

The association between educational level, DNA repair capacity and risk of breast cancer

Luisa Morales

Ponce School of Medicine and Health Sciences, Puerto Rico

Breast cancer (BC) is the most common cancer type in women worldwide. Between 2004 and 2008 BC accounted for 33.3% of all cancers diagnosed in women in the Puerto Rican population; and for 18.8% of all female cancer deaths. Educational level has been associated with cancer risk by several studies. A low DNA Repair capacity (DRC) has been linked to BC risk by several studies while educational level is associated with changes in lifestyle, like diet, exercise and frequency of screening. The purpose of this study is to evaluate the potential role of educational level as a modifier of the association between DRC and BC. An incident case-control study with approximately 1,100 participants which have answered an epidemiological questionnaire soliciting anthropometrical, educational, family history of cancer and BC, gynecological and obstetrical information, vitamins and calcium intake, life-style variables and other variables related to BC risk. The logistic regression adjusted odds ratio will be used as a measure of association between BC and level of education adjusting for DRC and each of the rest of the covariates simultaneously. The results of this study could provide epidemiological evidence of why educational level can be protective against BC and how DRC levels could be used to monitor the beneficial effects of education or any other DRC associated protective factors for BC. The results tabulation still in progress.

Biography

Luisa Morales, DrPH (c), is a Doctor of Public Health Candidate in Epidemiology at the Ponce School of Medicine and Health Sciences. Morales, works with Dr. Jaime Matta in the project DNA Repair and Breast Cancer Research at the Toxicology Research Laboratory of the PSM & HS for the last six years. Morales, has a BS in Biotechnology from the University of Puerto Rico, Ponce Campus. In 2012, she has several cancer research publications as a co-author. Additionally, she published as a coauthor an article on the association of DNA Repair with breast cancer risk in women.

lmorales@psm.edu