Continuing Education



An Overview of Adult-Learning Processes

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ealth care providers and patients enter into a teaching-learning relationship when information important to the patient's well-being is necessary. For the teaching to be as effective as possible, knowledge about adult-learning principles is essential. Understanding why and how adults learn and incorporating the learner's preferred learning style will assist the health care provider in attaining the goals set for each patient and increase the chances of teaching success.

Adult-Learning Principles

Malcolm Knowles was the first to theorize how adults learn. A pioneer in the field of adult learning, he described adult learning as a process of self-directed inquiry. Six characteristics of adult learners were identified by Knowles (1970) (see Table 1). He advocated creating a climate of mutual trust and clarification of mutual expectations with the learner. In other words, a cooperative learning climate is fostered.

The reasons most adults enter any learning experience is to create change. This could encompass a change in (a) their skills, (b) behavior, (c) knowledge level, or (d) even their attitudes

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Part of being an effective instructor involves understanding how adults learn best. Theories of adult education are based on valuing the prior learning and experience of adults. Adult learners have different learning styles which must be assessed prior to initiating any educational session. Health care providers can maximize teaching moments by incorporating specific adult-learning principles and learning styles into their teaching strategies.

about things (Adult Education Centre, 2005). Compared to schoolage children, the major differences in adult learners are in the degree of motivation, the amount of previous experience, the level of engagement in the learning process, and how the learning is applied. Each adult brings to the learning experience preconceived thoughts and feelings that will be influenced by each of these factors. Assessing the level of these traits and the readiness to learn should be included each time a teaching experience is being planned.

Motivation. Adults learn best when convinced of the need for knowing the information. Often a life experience or situation stimulates the motivation to learn (O'Brien, 2004). Meaningful learning can be intrinsically motivating. The key to using adults' "natural" motivation to learn is tapping into their most teachable moments (Zemke & Zemke, 1995). For example, a patient concerned about how stress urinary incontinence (SUI) is affecting her lifestyle might be motivated to learn about Kegel exercises more so than her counterpart who is not experiencing SUI. Lieb (1991) described six factors which serve as sources of motivation for adult learning (see Table 2). Health care providers involved in educating adults need to convey a desire to connect with the learner. Providing a challenge to the learner without causing frustration is additionally important. Above all, provide feedback and positive reinforcement about what has been learned (Lieb, 1991).

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Note: CE Objectives and Evaluation Form appear on page 353.



Table 1. Characteristics of Adult Learners

- Autonomous and self-directed
- Accumulated a foundation of experiences and knowledge
- Goal oriented
- Relevancy oriented
- Practical
- Need to be shown respect

Source: Knowles, 1970

Experience. Adults have a greater depth, breadth, and variation in the quality of previous life experiences than younger people (O'Brien, 2004). Past educational or work experiences may color or bias the patient's perceived ideas about how education will occur. If successfully guided by the health care provider, former experiences can assist the adult to connect the current learning experience to something learned in the past. This may also facilitate in making the learning experience more meaningful. However, past experiences may actually make the task harder if these biases are not recognized as being present by the teacher. In the case of the patient with SUI, it may be helpful for the teacher to ask whether other women in her family or her life have encountered continence problems and their experiences with Kegel exercises. This would be an opportune time to address any erroneous or preconceived ideas.

Level of engagement. In a classic study, Rogers (1969) illustrated that when an adult learner has control over the nature, timing, and direction of the learning process, the entire experience is facilitated. Adults have a need to be self-directed, deciding for themselves what they want to learn. They enter into the learning process with a goal in mind

Table 2. Sources of Motivation for Adult Learning

- Social Relationships: to make new friends; to meet a need for associations and friendships
- External Expectations: to comply with instructions from someone else; to fulfill recommendations of someone with formal authority
- Social Welfare: to improve ability to serve mankind; to improve ability to participate in community work
- Personal Advancement: to achieve higher status in a job; secure professional advancement
- Escape/Stimulation: to relieve boredom; provide a break in the routine of home or work
- Cognitive Interest: to learn for the sake of learning; to satisfy an inquiring mind

Source: Lieb, 1991

and generally take a leadership role in their learning. The challenge for teachers is to be encouraging to the learner but also reinforce the process of learning. The endpoint of learning cannot always occur quickly or on a preset timeline.

