Strategy for Reinforcing Drug Knowledge and Accountability in Drug Administration

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A variety of drugs is being rapidly developed in the pharmacy laboratory by systemic research. Scientific discovery has led to polypharmacy. The resulting numbers of different drugs have made it nearly impossible for nurses to retain knowledge about each specific drug administered. Although studies are limited, reports indicate that the drug knowledge of practicing nurses is not adequate to ensure safety to clients (Markowitz, Pearson, Kay, & Loewenstein, 1981).

One of the most difficult and complex roles of the clinical nurse is to assess a patient's response to drug therapy and to anticipate potential adverse effects. Jick (1984) and Melmon (1971) reported that adverse drug reactions are, to some extent, preventable. Ideally, the nurse integrates pharmacodynamic principles with steps in the nursing process to ensure optimal monitoring of drug therapy.

Pharmacology is taught as a distinct course in the first year of the baccalaureate nursing program at Purdue University. Although pharmacology is incorporated into nursing courses in the second year, students enrolled in medical-surgical nursing in the third year were having problems applying pharmacodynamics to the clinical setting. An evaluation of nursing students suggested that pharmacology knowledge had not increased significantly beyond the pharmacology course.

Drug cards and reference books having drug information and nursing considerations were used by the students and were helpful in providing an overview of drugs administered each week. However, students continued to have difficulty monitoring individual clients for drug effects and relating this role to their nursing practice.

Strategy

In an attempt to individualize the administration and monitor drug therapy, the students in a medical-surgical clinical course were instructed to generate nursing care plans related to the effects or potential effects of drugs administered to the assigned client. Considering a drug within the context of the nursing process reinforces nursing considerations in pharmacology. Active participation by the students further reinforces the role and importance of monitoring for drug effects.

Student assignments for selected clients are made during an evening clinical session. It is during this three-hour preparatory experience that students assemble drug information and initially assess their assigned client.

The students were instructed to familiarize themselves with the drug name (generic as well as trade names), drug category, mechanism of action, indications, dosage and route, effects, and nursing considerations. Using information about each drug and data gathered from the chart, as well as client interviews and physical assessment, the students are taught to draw conclusions related to pharmacology. The students then determine whether an actual or potential client problem exists and generate nursing diagnoses from a list accepted by the North American Nursing Diagnoses Association. Carpenito's (1987) format is utilized in designing the nursing care plan. This strategy helps students relate drug information to assessment data gathered in actual clinical practice.

In planning care focused on drug administration, students are taught to list client outcomes and interventions to monitor for and reduce adverse effects of drugs. Writing drug-related care plans emphasizes the clinical nursing student the importance of monitoring drugs. By individualizing nursing interventions, the student learns to incorporate other considerations about the client. This aspect adds meaning to the general nursing considerations and other information from published drug cards and texts.

Students are then instructed to follow their care plans during the morning clinical experience and make evaluations according to client outcomes. Conscientiousness is developed in an effort to monitor and provide care to assess for and reduce adverse effects of drugs administered in the clinical setting.

Student Reaction to the Assignment

Students expressed initial dissatisfaction with the drug-related nursing care plan. Primarily, they were concerned that their very basic knowledge in pharmacology was not enough to develop nursing diagnoses, much less an entire plan of care. Another concern was that this assignment...
would be too time consuming. Some of these initial negative feelings were resolved by limiting nursing diagnoses to two major adverse effects of one or two drugs administered. In addition, the students worked together writing a drug-related care plan in a preconference session during the first two weeks of the course.

By the end of the semester, nursing students could identify common adverse effects within drug categories and they reported that they were giving more attention to drugs and drug effects. The instructor noted this change when students individualized nursing considerations when verbally talking about any drug regardless of whether a care plan was made.

**Summary**

The strategy of including drug-related nursing diagnoses on the nursing care plan can be a helpful tool in fostering drug knowledge and responsibility for nursing care related to drugs. Using the nursing care plan adds meaning to drug cards and other pharmacologic resources. Individualizing drug considerations on the nursing care plan adds another important dimension to nursing practice. Students demonstrated improved proficiency and relevance in applying drug information to client care.

