A Community Project to Encourage Compliance with Mental Health Treatment Aftercare

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The authors are the 10-student team that devised and implemented a community health project at the University of Maryland at Baltimore, School of Nursing. Their entry won first place in the 1993 competition for the Secretary's Award for Innovations in Health Promotion and Disease Prevention. It has been revised and edited for publication. The faculty adviser for the continuing project is Marcia L. Cooley, RN, PhD, Instructor of Nursing.

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Synopsis

Rehospitalization of mentally ill persons has been associated mainly with two major factors, noncompliance with the prescribed course of medication and noncompliance with planned aftercare. The authors developed and pilot tested a community health project designed to assist chronically ill mental health patients who, when discharged from hospital care, are considered at high risk for rehospitalization. The project was designed to support clients' efforts to comply with their prescribed course of aftercare therapy, support, and medication. The project was developed at the University of Maryland at Baltimore, School of Nursing, in cooperation with the U.S. Department of Veterans Affairs.

The project consisted of interventions during the critical time after hospital discharge but before the client becomes fully established in outpatient treatment. The interventions were based on the principle of catching the high-risk client before a crisis situation occurred. The four interventions were (a) discharge planning for the individual client that stressed education about the client's psychiatric illness; (b) education about medications prescribed for the client; (c) an education program for family members and others to assist them in helping the individual client; and (d) communicating with the client to reinforce the support network concept, using a 48-hour followup telephone call, an information contact by postcard, and a noncrisis telephone line.

The project was implemented on a pilot basis during the fall of 1992 by the nursing students and staff members at a major urban Department of Veterans Affairs Medical Center (VAMC). The pilot project involved 31 staff and community health professionals and 68 client interactions during 1992. Data were collected from clients and staff members during and after the project was implemented. The project was evaluated using a multimethod evaluation tool, and revisions were incorporated based on the results.

Clients who participated in the program indicated that establishing caring relationships within a support network was the most significant factor in achieving compliance with aftercare. The results of the project, noted by staff members and observers, have led to implementation and expansion of interventions by subsequent groups of nursing students. Plans for the future of the project include determining rates of recidivism and obtaining more information on other health outcomes of clients.

THE NEED FOR REHOSPITALIZATION following treatment for mental illness is a pervasive problem. The extent of the problem is indicated by the estimate that about one in five persons suffers from a diagnosable mental disorder (*1*), many are hospitalized for that illness, and after their discharge many of those do not comply with the aftercare courses of medication and therapies

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Four winning proposals in the 1993 competition, including two tied for third place, are published in this issue, together with abstracts of 16 semifinalist proposals. The competition is sponsored annually by the U.S. Department of Health and Human Services, Public Health Service, in collaboration with the Federation of Associations of Schools of the Health Professions.

The 1993 competition drew entries from schools of allied health professions, dentistry, health administration, health education, health sciences, medicine, nursing, optometry, osteopathy, podiatry, pharmacy, public health, and veterinary medicine.

Prizes in the annual competition are first place, $5,000; second place, $4,000; third place, $3,000; and semifinalists, $300.

Information on entries for the 1994 competition was published in Public Health Reports, Vol. 108, No. 6, November-December 1993, p. 800. The deadline is Tuesday, April 19, 1994.

that are available to them (*2, 3*). Noncompliance frequently leads to a recurring personal or health crisis situation and subsequent rehospitalization of the client (*4*).

An informal survey of 13 hospitalized mentally ill patients at a large urban institution, the Department of Veterans Affairs Medical Center (VAMC), in Baltimore, MD, showed that virtually all had been noncompliant at some time with the prescribed course of medication as well as with outpatient therapy and had a history of rehospitalization. The survey was performed by the nursing students of the University of Maryland School of Nursing during the initial assessment of the population. The data are from a supplementary data collection tool document produced in the planning stages of the project. The document is available from the faculty adviser (*5*).

Clients are noncompliant with aftercare for many complex reasons. Mental health care providers have described a so-called critical window of time during which clients are most at risk for noncompliance. The critical window occurs after the patient is discharged from inpatient hospitalization and before the first appointment for outpatient treatment (personal communication, S. Lautz, Care Manager, VAMC, Baltimore, MD, October 15, 1992). During the critical window many clients experience a personal or mental health crisis and need connections with the health care system. In a survey associated with a newly developed crisis system model (*6*), 87 percent of clients in crisis did not seek readmission but needed 24-hour availability of mental health care, a clearly defined entry point, easy access to prescription renewal, and interpersonal support.

