Background and Significance

Emphasis has been placed on genetic research, necessitating the development of genetic nursing education at both undergraduate and graduate levels. This has led to the incorporation of genetic education into nursing curriculum to increase genetics awareness and establish competency in genomic literacy and clinical practice. However, our understanding of genetic knowledge among nurses is limited. The purpose of this review is to explore the current genetic knowledge and education needs among registered nurses (RNs) and advanced practice nurses (APNs).

Methods

Articles were identified with CINAHL, PsychINFO, PubMed, and Medline using select keywords. Studies available in English including reviews, commentaries, and original research published between 2008 and 2014 were searched. Bibliographies of pertinent articles were used to identify relevant studies that were not initially identified by the original database searches.

Results

Most identified articles focus on nursing knowledge of broad research terminology and guidelines specific to genetic research or genetic core competencies related to nursing practice.

Conclusions

• Nurses have insufficient knowledge and confidence to integrate genomics into practice.
• Nurses believe genomics is important to healthcare and are receptive to learning about genomics.
• A national nursing education initiative in genomics is needed (Calzone, 2013).
• A competent nursing workforce is critical to the effective utilization of genomics in personalized healthcare.
• Little documentation exists underscoring the importance of obtaining the genomic skills and knowledge relevant to APNs.

Implications for Nursing Practice

Previous studies have revealed that nurses have limited confidence in the genetics and genomics knowledge that may impact nursing practice. Genomics is an established core competency for all RNs regardless of academic preparation, clinical role, or specialty. APNs must be knowledgeable on genetic principles, topics, and the ethical, legal, and social implications related to genetics to increase the ability to provide effective and comprehensive care for individuals and families.

References