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Ethical Decision-Making for the Utilization of Technology-Based Patient/Family Education

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ABSTRACT

With the onslaught of technological advances for patient care and education, has anyone stopped to think about the ethical issues involved? Even though computerized patient/family education provides for *just-in-time* learning, is it the ethically appropriate method of patient teaching? Using the ethical principles of autonomy, beneficence, nonmaleficence, justice, veracity, fidelity, and multiculturalism, along with the Moral Rights theory, virtues ethics, deontology, and teleology, an action plan was developed. The Ethical Assessment Framework was used to develop a list of ethically-appropriate alternatives. There two alternatives available to the nurse are to empower the patient to use the Video on Demand (VOD) and provide printed materials from the web portal, or perform the traditional patient/family education at the staff's convenience. The morally justified option is to empower the patient to use the VOD and provide printed materials from the web portal.





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Introduction

When nurses are empowered to adopt technology in patient education, patient knowledge is increased. Computer-based patient education can support “just-in-time” learning; learning that occurs when the patient is ready to learn. Many adult patients are computer-savvy and seek additional resources for knowledge of healthcare. Nurses need to be aware of the range of available resources and their use in patient education (Lewis, 2003).

Video-on-Demand (VOD) is a patient education system that incorporates a computerized access system with the patient’s in-room television. The patient can call the computer via the telephone and request a specific educational video be shown on the television.

Ethical Issue

Lewis (2003) performed a systematic review of 32 research reports and found that there were statistically significant changes in knowledge acquisition when patients from school-age to the elderly were provided with access to computer-based learning programs. Self-care behaviors, social support, adherence, confidence, satisfaction, and clinical outcomes also improved. Technology-based patient/family education systems allow for just-in-time learning. If these systems are not used, the patients and their families may not be adequately prepared for self-care after discharge. However, these systems are cumbersome and time-consuming to use, especially the VOD.

The opposing values are two-fold. First, without the technology-based systems, the patients are educated at the nurses’ convenience, not necessarily when the patient is teachable. When this occurs, the patient may not be adequately prepared for self-care upon discharge. On the other hand, the VOD system is cumbersome and time-





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consuming. The nurses may not have the time to teach the patients how to use the VOD or to access the web portal to print materials useful to the patients and their families. Obviously, the safety of the patient should be the primary concern of the nurse; however, only so much can be done in one shift.

So, the choices are to educate the patient when the nurse is able to make time while caring for 4-6 patients. He or she can perform discharge teaching and provide the materials deemed useful by the administration for all patients with particular diagnoses, procedures, and/or medications. This can be more time-efficient for the nurse, but is not necessarily what is best for the patient and family. Or, the nurse can teach the patient how to access the VOD, along with providing printed materials from the web portal for the patient and family to review when they want to learn. This allows the patient and family time during the hospitalization to ask questions and discuss self-care after discharge.

Ethical Principles

Autonomy

According to Johnstone (2004), autonomy is self-governance. It is an individual's ability to make choices and includes respect for the choices of others. Individuals are able to decide what is in their best interests. Included in autonomy is the principle of prudence. Prudence requires patients to be educated about their care. The patient cannot make decisions about self-care and health promotion without having knowledge about choices. Meaningful, objective information is crucial to autonomy. Prudence (education) allows the patient to become responsible for his or her own care (Huycke & All, 2000).

Patient autonomy is often reduced in health care facilities due to disease, fear, family conflict, and economic or managed care concerns, along with complex medical





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decisions. What is often routine for the nurse, is unusual and often stressful for the patient and family. Medications with sedative effects, pain, and

the foreign nature of the medical language further reduce the amount of patient autonomy (Meyers, 2004).

Autonomy also applies to the nurse. All patients need education, but vary considerably in what they need to know. Some patients are able to grasp concepts quicker than others. Some may need more extensive education based on the severity of a patient's condition, or the potential side effects of a medication (Haddad, 2003).

The nurse must ensure that the patient has the knowledge necessary to make informed health care decisions. Patient self-care is totally dependent on proper education and this is best done when the patient and family are prepared to accept the education (teachable moments).

Beneficence

Beneficence is the principle of helping or contributing to the welfare of another (Johnstone, 2004). Meyers (2004) states that the emphasis in hospitalized patients should be the principle of beneficence. Most patients do not want to be autonomous, or are unable to be autonomous due to the life-altering events taking place. In these situations, beneficence is the more crucial moral principle (Meyers, 2004).

The welfare of the patient is increased with patient and family education that is timely and appropriate. The patient and family are able to learn and comprehend information when they are ready for it. This is where the VOD and printed pages from the web portal are advantageous.

Nonmaleficence

The principle of nonmaleficence is the obligation not to harm others and is linked to beneficence. Any act which causes the injury or suffering of another





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person is condemned (Johnstone, 2004). This is a nurse's fundamental commitment. Most nursing functions have nonmaleficence at their root. It is the reason side rails are raised, the crash cart is checked, and confidentiality is kept. Documentation shows how this principle was kept. Sometimes the duty of nonmaleficence will conflict with the patient's autonomy. The patient may request to watch a VOD when he or she is in need of rest, or is seen to be falling asleep during the video. Even though the patient expressed a desire for education, it is not a teachable time (Bosek Dewolf, 2001).

Nonmaleficence is patient education by the proper methods. Patients retain information better when they are prepared to learn. Using VOD and the web portal allow the patient to learn when he or she is ready. In this way, the patient has a better understanding of his or her self-care needs.

Justice

Justice can be defined as fairness or the equal distribution of good and bad (Johnstone, 2004). Justice is a key component of quality in health care. When health care is not equitable, it is unethical. Resources should be distributed based on need (Huycke & All, 2000). However, not all patients need equal amounts of education. As stated previously, some patients may have more serious problems, or a medication with more severe potential side effects. Distributive justice means that all patients should receive the quality education they need (Haddad, 2003).

Patient/family education should be based on need. Some patients and families need more education, or may need the same information repeated multiple times, in order to become proficient in self-care upon discharge. The nurse must assess the patients' and families' educational needs and decide which patients' needs are the priorities. Technology can provide some assistance in patient education. Storing patient/family education on the computer allows for quick retrieval and updating of patient/family education materials. The VOD allows the patient to watch an appropriate





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video and then ask questions at a later time when the health care professional has time (Haddad, 2003).

Veracity

Truthfulness is the most critical principle for healthcare professionals to foster trusting relationships with patients. Dishonesty harms healthcare as a whole (Povar et al., 2004).

It is imperative that healthcare professionals honestly evaluate their patients' needs regarding education. As previously stated, different patients and families will have different educational needs. Some patients may do better with printed materials, while other may require videos.

Fidelity

Fidelity is the obligation to remain faithful to commitments (Shirey, 2005). This is the cornerstone of patient advocacy. Healthcare professionals have a duty to promote patient welfare. Nurses and other health care professionals have made a commitment to ensure patient safety and assist patients with health promotion activities (Povar et al., 2004)

One of the commitments health care professionals have made to their patients is education. Without education regarding self-care, patients will have an increase in emergency center and physician office visits, along with increased hospital readmission (Bourdeaux et al., 2005).





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Multiculturalism

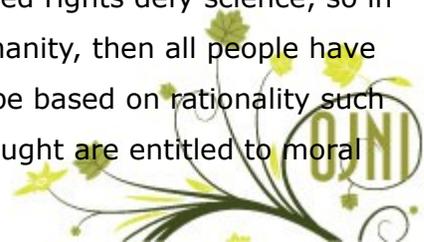
Fundamentalism is the view that ethical principles are universally applicable. These principles are rooted in human nature and independent of various cultures. The opposing view is that of multiculturalism; that ethical principles are culturally dependent and may only be applied within the culture. Between these two views lies ethical multiculturalism. It allows people to follow ethical principles while respecting cultural norms. For example, autonomy is better known as respect for persons in other cultures since other cultures often view the individual as inseparable from the community (Harper, 2006).

Nurses deal with patients from various cultures. It is important that the nurses respect the patients and their needs for education. Many cultures value the role of the family in care of the patient. The nurses must be culturally sensitive in order to provide the appropriate education to the appropriate family members at the appropriate time.

Ethical Theories

Moral Rights Theory

According to Johnstone (2004), moral rights theory suggests that individuals have the right to life, freedom, health, privacy, and confidentiality. A moral rights claim is the only basis necessary for moral action. If they are based on natural law and divine command, it is believed that they are built into the framework of the universe and have been divinely ordained. Unfortunately, these divinely ordained rights defy science, so in today's society, are not verifiable. If based on common humanity, then all people have moral rights simply by being human. Moral rights can also be based on rationality such that only those people capable of rationale, independent thought are entitled to moral





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rights. Unfortunately this means that individuals who are not capable of rational thought are not entitled to moral rights. If moral rights are based on interests, then only those who could be benefited or harmed have any claim to moral rights. Therefore, a chair cannot have moral rights (Johnstone, 2004).

Since patients and families are capable of rational, independent thought, they are entitled to moral rights. Therefore, it is imperative that nurses perform patient/family education in the way deemed best by the evidence. This way would be technology-based since it allows patients and families to learn when they are ready.

Virtues Ethics

According to Smith and Godfrey (2002), virtue ethics focuses on the character of the nurse or being a good nurse and doing the right thing. Character formation determines conduct. The inner character and intentions of the nurse must be known in order to interpret the nurse's actions. A qualitative study attempted to define "good nurse" and "right thing" by asking a group of conference participants two open-ended questions. "A good nurse is one who . . ." and "how does a nurse go about doing the right thing?" Seven categories resulted from these two questions. Personal characteristics included compassion, caring, respect for self and others, and general communication patterns. Professional characteristics included the commitment to the people he or she serves and included things such as acting within the applicable scope of practice and being a role model. Knowledge base reflects competence and knowledge of limitations with the desire to learn more and perform better. The category of patient-centeredness reflects the idea of putting the patient before everything else, including self. Advocacy includes empowering others or intervening on the patient's behalf. Critical thinking involved problem-solving in order to make the correct judgments or





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decisions, along with planning and evaluating the outcome. The final category of patient care is the application of performing safe, competent nursing care and included communication and teaching (Smith & Godfrey, 2002).

If this theory is used to make the moral decisions regarding patient/family education, the right thing is to provide the patients and their families with competent, timely education regarding their self-care. This would be done by using the technology-based system. It is the right thing that the good nurse would do.

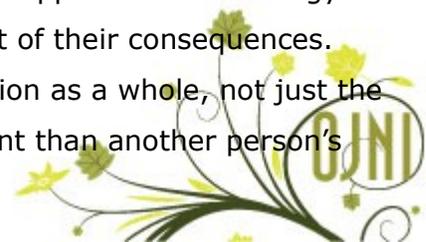
Deontology

Nursing ethics has traditionally been dominated by action-centered theories such as deontology (Armstrong, 2006). According to the principle of deontology, our performing our duty is mandatory, regardless of the consequences. Our duty is determined by God's command of the Golden Rule of do unto others as you would have them do to you (Johnstone, 2004).

In nursing, we have a duty to provide safe, competent care. According to Erlen (2004), most patient/family education materials are written at a sixth or seventh grade level, even though many patients are functionally illiterate. This creates a duty to provide education materials that are at the patient's functional level. This can be done with VOD. The videos require no reading ability and can be viewed whenever the patient and/or family desire. The videos can be viewed as often as necessary to comprehend the material.

