A Study of Effectiveness of Nursing Referrals

PHYLLIS A. COMBS, RN, BSN, MN

NURSES FROM ALL SERVICES at the Lexington Veterans Administration Hospital, when indicated in their judgment, refer patients to community nursing agencies. Our study of the effectiveness of these referrals was aimed primarily at determining whether followup by the community nurses was effective—that is, whether they provided the services requested.

Leaders in nursing and other health professions recognize that the nursing referral is a vital link in continuity of care (*1-5a*). Moreover, most health authorities agree that planning for and provision of continuity of patient care is a responsibility that the nurse shares with other health professionals (*6,7*). Referrals are also seen as an important contribution to continuity of care between the hospital and the home (*5b,8,9*).

Initial teaching or evaluation of information previously taught the patient and his family to assist them in adapting to the patient's health state is frequently requested in referrals. Learning is a major means by which man adapts, thereby modifying inadequate behavior (*10*). Today, patients are "questioning the nature of their impairments and are demanding more awareness of their treatment goals and patterns" (*11*). The rising tide of consumerism should enhance the provision of patient education as an element of our health delivery system.

Although the nursing literature contains a number of references to continuity of care, few reports are available on systematic investigations of the effect of nursing referrals. Davis' 1972 study results support the merit of nursing intervention in the home, but the study lacked measurement tools specific to such intervention (*9*). In Smith's study of the referral of patients to public health nursing service, she attempted to identify factors that stimulated the referrals (*12*). Direct cause and effect could not be established from the data, but Smith made several suggestions for the development of referral systems based on inferences from her findings. These suggestions dealt primarily with patient selection, implementation, education, and communication. Eckelberry (*13*) addressed the crucial need to evaluate outcomes of referral. She cited an often neglected aspect of referral evaluation: "This is the effort to obtain from the person or persons referred an expression of what referral meant to them."

Some investigators have attempted to measure success of a referral program in terms of readmission rates (*2,9,14*). Rehospitalization alone, however, does not indicate the success or failure of community nursing intervention. The natural history of some disease states may necessitate intermittent rehospitalization, regardless of nursing intervention. Early detection by the community nurse may indicate rehospitalization as a positive measure for some patients, whereas it may prevent rehospitalization for others. Regardless of the reason for referral or the patient's discharge condition, an effective nursing referral should result in nursing intervention directed toward the purpose of the referral.

When a patient is readmitted to the hospital, early evaluation of his or her status is essential. The time lapse between readmission and data collection may influence nursing assessment and patient response. Some

Referral of patients discharged from the Lexington Veterans Administration Hospital to community nursing agencies was found to be not as beneficial as previously thought

social psychologists report that man adapts his interpersonal response traits (*15*) to methods most likely to satisfy his needs. Participants in a social interaction process learn quickly the advantages of developing similar perceptions and attitudes for a comfortable association (*16*).

Evaluation of a patient admitted to a unit is perhaps best done by a clinical nursing specialist, who is expected to be a role model for comprehensive scientifically-based nursing care (*17,18*). The specialist is also expected to assess the care given by other nursing personnel and to identify needs for improvement, as well as to foster a spirit of inquiry that promotes openmindedness and objectivity.

Our study included 35 of 39 patients who were readmitted to the hospital within 6 months after they had been referred to a community nursing agency (4 patients were too ill to participate). The 35 patients were admitted to the following units, according to their diagnoses: 12, acute medical; 12, surgical; 9, neuropsychiatric; and 2, intermediate medical service. Information was obtained from them within 24 hours of their hospitalization because it was believed that they would not have learned the "correct" response behavior to hospital staff within this time, and therefore their answers would more accurately reflect their true perceptions.

Methodology

Because a suitable instrument was not available to obtain the needed information, a group of clinical nurse specialists at the hospital designed a two-part guide to obtain demographic information, to assess patients' conditions, to determine if community nursing intervention was effective, and to elicit patients' perceptions of the nursing intervention. A nurse consultant not associated with the hospital and nurses on the various hospital units judged the guide's contents to be appropriate. Although staff nurses and clinical nurse specialists had referred patients to community nurses, only clinical specialists were engaged in the data collection. The guide was pretested by 3 pairs of clinical specialists who assessed 12 patients simultaneously; each recorded her observations and the patients' answers independently. Their observations were reviewed by a nurse educator, not associated with the hospital, who found that the paired recordings for each patient were similar.

☐ *Ms. Combs is the community nurse coordinator for the Lexington Veterans Administration Hospital.* *The following members of the hospital's Nursing Research Committee assisted with the study design and data collection: Suzanne P. Dozier, Sondra G. Ferguson, Mary D. Hammel, Helen K. Holland, Nancy B. Hynson, Ellen M. Innes, Hilda G. McBridge, L. Mae McPhetridge, Cynthia S. Monroe, and Virginia R. Wells. Dr. Juanita J. Fleming, professor and director of maternal child nursing, University of Kentucky College of Nursing, was the consultant for the study design and analysis of the data.*

Tearsheet requests to Phyllis A. Combs, Veterans Administration Hospital, Lexington, Ky. 40507.

