# Abstract

Education, Learning

Abstract This paper will examine Bloom’s taxonomy of education and it’s relation to nursing education. Bloom’s Taxonomy of Education provides a solid framework for nurses to achieve higher levels of knowledge, to enhance patient outcomes. The most prevalent domains outlined by Bloom will be explored, relating to their application in managing patients with chronic diseases. Research based on the taxonomy, proves learning at the higher levels is dependent on mastering prerequisite knowledge and skills at lower levels. Bloom’s goal for creating such a framework was to provide learners with a more holistic approach to their education, just as nurses try to provide holistic care to patients. Bloom’s Taxonomy of Education and its use in Nursing Education “ Knowledge, as defined here, involves the recall of specifics and universals, the recall of methods and processes, or the recall of a pattern, structure, or setting “(Bloom et al., 1956, p. 201). Bloom bases this knowledge on three subcategories: cognitive, affective, and psychomotor. In relation to nursing education, faculty providing instruction to students in the clinical setting, need to have a theoretical foundation for their teaching (Benner, 2001). Skills in the cognitive domain focus on knowledge, comprehension, and critical thinking on a particular topic. There are six subcategories within the cognitive domain. The first subcategory is knowledge in which the learner can recall facts, terms and basic concepts. The knowledge subcategory is the foundation that the learners build on. Memorizing normal lab result for hemoglobin is an example of this knowledge. Comprehension of knowledge represents the understanding of facts and ideas by organizing, comparing, interpreting, and stating the main ideas. Nursing students can demonstrate this by stating the role of

hemoglobin in the body. The next segment, application, consist of using the knowledge and skills. A leaner can apply their knowledge about hemoglobin, by explaining to the instructor about hemoglobin and how it relates to Sickle cell disease. In the analysis level one uses higher levels of thinking by looking at the data and comparing and contrasting. Nursing instructors may ask students to describe hemoglobin pathophysiology in a patient with Sickle cell verse a patient with Thalassemia minor. The synthesis level combines data and knowledge in a different way or proposes alternative solutions. At the synthesis level nursing students are asked to formulate care plans with interventions. The final segment forces the learner to evaluate, present, and defend opinions by making judgments about information, validity of ideas or quality of work based on a set of criteria (Anderson et al., 2001). The care plan and interventions are evaluated by the student nurse. Practicing nurses will use these tools when teaching patients, and evaluate their comprehension. For example it is important to chart that the diabetic patient verbalizes understanding or can return demonstrate use of insulin injection. Each segment within the cognitive domain is important in moving throughout the hierarchy. Affective domain describes the way people react emotionally and their ability to feel another living thing's pain or joy. Educational psychologists that designed this domain found their greatest challenge was establishing a continuum of affective learning, the basis for development of levels of learning within the domain (Krathwohl et al., 1956). These psychologists ultimately concluded with five categories: receiving/attending, responding, valuing, organization, and characterization based on values. Affective domains can be utilized in nursing education by developing

therapeutic communication skills and upholding the nursing code of ethics. The psychomotor domain explains the tactile and motor skills involved. The psychomotor domain is evaluated in the clinical setting for nursing students. As described by Black and Hawks (2009), most nursing schools have implemented the use of a clinical skill performance check off list. To test nursing students' clinical knowledge, they may be asked to insert a Foley catheter into a mannequin. The educational psychologist mentioned who created taxonomies for the cognitive and affective domains, did not embark on creating such subcategories within the psychomotor domain. Other educational psychologist tried creating his or her own taxonomies. Simpson (1972) among other contributors, such as Harrow (1972) and Dave (1967), created a Psychomotor Taxonomy that helps to explain the behavior of typical learners or high performance athletes. Researched levels they proposed within the psychomotor domain include: Perception, Set, Guided Response, Mechanism, Complex Overt Response, Adaptation, and Origination. Nursing education combines all aspects of Bloom's taxonomy. Nursing students learn cognitive skills as well as applying knowledge from other prerequisite courses. The key values, emotions, and empathy of the nurse stems from the affect domain. The mastery of psychomotor skills along with the knowledge and reasoning for psychomotor interventions allows the nurse to practice safely and competently.