Breast Cancer Transitions

Kathryn E. Post, PhD, RN, ANP-BC
Sigma Foundation for Nursing Grant Report

Aim/Purpose/Objective: The purpose of this study is to explore the experience of patients diagnosed with triple-negative breast cancer to inform the development of a coping and supportive care intervention.

Sample: Eligible participants were adults diagnosed with stage I-III triple-negative breast cancer who had an Eastern Cooperative Oncology Group performance status ≤ 2, were English-speaking, and within four weeks to six months of completing curative cancer treatment.

Setting: This study was conducted at Massachusetts General Hospital in Boston, MA, and one community affiliate site. The Dana Farber/ Harvard Cancer Center Institutional Review Board reviewed and approved this study protocol.

Methodology: Mixed Methods, Interviews, Surveys
We conducted a parallel mixed qualitative and quantitative study. We conducted in-depth semi-structured interviews and thematic analysis. Participants also completed quantitative measures of fear of cancer recurrence ([FCR] Fear of Cancer Recurrence Inventory) and distress (Hospital Anxiety and Depression Scale and PROMIS Anxiety).

Results: Participants were, on average, 51 years old (SD = 13.56). Most participants (87.0%) reported elevated FCR (cutoff = 16; M = 18.91; SD = 6.22). Major themes identified in the qualitative interviews included: feeling dissimilar from others with breast cancer, quality of life interference, "shifting the focus" as a coping strategy, and FCR as a primary concern.

Conclusions: Patients with triple-negative breast cancer reported elevated FCR and unmet supportive care needs during the transition from curative therapy to surveillance. This study highlights potential targets for future interventions to address the needs of patients with triple-negative breast cancer.

Implications: Future research should tailor interventions to the unique needs of this previously understudied group of patients with breast cancer. Future supportive care interventions should consider survivorship care delivery models targeting high-risk survivor groups.

References:

1. Kumar P, Aggarwal R. An overview of triple-negative breast cancer. Arch Gynecol Obstet. 2016;293(2):247-269. doi:10.1007/s00404-015-3859-y

2. Carey LA. Directed therapy of subtypes of triple-negative breast cancer. Oncologist. 2011;16(S1):71-78. doi:10.1634/theoncologist.2011-s1-71

3. Dent R, Trudeau M, Pritchard KI, et al. Triple-negative breast cancer: Clinical features and patterns of recurrence. Clin Cancer Res. 2007;13(15):4429-4434. doi:10.1158/1078-0432.CCR-06-3045

4. National Cancer Institute. Cancer Stat Facts: Female Breast Cancer. Published 2023. Accessed July 5, 2023. https://seer.cancer.gov/statfacts/html/breast.html

5. Leysen L, Beckwée D, Nijs J, et al. Risk factors of pain in breast cancer survivors: a systematic review and meta-analysis. Support Care Cancer. 2017;25(12):3607-3643. doi:10.1007/s00520-017-3824-3

6. Abrahams HJG, Gielissen MFM, Goedendorp MM, et al. A randomized controlled trial of web-based cognitive behavioral therapy for severely fatigued breast cancer survivors (CHANGE-study): study protocol. BMC Cancer. 2015;15(1):765. doi:10.1186/s12885-015-1787-7

7. Jing L, Zhang C, Li W, Jin F, