

The Practice of Patient Education

The Theoretical Perspective

Rebecca L. Syx

Effective nursing practice is based on an understanding of the theoretical basis of nursing. Similarly, to be effective patient educators, nurses must be familiar with the theoretical basis of patient and family education. Theories provide the framework from which nurses use tools that can be adapted to each patient. Nurses may educate their patients and families using any combination of theories to achieve best results. Through this process arises the opportunity for the achievement of optimal patient outcomes. This article highlights theories originating from communications, psychology, education, sociology, and nursing.

Patient education could be defined as the process by which the patient comes to comprehend his or her physical condition and self-care by the use of various medians and experiences (Redmon, 2001). Generally, the goal of patient education is that the patient will not only understand his or her current health status but also be able to make appropriate healthcare decisions and make changes as necessary to reach optimal health (Redmon, 2001). There are several benefits to the patient when he or she is provided effective education, including increased patient satisfaction, increased quality of life, better continuity of care, decreased anxiety, decreased possible complications, promotion of adherence to the plan of care, maximized independence, and empowerment (Bastable, 2006). Patient education is not simply the nurse telling the patient what to do when he or she goes home; it is a means by which the nurse can assist the patient in the enhancement and expansion of his or her ability to provide effective self-care. Nurses are in a key position to positively affect the lives of patients through education, producing potentially longstanding changes in patients' lives (Bastable, 2006).

Most nursing students learn about the theoretical basis of their chosen profession before they even begin to practice clinically. This foundation provides an understanding of how nursing knowledge is built. The same could be said of patient education. It is important to understand theories in healthcare education to be effective as a patient educator. The nurse should understand the theoretical basis of patient education to reach his or her potential and implement the most effective teaching strategies. The greater the knowledge of the theoretical basis of patient education, the more tools the bedside nurse possesses to provide effective education.

There are several theories on which patient education is based. These theories originate from numerous schools of thought, including communications, psychology, education, nursing, and sociology. In this article, the following theories are discussed: the cognitive dissonance theory, the health belief model, the transtheoretical model of change, the self-efficacy theory, the locus of control theory, the adult learning theory, and the health promotion model.

Overview of Theories

COGNITIVE DISSONANCE THEORY

Festinger developed the cognitive dissonance theory in 1957 based on social psychology. The theory states that individuals desire consistency and will make necessary changes and adaptations to gain that consistency (Festinger, 1957; Gruber, 2003). Cognitive dissonance is experienced in situations where the patient is challenged by inconsistency requiring a life change (Festinger, 1957; Gruber, 2003). Dissonance refers to the sense of discomfort people feel when an action differs from what they believe, for example, an individual continuing to smoke despite knowing the health risks. In turn, individuals are motivated by this stress to make changes to regain consistency and eliminate the stress. The amount of dissonance does not affect the individual to change; the pressure to change must be high and the discomfort caused by the action moderate. If this is true, the patient will explore and consider change (Festinger, 1957).

For example, a patient suffering a hip fracture is faced with numerous stressors associated with the threatened and actual health risks and necessary changes surrounding his or her diagnosis. The patient may be required to make changes in beliefs, attitudes, and values to regain desired consistency in his or her life during the course of recovery. These changes may include restrictions and changes in mobility and activities, acceptance of assistance from others, and changes in diet or habits to promote healing. According to the cognitive dissonance theory, the nurse must understand the patient's perception and definition of consistency. The nurse must also understand the patient's perception of threats to consistency to

Rebecca L. Syx, MSN, RN, Nurse Educator, Hospital of the University of Pennsylvania, Philadelphia.

The author has no significant ties, financial or otherwise, to any company that might have an interest in the publication of this educational activity.

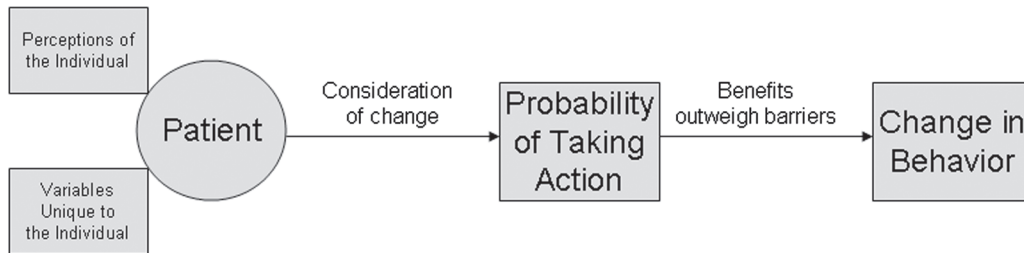


FIGURE 1. Concept of process of change in health behavior based on the conceptions of Hochbaum (1958).

best educate the patient; exerting high importance on positive changes based on probable negative effects.

THE HEALTH BELIEF MODEL

The health belief model (HBM) was developed by Hochbaum and colleagues in the 1950s and influenced by health education and communications schools of thought. There are three major premises that comprise the HBM: individual perceptions, modifying factors, and likelihood of action (Bastable, 2006; Hochbaum, 1958; Phuanukoonnon, Brough, & Bryan, 2006). Individual perceptions refer to the patient's perception of susceptibility and severity of the disease. Modifying factors include knowledge base, as well as demographics and social and psychological variables. Likelihood of action is based on the perceived barriers and benefits of the situation. These premises influence the likelihood of the acceptance and application of health behaviors by the patient (Bastable, 2006; Hochbaum, 1958; Phuanukoonnon, Brough, & Bryan, 2006) (see Figure 1).

Consider again the patient with a hip fracture. How he or she handles the new diagnosis and situation following depends on all of the previous components. If the patient does not feel threatened, believes that he or she will not benefit from interventions, or is not confident that he or she will be effective in the management of the fracture, the patient may not be as receptive to teaching. The nurse must be aware of the patient's perception of the disease, situation, and outcomes to understand what education is warranted.

THE TRANSTHEORETICAL MODEL OF CHANGE

The transtheoretical model of change was developed by Prochaska and Velicer in 1997. This model is used to

define how individuals initiate change in their lives, progress through those changes, and process and maintain behaviors. The model also explains why people continue certain behaviors despite adequate information advising against these behaviors. There are five stages in the transtheoretical model of change: precontemplation, contemplation, preparation, action, and maintenance (Prochaska, Johnson, & Lee, 1998). The stage of precontemplation refers to when an individual sees no issue with his or her current condition and no need to change. The contemplation stage refers to when the individual sees the issue as serious and begins to consider changing behaviors within the next 6 months. Preparation refers to the individual planning to take action within 30 days and beginning to make small changes in preparation for the behavior modification. The stage of action refers to when the individual has made changes in the last 6 months to address the issue. Maintenance is the stage where the individual is working to prevent a relapse into his or her old behaviors; a stage lasting anywhere from 6 months to 5 years (Kidd, Reed, Waver, Westneat, & Rayens, 2003). With each stage of the model, the individual weighs the pros and cons of progressing through the stages. For progression to occur, the pros must outweigh the cons at each possible change. The individual may also drift back and forth between stages during the course of progression toward behavior modification (see Figure 2).

If a patient undergoes a knee replacement resulting from cartilage and joint degeneration, there are several lifestyle changes that may need to be considered, such as diet, exercise and mobility, and medication. With each of the stages of the transtheoretical model of change, the patient makes decisions weighing the pros and cons and

Baseline	Consideration of change	Groundwork for change	Take Action	Maintain Change
No plans to change	Begins to weigh benefits of change	Plan to take action in 30 days	Made changes in the past 6 months	Works to prevent relapse into old behavior
Opposed to change	Considers issue a threat	Beginning to make small changes		

FIGURE 2. Concept of process of change in health behavior based on the conceptions of Prochaska (1997).

probable outcomes. The positive outcomes of behavior modification must outweigh the negative aspects of change. For example, the patient must see the necessary changes to mobility and exercise as more beneficial than negative for him or her to begin progression toward this change. The education provided by the nurse and health-care team could positively influence the decisions made at each stage. It is important to be aware of where the patient is in the continuum to best meet his or her needs.

THE SELF-EFFICACY MODEL

The self-efficacy model focuses on the patient's belief in his or her own abilities to make and maintain changes and positive outcomes in the patient's lives (Bandura, 1977). According to Bandura (1977), this feeling of self-efficacy is based on self-confidence and is a good indicator for motivation to make behavioral changes. The theory of self-efficacy is based on the mastery of skills, modeling of skills especially by others, social persuasion of others presenting belief that the patient is capable, and arousal of emotion that the situation may create. The environment may also play a role in the degree of self-efficacy felt by an individual. Bandura (1977) formulated that general self-efficacy alone would not necessarily be effective and that a patient would need specific plans specialized to his or her situation to succeed (see Figure 3).

If a patient is to be discharged home with a newly replaced knee and must provide some degree of self-care, the model of self-efficacy may come into play. For instance, when teaching staple care, the nurse must break down the skill set into manageable steps, encourage support by others, and encourage the patient to formulate success. The patient is faced with mastering self-care skills, modeling those skills successfully, and being supported socially by his or her healthcare providers and social network. The patient moves from self-doubt and anxiety to comfort and confidence in his or her own abil-

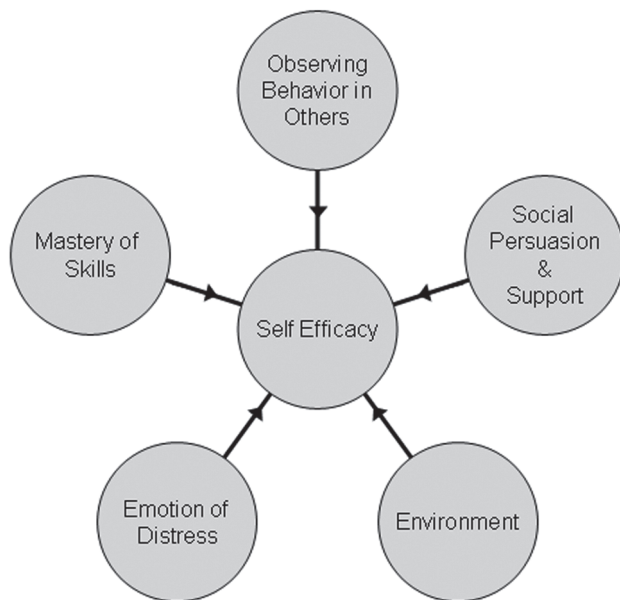


FIGURE 3. Concept of influences on perceived self efficacy based on the conceptions of Bandura (1977).

ities to effectively care for himself or herself. The nurse must be able to recognize and apply proper intervention depending on the patient's degree of self-confidence.

LOCUS OF CONTROL

Rotter (1966) developed the locus of control model. This model is based on external and internal loci of control. The locus of control is external to those who believe their health is controlled by factors they cannot direct and is unrelated to their behavior (Rotter, 1966). An example of a patient who places his or her locus of control externally would be a patient who believes it is bad luck or fate that causes his or her high blood pressure rather than his or her weight, diet, or lifestyle. The locus of control is internal to those who believe they control the outcomes of their health, and it is a consequence of their own actions. The locus of control for a patient is dependent on his or her outlook and beliefs. There are several questions the nurse can ask the patient to gauge where the patient places the locus of control, including what do you think caused your problem, how severe is your illness, and what results do you hope to gain? (Bastable, 2006). Patients with an external locus of control may be less likely to be receptive to the same health education as patients with an internal locus of control. The nurse must be sensitive to where patients place their locus of control to best educate them.

ADULT LEARNING THEORY

The adult learning theory by Knowles (1980, 1984) is based on the premise that adults require certain considerations to effectively learn. Knowles (1980, 1984) stated that adults need to know why they must learn something before they start. They want to be perceived as self-directed. Adults prefer responsibility for decisions. Adults also have life experience, which is a rich resource for learning. Knowles (1980, 1984) also stated that because of these points, adults need individualization of learning strategies. This learning must be centered on life and tasks. Adults require internal motivators less than external motivators and function autonomously. Knowles' research (1980, 1984) set the groundwork for the adult learner in any setting, with consideration to how life experience changes an individual's expectation in a learning environment.

With the exception of pediatrics, all patients are essentially adult learners. The nurse must consider this in preparation for an educational plan but must also consider the stress hospitalization and change may place on an individual. The nurse must also consider the learning environment. A hospital environment can be distracting, fast paced, and many times full of interruption, making it difficult to focus. The nurse should understand what motivates the adult learner as a patient; is it getting home sooner, being independent in the care of their new incision, or maintaining their mobility? While considering this, the nurse must be keenly aware of how, why, and when the patient best learns.

HEALTH PROMOTION MODEL

Nola Pender, a nurse, developed the health promotion model in 1975. The model is based on the premise that

characteristics and experiences of the individual affect actions specific to behaviors and affect and in turn affect outcomes specific to behavior (Pender, 1975). In 1996, Pender, Murdaugh, and Parsons (2002) updated Pender's model to incorporate aspects of Bandura's (1977) theory on self-efficacy (see Figure 3). Specifically, the health promotion model uses general information from Bandura's social theory (1977) to build on the nursing perspective of the holistic patient (Pender, Murdaugh, & Parsons, 2006). Pender and colleagues (2002) describe this theory as one pulling from nursing and behavioral sciences to identify the major factors influencing the adaptation of health promotion behavior. The model emphasizes that human behavior is rational and economical. Pender (1975) and Pender and colleagues (2002) state that an individual's behaviors are driven by prior related health promotion behaviors, as well as personal factors, including biological, psychological, and sociocultural. These aspects of an individual influence the next stage of the health promotion model where the individual then contemplates the benefits and barriers of health promoting actions, perceived self-efficacy, and his or her affect related to the specific activity. Also factored into the model at this stage are the interpersonal and situational influences on the individual (Pender, 1975). These perceptions and influences lead the individual to commit or not commit to a plan of action to promote health, factoring in immediate competing demands, and in turn the individual then adopts the health promoting behavior (Pender, 1975). Pender and colleagues (2002) stress the point that the patient plays an active role in initiating and maintaining health promotion behaviors, as well as altering the environment to be successful. Many theories in the field of health promotion and adaptation are developed based on the work of Nola Pender. The basic premise of the model is that health-promoting behavior is a result of several factors and influences, which many times are unique to the individual patient. Because of this, the nurse must understand that the patient's adaptation of health promotion behavior is affected by numerous factors. The ability of the nurse to modify factors influencing the health-promotion behaviors of the patient lies in his or her ability to identify factors under the patient's control.

Case Study

L.S. is a 76-year-old male preparing for discharge from the hospital after surgery repairing a broken hip after falling at home. It is the first day after L.S.'s hip repair, and his projected length of stay is 4–6 days. During the assessment of L.S., the nurse discovers that he was completely independent before his surgery; walking 1 mile every day and caring for his wife. L.S. tells the nurse he fell while he was shoveling his front walk. L.S. tells the nurse he "just likes to do things himself" and wants to get better so he can get back into his routine at home. He is concerned about his wife being home alone during the day, even though his neighbor stops in to check on her often.

During this admission, it is discovered that L.S.'s blood pressure is not well controlled by his daily 50 mg of Lopressor, and the doctor has ordered the dose to be

increased to 100 mg. The nurse is concerned that L.S. may not fully understand the recovery and healing process after a hip fracture, especially with the addition of a new dose of medication. The nurse's teaching will focus on L.S. caring for himself in a manner that will promote healing of the fracture and surgical site and achievement of normal blood pressure levels. The nurse will include signs and symptoms of infection; incision care; management of blood pressure regarding medication use, diet, and exercise; mobility; and safety in the home.

Because L.S. is an adult learner, the focus of education will need to be problem centered rather than subject centered, as it often is in childhood (Bastable, 2006). In other words, L.S. will benefit from education that is based around his mobility because the hip fracture poses a problem with this. The nurse recognizes that because he is an adult learner, L.S. will be resistant to change because he has already developed his system of values and beliefs. The nurse also recognizes that L.S. has other things vying for his attention, such as his wife and care of his home, making it difficult for him to focus fully on himself. Although adults are self-directed and autonomous, they need structure, instruction, and guidance (Bastable, 2006). Therefore, the nurse has established specific times in conjunction with the healthcare team for education and learning to direct L.S. in his plan of care.

Considering Pender's health promotion model, the nurse understands that L.S.'s previous active lifestyle, as well as personal factors, including the care of his wife, will affect his perceived benefits and barriers to health promotion, as well as his perceived self-efficacy in meeting goals. The nurse recognizes how the interpersonal influence of the care of his wife and the situational influence of her being alone will affect his commitment to a plan of action. Because of the comments L.S. has made about his desire for the return of a routine, the nurse recognizes that he is motivated by this new stress to adapt to his treatment plan and situation. However, the nurse is also concerned that L.S. prefers to do most things himself, having recently found him bending at the waist to pick up something off the floor rather than using his reacher.

Recognizing this as manifestation of Festinger's cognitive dissonance theory (1957), the nurse can work with L.S. to develop a treatment plan that will be as close to his normal routine as possible, with consideration for his recovery and safety realizing the closer the plan is to his normal routine the more likely L.S. will be to adhere to recommendations. Because of the urgency of the necessary changes to be made to his lifestyle, L.S. has already moved into the preparation and action phases of Prochaska's and Velicer's transtheoretical model of change (1998). L.S. prepares to make lifestyle changes to control his blood pressure, including controlling his pain, stress levels, and responsibilities, and taking his medication as prescribed. He will move into the maintenance phase as he adapts at home. L.S. states that he understands how pain, stress, and responsibilities can affect his blood pressure and acknowledges that he has control over not only these aspects of his life but also of his self-care.

These statements, as well as answers to questions asked, led the nurse to understand that L.S.'s locus of control is internal (Rotter, 1966). He sees his health as being directly affected by his actions and, therefore, within his control. The nurse asks L.S. if he feels capable of self-care and is agreeable to the treatment plan. He responds, saying that he is confident that he can care for himself as he is instructed. According to Bandura's model of self-efficacy (1977), L.S. is more likely to adhere to the treatment plan because he feels capable. According to Knowles (1980, 1984), because L.S. is an adult learner, he will need to feel as though what he is learning is applicable. L.S. may accept the techniques he is learning because they are focused on practical life tasks.

Summary

Theories provide the foundation or framework for determining approaches to patient education for each individual patient. As noted in the case study, the nurse understood the effect of L.S.'s situation and his life experience on his ability to learn healthcare information through the knowledge gained from theory. Practical knowledge and application of the theoretical frameworks of patient education have the potential to positively influence patients long-term. Understanding the theoretical basis of patient and family education is paramount to properly apply and appreciate its effects. Each framework considers varying aspects of the patient experience, but all consider the experience of the patient in respect to health education. Nurses may educate their patients and families using any combination of the listed theories to achieve best results; tailoring the applications to the situation that is specific to that patient. Theories provide the framework from which nurses use the tools that work best for each patient, customizing their educational plan. Through this process there is opportunity for optimal patient outcomes to be achieved.

The nurse acts as a facilitator to learning, creating situations to motivate the patient to learn and adapt (Bastable, 2006). In doing so, the nurse creates an active partnership with the patient as they make sense of the situation. In practice, the nurse focuses not only on the diagnosis and treatment of the patient but also on the long-term implications, including health behaviors. Based in health education, theories serve as frameworks and blueprints for the maintenance and enhancement of positive change in patient behavior (Bastable, 2006). Therefore, familiarity with these theories has the potential to increase long-term efficacy, motivation, and compliance of patients and positively affect their outcomes even after discharge.

REFERENCES

- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191–215.
- Bastable, S. B. (Ed.). (2006). *Essentials of patient education*. Sudbury: Jones and Bartlett Publishers.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Illinois: Stanford University Press.
- Gruber, M. (2003). Cognitive dissonance theory and motivation for change. *Gastroenterology Nursing*, 26(6), 242–245.
- Hochbaum, G. M. (1958). *Public participation in medical screening programs: A sociopsychological study*. PHS Publication No. 572. Washington, DC: Government Printing Office.
- Kidd, P., Reed, D., Weaver, L., Westneat, S., & Rayens, M. K. (2003). The transtheoretical model of change in adolescents: Implications for injury prevention. *Journal of Safety Research*, 34, 281–288.
- Knowles, M. (1980). *The modern practice of adult education: From pedagogy to andragogy*. New York: The Adult Education Company.
- Knowles, M. (1984). *The adult learner: A neglected species*. Texas: Gulf Publishing Company.
- May, B. J. (1999). Patient education: Past and present. *Journal of Physical Therapy Education*, Winter 1999.
- Mitchell, M. L., & Courtney, M. (2005). Improving transfer from the intensive care unit: The development, implementation, and evaluation of a brochure based on Knowles' adult learning theory. *International Journal of Nursing Practice*, 11, 257–268.
- Nexoe, J., Kragstrup, J., & Sogaard, J. (1999). Decision on influenza vaccination among the elderly: A questionnaire study based on the health belief model and the Multi-dimensional Locus of Control Theory. *Scandinavian Journal of Primary Health Care*, 17, 105–110.
- Phuanukoonnon, S., Brough, M., & Bryan, J. H. (2006). Folk knowledge about dengue mosquitoes and contributions of health belief model in dengue control promotion in Northeast Thailand. *Acta Topica*, 99, 6–14.
- Pender, N. J. (1975). A conceptual model for preventive health behavior. *Nursing Outlook*, 23(6), 385–390.
- Pender, N. J., Murdaugh, C. L., & Parsons, M. A. (Eds.). (2002). *Health promotion in nursing practice* (4th ed.). Upper Saddle River, NJ: Prentice Hall.
- Pender, N. J., Murdaugh, C. L., & Parsons, M. A. (Eds.). (2006). *Health promotion in nursing practice* (5th ed.). Upper Saddle River, NJ: Prentice Hall.
- Prochaska, J. O., Johnson, S., & Lee, P. (1998). The transtheoretical model of behavior change. In S. S. Shumaker, & E. B. Schron (Eds.), *The handbook of health behavior change* (2nd ed.) (pp. 59–84). New York: Springer Publishing Company.
- Redmon, B. K. (Ed.). (2001). *The practice of patient education* (9th ed.). St. Louis: Mosby.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 80(1), 1–28.