Part 1 of the guide contained two questions. Question 1 concerned the purpose of the referral and asked for specific information under the broad categories of (*a*) teaching, (*b*) continued supportive care, (*c*) administration of prescribed therapy, and "other." Question 2 dealt with evidence of complications preventable by nursing intervention based on the reason for referral of the patient; the following checklist of complications was used:

Infection
Skin breakdown
Change in bowel functioning
Change in urinary functioning
Contracture or foot drop
Dehydration
Edema
Weight change
Pain or discomfort
Injury
Follow medical regimen: diet, medications
Change in rest-sleep pattern
Change in work plans
Suicidal thoughts or attempts
Seizures or "blackouts"
Drinking
Difficulties with other people at home or community

Part 2 of the guide, a questionnaire, was administered to each of the 35 patients. It asked the following questions: Did the community nurse (public health nurse) visit you after you went home from the hospital? How many times did the community nurse see you between discharge and return to the hospital? What did she do? Did you need help from anyone other than the nurse? If yes, did the public health nurse assist you in getting the help you needed? Did the public health nurse suggest that you come back to the hospital?

The questionnaire also included the patient's name, social security number, age, diagnosis, education level, marital status, occupation, person in home responsible for the patient's care, residence, hospital unit to which patient was admitted, length of previous hospitalization, and length of stay out of the hospital.

Results

The 35 patients, all men, were interviewed within 24 hours of their rehospitalization. Their average age was 55 years, and their mean education level was eighth grade, as shown in the following table:

Item	*Number of patients*
Age	
Under 45	5
45–65	26
65 and over	4
Marital status	
Married	21
Single	14
Residence	
Rural	28
Urban	7
Education	
Grade 1–8	20
Grade 8–12	6
High school graduate or college	7
Unknown	2
Occupation of those working	
Semiskilled	13
Skilled	0
Professional	1
Employment	
Working	14
Not working	21
Retired	6
Disabled	8
No work in 2–24 years	7
Person responsible for home care	
Self and other family members	15
Spouse	10
Children, spouse, or siblings	9
Landlady	1

Twenty-two of the 35 patients were visited by a community nurse, and 16 of these patients had been referred for continued supportive care alone or in combination with other categories. The referral purpose for 10 patients was teaching alone or in combination with the other three categories; for 1 patient, it was administration of prescribed therapy alone; and for another patient, it was evaluation of the home situation (categorized under "other"). For 11 patients not visited by the nurse, the referral was for continued supportive care alone or in combination with other categories.

A significant difference was seen in the number of complications that were preventable by nursing intervention:

Variable	*Chi square*	*Degree of freedom*	*Probability*
33 complications preventable by nursing intervention	5.12	1	> 0.025
22 patients visited versus 13 not visited	5.51	1	> 0.025

Most of the preventable complications related to an evaluation of the patient and family's understanding of and compliance with the medical regimen. Generally, either initial teaching or reinforcement of previously taught information was requested in the referrals. Specific examples of the referral requests were to assist with planning meals for special diets; observe for ankle edema; help to plan physical activity; diabetes control in relation to diet, insulin, activity regulation, and urine testing; reinforce abstinence from alcohol; take blood pressure readings; encourage patient to take medicine; evaluate patient and family's understanding of recent cardiac surgery.

The most common complications among the 35 patients were (*a*) behavior problems associated with failure to take medication, alcohol intake, or use of tranquilizers and alcohol together and (*b*) physical problems associated with failure to comply with the

prescribed regimen; for example, weight gain, edema and shortness of breath, elevated blood sugar, weight loss, and internal bleeding as a result of too much Coumadin.

The interval before rehospitalization ranged from 3 days to 6 months. The average number of visits by the community nurse was calculated from the total number of visits for each patient before rehospitalization. The mean number of visits for each patient visited was 3.5; 13 patients received 1 or 2 visits, 4 received 3 or 4, 3 were visited weekly for several weeks, and only 2 patients were visited daily (5 times a week). As mentioned before, 13 patients were not visited.

Of the five patients visited weekly or daily, the referrals for three were categorized as continued supportive care. However, two of these three also required administration of prescribed therapy. Four of the five patients required physical care such as care of wounds, urine checks, blood pressure readings, or evaluation of patient's ability to perform post-colostomy care. One frequently visited patient required emotional support because of his concern regarding his ability to care for himself and his elderly senile wife. The referral requested assistance in planning for home care. The nurse discussed referral to a day care center for senior citizens with this patient.

The patients generally perceived the community nurses as providing direct care, "checking" them, observing them taking care of themselves, or working with family members. Ten patients mentioned checking all or some vital signs as one of the functions performed by the nurses; only one patient stated that this was the sole function. Five patients stated that the nurses discussed their medications in combination with other topics. Three stated that the nurses discussed diet, and four mentioned discussion of their general condition or specific health problems. Three patients received direct care or treatment. Two patients stated that the nurses checked their wounds and "said they were OK." One patient said that the nurse observed him perform a procedure that he had been taught, and another patient said the nurse advised him to return to the hospital because of his wound infection.