For the patient with SUI, the health care provider should assess her understanding of SUI, expectations for treatment, and the level of motivation to learn and practice the recommended Kegel exercises. According to Rogers (1969), the adult-learning process is facilitated when:

- The learner participates completely in the learning process and has control over its nature and direction.
- It is primarily based upon direct confrontation with practical, social, or personal problems.
- Self-evaluation is the principal method of assessing the progress or success.

It is important to remember that in order to engage the adult learner and facilitate the transfer of knowledge, patience and time on the part of the teacher and patient are needed.

Applying the learning. As skills and knowledge are acquired, it is paramount to include return demonstrations

by the learner. The primary purpose is to verify the ability of the patient to perform the skill. Return demonstrations enable the teacher to view, and the patient to experience, progress in their understanding and application of the education. Seeing progress and realizing a tangible movement forward in learning process increase the patient's motivation to learn even more. Information that goes into the learner's memory will likely be remembered if the teacher provides opportunities in the session for activities such as application exercises and discussions (Zemke & Zemke, 1995).

In the case of the patient with SUI, return demonstration of Kegel exercises via connection to a biofeedback monitor is optimal. As an alternative, the health care provider might ask about the frequency of the exercises and whether her continence has improved. Depending on the patient's response, it may be necessary and beneficial to reinforce the teaching done in the initial session.

Learning Styles

Most adult learners develop a preference for learning that is based on childhood learning patterns



Table 3.

Learning Styles, Characteristics of Learners, and Suggested Teaching Strategies

Learning Style	Characteristics	Suggested Teaching Strategies
Visual	 Prefers written instructions rather than verbal instructions. Prefers to have photographs and illustrations to view when receiving written or visual instructions. Prefers a time-line, calendar, or some other similar diagram to remember the sequence of events. Observes all the physical elements in the learning environment. Carefully organizes their learning materials. Remembers and understands through the use of diagrams, charts, and maps. Studies materials by reading notes and organizing it in outline form. 	 Provide lots of interesting visual material in a variety of formats. Make sure visual presentations are well organized. Make handouts and all other written work as visually appealing as possible, and easy to read. Make full use of a variety of technologies: computers, overhead projection, video camera, live video feeds/close circuit TV, photography, Internet, etc.
Auditory	 Remembers what they say, and what others say very well. Remembers best through verbal repetition and by saying things aloud. Prefers to discuss ideas they do not immediately understand. Remembers verbal instructions well. Finds it difficult to work quietly for long periods of time. Easily distracted by noise, but also easily distracted by silence. Verbally expresses interest and enthusiasm. Enjoys group discussions. 	 Rephrase points and questions in several different ways to communicate intended message. Vary speed, volume, and pitch, as appropriate, to help create interesting aural textures. Write down key points or key words before providing verbal instructions to help avoid confusion due to pronunciation. Ensure auditory learners are in a position to hear well (be sure hearing aids are inserted and functional). Incorporate multimedia applications utilizing sounds, music, or speech (use tape recorders, computer sound cards/recording applications, musical instruments, etc.).
Kinesthetic	 Remembers best through getting physically involved in whatever is being learned. Enjoys the opportunity to build and/or physically handle learning materials. Will take notes to keep busy but will not often use them. Enjoys using computers. Physically expresses interest and enthusiasm by getting active and excited. Has trouble staying still or in one place for a long time. Enjoys hands-on activities. Tends to want to fiddle with small objects while listening or working. Remembers what they do, what they experience with their hands or bodies (movement and touch). Enjoys using tools or lessons which involve active/practical participation. Can remember how to do things after doing them once (motor memory). Has good motor coordination. 	 Permit frequent breaks in teaching session to allow learner to move around room. Encourage learner to write down their own notes. Encourage learner to stand or move while reciting information or learning new material. Incorporate multimedia resources (computer, video camera, overhead transparencies, photography camera, etc.) into programs (teacher presentations and student presentations). Provide lots of tactile-kinesthetic activities in the class. Have product samples available for practice. Encourage return demonstration of procedures.



(Edmunds, Lowe, Murray, & Seymour, 1999). Several approaches to learning styles have been proposed, one being based on the senses that are involved in processing information. An assessment of the patient's learning style is a fundamental step prior to beginning any educational activity. Determining the patient's learning style will help identify the preferred conditions under which instruction is likely to be most effective (Richardson, 2005). The most frequently used method of delineating learning styles is in describing visual, auditory, and kinesthetic learners. Table 3 outlines the characteristics and suggested teaching strategies for these types of adult

Visual learners prefer seeing what they are learning. Pictures and images help them understand ideas and information better than explanations (Jezierski, 2003). A phrase you may hear these learners use is "The way I see it is." The teacher needs to create a mental image for the visual learner as this will assist in the ease of holding onto the information. If a visual learner is to master a skill, written instructions must be provided. Visual learners will read and follow the directions as they work and will appreciate it even more when diagrams are included.

Auditory learners prefer to hear the message or instruction being given. These adults prefer to have someone talk them through a process, rather than reading about it first. A phrase they may use is "I hear what you are saying." Some of these learners may even talk themselves through a task, and should be given the freedom to do so when possible. Adults with this learning style remember verbal instructions well and prefer someone else read the directions to them while they do the physical work or task.

Kinesthetic learners want to sense the position and movement of the skill or task. These learners generally do not like lecture or discussion classes, but prefer those that allow them to "do something." The phrase this group of people will often use is "I feel like you..." These adults do well learning a physical skill when there are materials available for hands-on practice.

Barriers to Learning

The adult learner has many responsibilities that must be balanced against the demands of learning. Because of these responsibilities, adults may have barriers against participating in learning. Some of these barriers include (a) lack of time, (b) lack of confidence, (c) lack of information about opportunities to learn, (d) scheduling problems, (e) lack of motivation, and (f) "red tape" (Lieb, 1991). If the learner does not see the need for the change in behavior or knowledge, a barrier exits. Likewise, if the learner can not apply learning to his/her past experiential or educational situations, the teacher will have barriers to overcome. As health care providers, urologic nurses need to find ways to motivate patients, enhance their reasons for learning, and decrease barriers if possible. A successful strategy includes showing the adult learner the relationship between the knowledge/skill and the expected positive out-

As educators, urologic nurses must be aware of possible environmental and emotional barriers to patient education. Adults are more sensitive to discomfort so the physical setting, room temperature, lighting, and noise level should be as comfortable as possible. Providing an ambient room temperature is especially important for older adults who may chill more easily. If the learner has hearing or vision impairments, this can impact the educational process and possibly make the patient appear insecure or unable to comprehend the information. If not corrected, eventually the learner may become less willing to participate in the learning experience. Emotional connection to the learner is perhaps the most elusive barrier to overcome between teacher and learner. Any teacher who can make a learner believe that he/she is capable of learning a skill/knowledge has already met an important goal of the teaching/learning experience.

Summary

Although each patient may require a unique learning style, adults learn best when teaching strategies combine visual, auditory, and kinesthetic approaches. Assessing the patient's best style of learning will make a difference in the methods and materials most appropriate for the teaching session. Ultimately, adults learn best by doing. Active participation, which can take many different forms, is the cornerstone for both the style of learning and the principles of adult education. Active learning results in longerterm recall, synthesis, and problem-solving skills than learning with verbal instruction only.

In our day-to-day approach to educating patients, health care providers must redirect and focus their energies on assessing individual learning styles, motivation, relative past experiences, level of engagement, and willingness to apply the learning. A collaborative effort between teacher and learner will maximize success and benefit everyone involved in the activity.

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skills plays a critical role in promoting the health of patients undergoing urinary diversion. The scope of patients' needs require a nurse competent to assume the changing roles in the four phases of the interpersonal process described by Peplau (1992; 1997). Peplau's theory emphasizes that effective communication is integral to the nurse-patient relationship and necessary for educational efforts to be successful. To that end, it is important to involve the patient in establishing the teaching goals, conduct frequent review of these goals, and evaluate the efficacy of teaching methods used. Applying this theory to practice helps the urologic nurse evaluate and develop skills and teaching methods to meet the needs of each patient.

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Additional Reading

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