

Genomics



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BSN nurses are expected to be better prepared to lead the nursing field in advancing technology. Genomics, one of the most influential scientific advances in recent history, is increasingly impacting medical research development as well as legal, ethical, and clinical practices. The future of nursing requires clear delineation of nursing's contribution the field of applied genomics in both research and clinical environments through incorporation of elements of genomics in the nursing practices and inclusion of genetics in the nursing assessment. Because of the role that genomics has been proven to play in disease, modern nurses commonly are responsible for eliciting at least three generations from patients (Consensus, 2008). Nurses play a critical role in assessment of this information for use in preventative care, prognostics, selection of treatment, and treatment evaluation, necessitating firm understanding of genomic principles. Nurses are an essential educational resource for patients unaware of genomic technologies. Nurses also serve as advocates for clients that may benefit from genomic services and for the rights of those clients to make autonomous, informed genomic and genetic based decisions. As part of the nursing assessment, genomics allows a nurse to establish risk factors based on family history of disease. Perhaps more importantly, however, the nursing assessment should include patient attitude and knowledge of genetic and genomic technologies that may be beneficial. This assessment will also allow other healthcare professionals to interact more effectively with the patients by understanding their biopsychosocial views and is critical in allowing patients to make informed decisions based on these new technologies. The nursing assessment should not only include a component of recording family history in order to provide information on which to base genetic and genomic

risks, but it should also be the initial assessment involved in patient education in genomics. References Consensus Group. (2008). Essential of Genetic and Genomic Nursing: Competencies, Curricula Guidelines, and Outcome Indicators, 2nd Edition. URL: [http://www. genome.gov/Pages/Careers/HealthProfessionalEducation/geneticscompetency. pdf](http://www.genome.gov/Pages/Careers/HealthProfessionalEducation/geneticscompetency.pdf)