Identifying Preferences For Approaches To Breast Cancer Surgical Treatment Beyond Traditional Clinical Benchmarks Of Survival

Author(s):

Toni Storm-Dickerson, MD¹
Lopamudra Das, PhD²
Allen Gabriel, MD³
Matthew Gitlin, PharmD⁴
Dave Macarios, MSc⁵

Background:
We sought to understand what drives a woman’s decision making regarding breast cancer treatment, breast conservation, mastectomy, and reconstruction. How do factors, such as fear of recurrence, doctor’s recommendations, use of radiation, breast asymmetry, and cost impact choice?

Methods:
An adaptive choice-based conjoint survey was administered in December 2016 to a convenience sample of healthy women and female breast cancer survivors enrolled in the Army of Women Research registry. The survey quantified the relative importance of 9 attributes, including clinical and humanistic outcomes and surgical treatment characteristics. In addition, a simple survey of respondent attitudes and behaviors as it related to breast cancer surgery and outcomes was administered.

Results:
Among healthy women (n=522), the most important of the 9 factors in making a surgical choice were doctor’s recommendation at 21.4% (SD 13.6%) and overall survival (OS) at 20.5% (SD 9.8%) while among breast cancer survivors (n=71), the most important factor was OS at 19% (SD 9%) and doctor’s recommendation at 17.2% (SD 10.3%). Among healthy women, recurrence, restrictions on mobility, and ensuring financial security were the top concerns while breast cancer survivors placed avoiding recurrence higher and avoiding pain lower than healthy women.

Conclusions:
While OS accounted for the largest single driver of patient choice at ~20%, it is notable that 80% of patient decision-making was driven by factors unrelated to survival and that when all variables are accounted for, one size does not fit all. What is the right choice for one woman may not be for another.