Teleology

Teleology is also known as consequentialism and is the exact opposite of deontology. Teleology asserts that actions can only be judged in the light of their consequences. Utilitarianism is a form of teleology and looks at the population as a whole, not just the individual. One person's rights/needs are not more important than another person's





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(Johnstone, 2004).

The consequences of the action of patient/family education are also an important consideration. Bourdeaux, et al. (2005) studied the effects of patient education as a part of case management on patients with a diagnosis of syncope and noted that quality of care increased with the development and use of patient education materials. Quality of care was measured in a decreased length of stay of 0.15 days over 12 months of the program, which subsequently decreased patient care costs by \$376.00/patient, totaling \$181,980 for one facility.

Action Recommendation

An ethical framework can be useful in assisting the nurse in making the appropriate ethical decision when choosing which option is best in any ethical dilemma. The Ethical Assessment Framework (EAP) applies well to the issue of patient/family education (Cassells & Gaul, 1998).

The first step in any process is to assess the situation. According to the EAP, this includes identifying the problem and clarifying the relevant facts. Then, the nurse is to identify the methods to help resolve this problem including any applicable ethical principles and/or ethical theories. Once the principles and theories have been identified, the nurse needs to consciously clarify his or her own values, rights, and duties, along with those of the patient and/or others involved in this dilemma. After identifying the ethical dilemma present, it is time to identify the guidelines from professional organizations and other interdisciplinary resources. Then, the nurse must identify and prioritize all the possible options for action.

After assessment, the nurse must select an option from the list of alternatives developed during assessment and act on that option. As in any process, the final stage is that of evaluation and includes short and long-term consequences.





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The problem arises from the staff not having enough time to use the VOD and web portal for patient/family education. Even though it has been shown that just-in-time learning is best for the welfare of the patient, it requires that the nurse work around the patient's needs, regardless of other tasks that need to be done at any given time. The applicable principles and theories have already been outlined with the appropriate decision based on each particular principle or theory. The principles previously identified include autonomy, beneficence, nonmaleficence, justice, veracity, fidelity, and multiculturalism. The identified theories include moral rights, virtues ethics, deontology, and teleology. The duties and rights of the nurse have been identified and include providing a safe environment with competent care. The rights of the patient have also been identified as having a safe environment with preparation for self-care at discharge. The ANA Code of Ethics Provision two states, "the nurse's primary commitment is to the patient, whether an individual, family, group, or community." Provision three states, "the nurse promotes, advocates for, and strives to protect the health, safety, and rights of the patient" (*Code of ethics*, 2001). Other evidence from the literature regarding the benefits of technology-based patient/family education was presented previously. There are two alternatives: empower the patient to use the VOD and provide printed materials from the web portal, or perform the traditional patient/family education as the staff's convenience. The morally justified option is to empower the patient to use the VOD and provide printed materials from the web portal.





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Author Bio

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Dr. Heiskell is a full time faculty member and Program Director for the RN-BSN program at South University Online. She completed a Bachelor in Science in Nursing degree from the Medical College of Georgia in 1983, and a Master of Science in Nursing degree in Cardiovascular Nursing from the University of Alabama at Birmingham in 1985.

In 2007, she completed a Doctor of Nursing Practice degree at the Medical College of Georgia with a concentration in Informatics. Her DNP project was Barriers to use of a technology-based patient/family education system.

Dr. Heiskell successfully completed the requirements for the designation of Certified Nurse Educator in July 2008. She is on the NLN Task Force for Faculty Competencies in Nursing Informatics. Dr. Heiskell has presented at nursing education conferences about the use of PDA's in nursing school and is currently a peer reviewer for e-learning for the Online Journal of Nursing Informatics. Her research interests include the characteristics of successful online nursing students. She has learned to enjoy new technology and can see how it will continue to improve health care in the future. She envisions nurses one day putting on suits similar to Cyborgs in Star Trek so that all information seen, heard, and touched becomes part of the health care record.