The literature strongly relates aftercare noncompliance to rehospitalization. During an 18-month study of 698 clients, 92 percent of the sample were noncompliant with medications, and 76 percent were noncompliant with aftercare treatment (*2*). Many did not have social supports. Another study substantiated that major factors leading to rehospitalization were a failure to appear for followup therapy and medication noncompliance (*3*).

Nurses are trained to provide health education, and they are in a unique position to influence a client's health maintenance and aftercare compliance (*7*). Studies on noncompliance provide insight into effective nursing interventions. Systematic interventions, such as standardized discharge planning and coordinated postdischarge followup, can help prevent rehospitalization (*4*). A discharge planning checklist can provide a structured comprehensive format for coordinating client aftercare (*8*). Key elements in the structured format usually include demographics, social and personal resources, anticipated needs of the followup nursing care, medication information, and followup appointments (*9*).

Compliance with medications has long been a concern of health professionals (*7*). The level of a client's knowledge of his or her medications, such as the side effects, both experienced and potential, and how to manage adverse reactions, increases the client's ability to achieve and sustain medication compliance (*10*). Written instructions, reviewed orally with the client, are most effective for the client and the family (*11, 12*).

Family involvement increasingly has been recognized as a vital component in the treatment and care of the mentally ill. One study found that readmission rates dropped 50 percent among clients who had support from family members or others (*13*). The concept of having a case manager allows for continuing tracking of a client and evaluation of progress (*14*). Telephone followup within 48 hours of discharge contributes to continuity of care, provides support and links to psychotherapy services, and offers an opportunity to assess new client needs (*15, 16,* and personal communication, Delores Saylor and Pat Waddel, Case Managers, VAMC,

Baltimore, MD, October 26, 1992). Siegel found that sending a postcard added support and was effective in reminding the client of the availability of support persons and resources to help the client reintegrate in the community (*15*).

Project Description

A community health project, developed by 10 students at the University of Maryland at Baltimore, School of Nursing, proposed a comprehensive approach to mental health patient discharge planning. The approach was designed to coordinate nursing care, client participation, and family and social support. The group worked in conjunction with VAMC psychiatric staff members to provide services and support for their discharged psychiatric patients, nearly all men, at high risk for rehospitalization. The project is called CATCH, an acronym for Compliance with Aftercare Treatment Can Help. Four interventions were designed provide support for the discharged client during the critical window.

Discharge planning. The first intervention was a discharge planning worksheet developed to be filled out by each participating client while still hospitalized. The sheet asked questions to determine the client's understanding of issues that could be triggers for rehospitalization, such as

- how to recognize symptoms indicating a possible relapse,
- what medications are to be taken, the doses, and the times to take them,
- the expected side effects of the medications and potential unexpected side effects,
- how to obtain prescription refills,
- what future serologic tests are necessary,
- outpatient clinic locations and therapists' names,
- date and time of the first outpatient care appoint ment,
- availability of support networks, and
- knowledge of the diagnosed condition and its treatment.

A discharge checklist was created to be filled out by staff members to help identify a client's level of preparedness for discharge. The categories paralleled the areas of the planning worksheet.

Medication management. The second intervention dealt with the client's knowledge about his or her medication. Forms were created to provide, in easily understood language, general information about side effects, and important points to remember about each type of medication. The sheets were distributed to clients at the time drug therapy was begun or when clients were identified as participants in drug therapy.

Support. The third intervention dealt with the family members or care givers, providing information on the client's illness and the support the client needed. A CATCH coping group was modeled after the Maryland Department of Mental Health and Hygiene's Family Centered Group Program, using its information manual (17). The manual offers specific items of family education to be discussed at meetings attended by family members or care givers before discharge.

Communication. The fourth intervention established a communication network to help the client after discharge. Initial steps to be followed included a followup telephone call by the case manager 48 hours after discharge, an information postcard giving the date and time of the first outpatient appointment, a list of pertinent telephone numbers, and a personal note. The network offered a so-called warm line, a telephone noncrisis line that the client could access for support.

Objectives. Specific objectives for the project were to

1. Develop the prototype project.
2. Present the project to VAMC staff members and obtain feedback.
3. Make necessary revisions based on feedback.
4. Pilot test the revised project, using the worksheets and forms, distributing the coping information to care givers and family members, and making followup telephone calls and sending postcards.
5. Make further modifications and recommendations based on data obtained from the pilot test.

