Health-related Quality Of Life Among Australian Women Cancer Survivors - The Roles of Optimism And Social Support

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Background
Health-related quality of life (HRQOL) refers to patients’ appraisal of their health and well-being across various dimensions. Previous studies among selected cancer populations suggest that people with cancer are likely to experience poorer physical and mental functioning, with several social demographic, behavioral, and clinical determinants associated with poorer HRQOL.1 The evidence in relation to psychosocial determinants of HRQOL among cancer survivors is limited and based on selected cancer patient groups, moderate or small sample size, cross-sectional study design, and does not account for the time since diagnosis of cancer.1-6 So far, no prospective cohort study has examined how optimism and social support promote HRQOL in cancer survivors.

Objectives
1. To compare the HRQOL among women cancer survivors and those without cancer
2. To identify the determinants of HRQOL among women cancer survivors
3. To examine the interaction effect of optimism and social support in promoting HRQOL among women cancer survivors

Methods
Data sources
1946-51 birth cohort (n=13,715) of the Australian Longitudinal Study on Women’s Health (ALSWH), linked with the Australian Cancer Database (ACD) and National Death Index.

Design:
Prospective cohort study

Derivation of the sample
Women cancer survivors who survived at least one year after diagnosis of cancer and participated in the survey, 466 (42%) were interviewed; 5580 controls, women without cancer. Of the 1110 women cancer survivors in the cohort (Vic, Qld, SA, & SA) who survived at least one year after diagnosis of cancer and participated in the survey, 466 (42%) were interviewed; 5580 controls, women without cancer.

Measures
Most variables were from the first ALSWH survey which completed first after diagnosis of cancer (from ACD). Medical outcome study (MOS) Social Support Index (SSI) and Revised Life Orientation Test (LOT-R) were measured from Survey 2 (1998) onward and Survey 3 (2001) onward, respectively.

Statistical analysis
Mean scores of the HRQOL subscales (except for role emotional and role physical) between cancer survivors and those without cancer were compared using two-sample t-tests. The average sub-scale scores for cancer survivors were further compared by the observed level of social support and optimism. Multivariable linear regression models were performed to identify the predictors and the interaction effect of optimism and social support for the six subscales of the HRQOL.

Results
Women cancer survivors with low to moderate optimism and who received low social support had substantially lower average scores across all subscales of the HRQOL than those who had higher optimism and social support.

Conclusion
This is the first study to examine the psychosocial determinant of HRQOL in a prospective cohort of women cancer survivors. We found that women cancer survivors had significantly lower HRQOL than those without cancer. Low optimism and social support, other health conditions, and financial difficulties were the significant determinants of lower HRQOL among women cancer survivors. Further studies adjusting for survivors’ clinical characteristics and stratifying by time since diagnosis are needed to confirm our findings.