarding the characteristics of participants and non-participants in a drop-in center program for chronically mentally ill (CMI) clients. The present study examined the extent to which changes occurred in client utilization of psychotropic medications and hospitalizations as a function of participation in a drop-in socialization program. It was expected that socialization programs enhance coping skills for the CMI to maintain community living, thus, reduce the need for psychotropic medications and hospitalization.

This is a retrospective, exploratory study using pre-existing and survey data of clients who attended the drop-in center at least once during the early months of 1982 (January 11 to February 22). Thirty-six subjects were followed throughout the year until January 1983. Data was obtained from daily attendance records at the drop-in center, and clients' charts from the community mental health clinic. Further, follow-up data were obtained through a short interview with 20 subjects

in an attempt to identify factors which might have contributed to their degree of participation. Results were analyzed using appropriate statistical methods.

Demographic data suggested that clients who attended the drop-in center tended to be young males. No significant differences were found between demographic variables and the degree of participation in the center. Although no significant relationship was found between the degree of participation and utilization of psychotropic medications, the findings of this study supported an association between participation in the center and length of stay in the hospital. Results of the follow-up interview revealed that the majority of clients came to the center to socialize with others and made friends with whom they maintained contact.

Implications for nursing practice were inferred from the study results. Mental health nurses need to assess the nature and strength of the support that clients receive from the community in which they live. Additionally, more active participation in developing and maintaining socialization programs by mental health nurses could benefit the increasing numbers of young chronic patients.