Methodology

A thorough assessment of the clients' community health needs was made. A literature review defined noncompliance as a health problem for this population. Goals and outcome criteria were developed. A supplementary data collection tool was devised and used with inpatients at the VAMC. Staff members working with the clients were asked to provide input and concerns by answering questionnaires. The information obtained was used in

project development. The project was presented to the faculty adviser and VAMC staff members, and permission was obtained for a pilot. The pilot and continued assessments were implemented with clients who were identified by staff members as being at high risk for rehospitalization. The results of the pilot were used to improve the project. The project was evaluated using the Context Input Process Product Evaluation (CIPP) Model (*18*).

Project Significance

Noncompliance with aftercare by those diagnosed with mental illness often results in higher rates of relapse, rehospitalization, and poor community adjustment (*19*). Studies have shown that comparatively brief interventions can improve compliance behavior and the quality of life for those with chronic psychiatric disorders (*11, 19*). Participation by clients in the project was found to decrease reoccurrence of illness, recidivism, and misuse of medications, contributing to their overall emotional health and quality of life.

The strength of the project was its concept, design, and beneficence. The design reflected a significant need of the mentally ill population, a review of current literature, and validation of the problem with multimethod data collection and evaluation. The project was based on the knowledge that mental illness is a long-term, multifaceted health concern. The goals were directed specifically at reducing the need for rehospitalization and enhancing the client's resources. The interventions reflect the diverse needs of the clients. Four harmonizing interventions provided aftercare support. The project team collaborated extensively and closely with VAMC staff members. Each phase of the design was evaluated by staff members and students to provide constructive feedback and realistic data, leading to the project's subsequent implementation and continued use at VAMC. Subsequently, other nursing students have expanded and further developed the effectiveness and scope of the project.

Innovations

While previous interventions directed toward reducing client noncompliance have been effective, few have combined a multifaceted program. CATCH addresses many causes of noncompliance, including client education regarding disease processes and available discharge resources. Knowledge of medications was strengthened and an at-home information resource was provided in the form of the medication education sheets. Caregiver support and knowledge of the disease process was strengthened.

Client interaction with VAMC staff members was encouraged for the critical time when the client usually was without support. Communications among the client, the medical staff, and the family or support group were improved.

Each intervention was designed to match client population needs. For example, medication education sheets were written in bold, simple language, without the use of medical terms, to make them more understandable at the client's level. The discharge form included documentation of the client's understanding of specific disease symptoms that signal a relapse. Telephone numbers and appointment dates for each client were provided. The crisis warmline was modified from the form of traditional hotlines to match current VAMC resources, which are its strong volunteer group. While many health professionals acknowledge the need to interact with clients, few have such a system set up and operating.

The design of the project reflects a true fit between the community it serves, the needs of the client population, and the resources that sustain the project. The experience and knowledge gained has been built upon and expanded by other students in subsequent semesters.

Evaluation Methods

The CIPP evaluation model *(18)* was used in determining four aspects of the design and development. Evaluation of the context of the project determined its objectives. Evaluation of project inputs looked at ways that the objectives could be met, assessing the agency's capabilities and strategies and methods for implementing them. Process evaluation provided periodic feedback from the supplementary data collection tool, meetings with VA case managers, pretests and posttests of staff members' opinions, and comments from clients participating in the pilot project. The final part of the model, product evaluation, was to determine if goals and outcome criteria had been met.

Data obtained from the evaluation were used to make several changes. Clients provided positive feedback regarding the worksheet and recommended its use. Staff members agreed that the discharge form was an effective way to track completion of discharge education. Client comments regarding the medication information sheets were favorable. The VAMC volunteer association members agreed

to assist with implementation of the warm line. Telephone followups and postcards were well regarded.

The effectiveness of the coping group was questioned. Many clients were socially isolated from family members, and some were either homeless or living in sheltered environments. Other clients had family members available, but none was interested in participating in the groups. The plans for those meetings were modified to reflect the capabilities of care givers at the supervised group homes where many of the clients stayed.

The program continues to be modified each semester by nursing students working with the VAMC psychiatric staff. Plans for the future of the project include determining rates of recidivism and obtaining more detailed information on other health outcomes of clients.

Budget Estimate

The project team of nursing students initially contributed $50 toward the project. Graphic art services, advertising for presentations to staff members, and the production of postcards were donated and estimated to have a value of $250. Production of the medication education sheet, the discharge planning worksheet, the discharge documentation form, and the patient worksheet totaled $30. Film and developing for a slide presentation cost $20. The total expended, outside of staff time, has been $300, mostly donations.

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