Factors influencing decisions of breast cancer patients to follow-up on recommendations for genetic counseling – The University of Tennessee Medical Center experience

**Background:** Referrals of patients to the genetic center at University of Tennessee Medical Center Cancer Institute (UTMC-CI) follow the NCCN Clinical Practice Guidelines in Oncology for Genetic/Familial High-Risk Assessment for Breast and Ovarian Cancer, developed to identify individuals who may benefit from cancer risk assessment and genetic counseling. Referrals for genetic counseling at UTMC-CI are given to patients by nurse navigators, and patient's information is forwarded to the hospital's genetic center.

**Methods:** We investigated factors influencing decisions of breast cancer patients in UTMC to follow-up on recommendations for genetic counseling in 2012-2014 time-period. These included age, rural-vs.-urban living, benign-vs.-malignant breast diagnosis and effect of Angelina Jolie's announcement on 5-14-2013 of undergoing prophylactic mastectomies for being a carrier of BRCA1-gene for breast cancer. Her statement apparently caused an increase of genetic counseling referrals in a big referral center in Canada and few in the United Kingdom.

**Results:** From 412 UTMC-CI's referred patients, 139=33.7% scheduled, 105=25.5% attended the appointment; 30=7.3% sought testing and 5=1.2% was found with genetic mutation. Malignant breast diagnosis, urban living and age<50 significantly increased scheduling of the appointment by referred patients (p<.05), but Angelina Jolie's announcement had no effect (p=.07).

**Conclusion:** While attending of the appointment and seeking of genetic testing when recommended was underpowered by number of patients in our study, we noted that each step of the process was challenged by stepwise decline of show of referred patients. UTMC-CI's employment of a genetic counselor for cancer patients only (summer-2016), housed-in Cancer Institute, might help in alleviating this problem.

**Biography**

Megan McNeil is currently pursuing her Bachelor's Degree in Biological Sciences at North Carolina State University, where she is a Park Scholar. She participated as an Outside Learner, assisting in research for the Pathology Department at University of Tennessee Medical Center in Knoxville, TN. She plans to attend medical school after graduating from NC State.

mlmcneil3@ncsu.edu