Only two patients made negative comments about the community nurses. One said his nurse was more interested in the new house he was building than in his personal progress. Another said that his nurse only took his blood pressure. In addition to blood pressure checks, the nurse had been requested to instruct the patient in pursed-lip breathing and in following a low-sodium diet and to caution him about going outdoors when temperatures were extreme.

The responses indicated that most of the patients did not require referral to other community service agencies. With one exception, intervention by a community nurse was not a factor in the patients' rehospitalization. Nine of the 35 patients had been scheduled for readmission, primarily for elective surgery.

Discussion

The study results demonstrated that the nursing referral program at the Lexington Veterans Administration Hospital is not as effective as previously thought. The clinical specialists frequently decided that certain complications could be prevented by nursing intervention. Possibly these nurses—because of their preparation—were more objective and perhaps more critical than the average nurse. Examples of nursing intervention which, in the view of the clinical specialists, might prevent complications are (*a*) helping patients who failed to take their medications by determining whether the problem stemmed from illiteracy, senility, visual impairment, lack of motivation, or side effects of the drug, (*b*) helping to rehabilitate alcoholics by means of a therapeutic nurse-patient relationship fostered in a nonjudgmental, open atmosphere, and (*c*) giving patients specific instructions about the management of chronic health conditions.

As for the checklist of complications, it is debatable whether some of those listed could be prevented by nursing intervention. For example, edema and dehydration could be debated either way. On the other hand, skin breakdown and contractures are recognized as complications that can be prevented by good nursing care. However, the list was intended only to be a guide in the nursing assessment.

It is interesting that of the 13 patients not visited by a community nurse, 11 had been referred for continued supportive care. Generally, the community nurses were requested to encourage patients to get a job, take medications, refrain from alcohol, or attend scheduled clinic visits—these nurses may give lower priority to such requests. One could also question whether the referral request was specific enough, especially for the category of continued supportive care. Nurses seem to have difficulty in describing the kinds of nursing intervention necessary for patients with behavioral or emotional problems. Some nurses gave quality information on the patient's hospital stay, but their weakness may have been in not giving the community nurse explicit and purposeful information for followup care. Close collaboration between the hospital nurses and the community nurses seems indicated from the study findings.

The study patients' indication that they did not need the services of other community agencies may have been due to their having had supportive services while hospitalized. The Veterans Administration hospital system has a wealth of support services available to the hospitalized veteran. These services include social service, diet instruction and consultation, vocational counseling and testing, physical therapy, occupational therapy, the availability of clergy, and a VA contact representative who is the liaison between veterans and the system regarding veterans' benefits. Therefore, it may be that the patients' needs for other services were met before they were discharged from the hospital.

The study patients were able to identify physical nursing care and instruction as functions of the community

nurse, but none were able to cite an example of the nurse's function in relation to continued supportive care other than to reinforce instructions. Perhaps the patients were not aware that they could expect this more nebulous variable from the community nurse. Their level of sophistication and education may have had a bearing on their interpretation of services rendered.

Redman (*10*) speaks to the need for patient and nurse to establish mutual goals for patient education. Could this apply to all functions of nursing? A basic principle of the referral process is to plan with patients and their families rather than for them. Patients' need for understanding of their conditions and treatments increases proportionately with the rising incidence of long-term and chronic illness (*11*). Although partially dependent on health professionals, patients with chronic illness must learn to successfully exercise independent judgment in the management of their health states.

Redman also refers to the difficulty entailed in evaluating outcomes of teaching intervention (*10*). She suggests that feedback through measures of behavior is indicated, preferably in a natural situation in which learned behavior is required. Another study designed to measure patients' expected behavior in their homes would seem appropriate. If the health care delivery system is effective, most patients will reach their optimal level of functioning. The home setting provides a fertile field for measuring patient outcomes in this respect.

Limitations of the Study

One limitation of the study was that no attempt was made to include patients who had received nursing referrals but were not readmitted to the VA hospital. Another limitation was that in devising the instrument used to obtain information the nurses found it difficult to measure complications preventable by nursing intervention with respect to interdependent variables. However, they recognized the difficulty of separating complications preventable by nursing intervention and those inherent in the natural history of some disease states. Furthermore, the community nurses were not directly engaged in the study, nor was information elicited from them regarding their nursing intervention. Finally, the small sample size does not permit broad generalizations.

Implications

The study findings suggest the need for the following efforts to improve the effectiveness of nursing referrals.

—Collaboration between hospital and community nurses toward a better mutual understanding of the community nurses' priorities for service.
—More aggressive followup by the hospital community nurse coordinators to determine why referred patients did not receive service.
—Staff nurses' upgrading of the content of their referral requests by including specific and comprehensive information which reflects the need to establish mutual goals by the patient, the family, and the community nurse.
—Preparation of a questionnaire by which more specific information as to what the community nurse actually accomplished during the home visits can be elicited from the patient.
—Further study to determine patients' impressions of the purpose of the referral and means of facilitating their understanding of the nurse's visit.
—Development of a measure of effectiveness of nursing intervention for referred patients who do not require rehospitalization.
—Replication of the study in other settings.

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