Advances in oncology care have transformed treatment approaches as genetics and genomics analyses promote implementation of personalized medicine. Genetics and genomics research in TP53 have demonstrated that some mutations are prevalent in minority populations. This has implications on personalized treatment approaches, particularly in early disease stages. The purpose of this article is to describe oncology nurses’ role in applying these findings in practice to reduce disparities observed in cancer and survivorship care.

**AT A GLANCE**
- Advances in cancer care have improved survivorship, but disparities exist.
- Genetics and genomics research indicates that some mutations may be prevalent in specific minority populations, and these findings can direct development of personalized medicine approaches.
- Oncology nurses have a role in educating the public, particularly at-risk populations, regarding cancer screening, genetics and genomics, and determinants for personalized medicine.

**KEYWORDS**
disparities; survivorship care; genetics; genomics; patient education

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**Genetic Testing**

How genetics and genomics can affect healthcare disparities

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**TP53**

Located on the 17th chromosome, tumor protein p53 (TP53) is a tumor suppressor gene inhibiting the development of cancer. The p53 protein consists of four domains, with responsibilities that include transcription factor activation, recognition of DNA sequences, and recognition of DNA damage. p53 plays a major role in apoptosis, growth arrest, DNA repair, and...