Cancer disease Chronic

The RESILIENT Study: A Retrospective, Descriptive, Correlational Investigation of Rate and Correlates of Oral Endocrine Therapy Adherence in Older Women with Breast Cancer
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Introduction & Problem
- Breast cancer is the most prevalent type in the United States
- 268,000 new cases and 41,760 deaths in 2019
- Medication nonadherence (NA) issues
  - Medication-NA costs = $20.5 billion in 2020

Purpose
- The purpose of this study is to identify determinants influencing OET adherence in older women with breast cancer.
- Determining levels and multi-level determinants of OET adherence will be the first step in developing and testing interventions to improve OET adherence in older women with breast cancer, which has the potential to decrease morbidity, mortality, and medical cost and increase Quality-of-Life (QOL).
- Determining rates and multi-level determinants of OET-NA for older women with breast cancer.

Gaps
- Lack of diverse samples
  - Limited “OET-NA rate” studies utilizing diverse samples (i.e., ethnic backgrounds, socio-economic factors)
- Majority of retrospective OET-NA studies have utilized small electronic databases (i.e., < 10,000)
- Limited generalizability
- Difficulty in determining multi-level determinants on medication adherence
- Existing literature on OET-NA rates has largely focused on patient-level determinants of medication adherence
- For example: psychosocial barriers
- Breast cancer OET-NA is influenced by social factors (i.e., family, friends, community, and culture)

Theoretical Frameworks
- Determining rates and multi-level determinants of OET-NA will be the first step in developing and testing interventions to improve OET adherence in older women with breast cancer, which has the potential to decrease morbidity, mortality, and medical cost and increase Quality-of-Life (QOL).
- The Five dimensions of Adherence: adherence is a multidimensional phenomenon determined by the World Health Organization

Method
- Cross-sectional, correlational study
- Secondary data analysis of SEER-Medicare database
- OET-NA is calculated as a ratio and this data will be computed by using PDC in SEER-Medicare data.
- Descriptive statistics will be applied to the extracted data and calculated percentages of OET-NA.
- OET-NA is the main outcome variable and operational definition
- The Phi coefficient of bivariate statistical test will be computed to assess the relationship between multi-level determinants and OET-NA at a significance level of 0.05.
- The Five dimensions of Adherence: (right)

Selection criteria
- American women, 65 years of age or older, who are residents of the United States
- Prescribed one of the following oral endocrine medications:
  - anastrozole, exemestane and letrozole
- Exclusion criteria
  - Involuntary medication adherence
  - Missing or incomplete data

Data analysis
- For example, PDC = (35+46+15+30+30)/180 X 100 = 75%
- OET-NA is the main outcome variable and nominal level of data.
- The Phi coefficient of bivariate statistical test will be computed to assess the relationship between multi-level determinants and OET-NA at a significance level of 0.05.

Results of Literature Review
- The SEER-Medicare database has been validated for 35,000 women with breast cancer prescribed tamoxifen, anastrozole, exemestane and letrozole medications annually and adherence rates are expected as 80% from 2014-2019.
- Multi-level determinants are included as patient-related, condition-related, therapy-related, social/economic-related, and health care team/system-related factors.
- Patient and therapy related factors were stronger for breast cancer patients.
- Determining multi-level influences is critical because nurses are uniquely positioned at all levels to guide and support women with breast cancer to achieve better OET medication adherence to treat breast cancer.
- This study will be the first to include the OET-NA non-adherence rate and explore multi-level influences on OET non-adherence in women with breast cancer utilizing a large database.
- Determining rates and multi-level determinants of OET adherence will be the first step in developing and testing interventions to improve OET adherence with breast cancer, which has the potential to decrease morbidity and mortality and increase QOL.

Discussion & Conclusion
- The SEER-Medicare database has been validated for 35,000 women with breast cancer prescribed tamoxifen, anastrozole, exemestane and letrozole medications annually and adherence rates are expected as 80% from 2014-2019.
- Multi-level determinants are included as patient-related, condition-related, therapy-related, social/economic-related, and health care team/system-related factors.
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