The Integration of Genetics and Genomics into Nursing Practice at Baptist Beaumont Hospital
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Problem: There is a growing need for institutions to incorporate family health history and genetic information into healthcare delivery. Institutions need to educate nurses on genetics and the understanding of how this information is beneficial patients.

Evidence: The importance of genetics has increased over the past 10 years due to advances in medicine, therefore most nurses have no formal knowledge on genetics. A pre-assessment was performed to assess baseline genetic knowledge of all registered nurses within Baptist Beaumont Hospital. Three hundred and twenty-two nurses completed the survey, which resulted in a 58% response rate. Fifty-eight percent of nurses surveyed believe that it was important for nurses to become more educated about the genetics of common diseases. Approximately 85% of nurses thought that genetic risk factors have clinical relevance on common diseases such as coronary heart disease and diabetes. However, 75% of the nurses surveyed stated that their limited expertise in genetics restricted their ability to discuss the genetics of common diseases. Additionally, 88% of nurses had no knowledge of genetic competencies endorsed by ANA as the standard of practice for genetics.

Strategy/Practice Change: A team of nurse managers, educators, and staff nurses was created to work on this project. The action plan included several approaches to educating nurses on genetics and genomics. Simple games were played during the lunch hour to increase the knowledge of genetics to nurses. Monthly genomics fliers were placed in staff areas on each unit. CEU workshops were presented to the nurses on multiple days. The workshops presented information about genetics and its relationship to family health history. Health history questions were added to the hospital inpatient admission assessments. Hospital policies were revised to include relevant information on assessing for genetic risk factors.

Evaluation/Results: At the continuing education workshops, pre and post tests were given to assess the nurse's increased knowledge of genetics. Twenty five registered nurses attended the continuing education offering. The pre-tests showed the nurses, on average, answered 61.5% questions correct and the post test revealed an average of 83.5% correct answers. From this the conclusion was drawn that the nurses' knowledge of genetics increased. In August, the initial pre-assessment survey will be given again to reevaluate the nurses' views on genetics at Baptist Hospital.

Recommendations/Lessons Learned: The science of genetics and genomics is reshaping the understanding of human health and diseases. Therefore, the integration of genomics as a science is essential for the knowledge of healthcare professionals. In order to care for the people in our
communities throughout the lifespan, registered nurses will need to incorporate genetic and genomic information into their practice. Further investigation on best practices for achieving this practice change is merited.

**Bibliography:**