**Love, Beauty, and Truth: Fundamental Nursing Values**

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Formal programs of education are an important means by which social groups transmit their culture to neophyte members. A central focus for students in a program of study is the examination and personalization of values fundamental to the culture. Nursing as a profession is a particular group in society, a culture characterized by a distinctive system of values. A program of education for nursing should address that value system.

When caring is fully understood, it is recognized as "the human mode of being" (Roach, 1984). Nursing, with its focus on the person living life, is necessarily characterized by caring. Caring is recognized as the spirit of nursing, its fundamental cultural value.

The primary spiritual values of love, truth, and beauty are illuminated in the caring nature of nursing and are appropriately acknowledged and nurtured in nursing curricula. Carper (1978) described the patterns of knowing essential for nursing positioning personal, ethical, and aesthetic knowing on a par with empirical knowing. Nursing education provides the cultural milieu within which the fundamental spiritual values of love, beauty, and truth can be experienced, appreciated, and creatively expressed.

In his critique of Kant, Healy (1986) suggested that feeling is the mediator between desire and cognition. Reinterpreted, beauty is the mediator between love and truth. The unifying character of aesthetic knowing, recognized by Phenix (1964) and Carper (1978), was the basis for an assignment given to students in a beginning nursing course. Students were invited to "creatively express the beauty of other as illuminated through nursing." The resulting projects represented many forms of expression: music, poetry, photography, puppetry, prose, painting, drama, and poster art. Some of the projects focused on the beauty of cultural variation, others on the beauty of shared experience, and many on the beauty of the unique individual. Images of love and truth were apparent in these expressions of beauty, thus reflecting the integrity of the caring spirit of nursing.

Laird (1929), in *The Idea of Value*, noted a resurgence of interest in values as a topic of study and discourse, remarking "value may prove to be the key that will eventually release all the human sciences from their present position of pathetic, if dignified, futility" (p. xix). Many decades later, nursing is engaged in the continuing effort to humanize the practice and product of science as inquiry is directed toward caring as a value system for the discipline. Laird includes love, beauty, and truth among what he terms the "great values" (1929, p. xv). Watson (1985) proclaims caring the moral ideal of nursing. Laird calls ideals the "poetry of values" (1929, p. 375) and describes an ideal as a pattern or exemplar, an organization of values.

Value, the noun, has as its most common meaning "worth" or "the property of worth." The noun form is also used to denote the thing possessing characteristics of dignity, nobility, and good. Laird (1929) discussed three divisions of value: economic value (exchange or relative value); hedonistic value (desire, pleasure, satiety); and moral value (summum bonum, the greatest or ultimate good). The division of value addressed here is moral or ultimate value.

Parse (1981) described a value as a symbol that signifies meaning, a sign of meaning, and valuing as making meaning. Further, valuing is man's process of confirming cherished beliefs and is reflective of one's world view. Valuing as a process includes choosing, prizing, and acting; that is, choosing freely from alternatives, as well as choosing reflectively; cherishing and affirming that choice; and carrying out and repeating the chosen course.

Evaluating is often given as the opposite of valuing. Laird (1929) differentiated between evaluating and prizing: "we evaluate something when we think out its values and determine their place on a definite scale. Prizing, on the other hand, is defined as 'setting store by' " (p. xv).

Paterson and Zderad (1988) have raised the question of how to transform a negatively judgmental attitude to one of prizing. The solution they propose requires the willingness and openness to choose to respond to the complement as valuable: to choose to respond to the unloving as loving, the unbeautiful as beautiful, and the untruth as truth. At first glance, that solution may seem to make absolute values relative. From a holistic perspective, however, the complements are seen as two of the many aspects of a single unity.

The correctness of this alternating rhythm was conveyed by a student in her narrative account of recognizing the utter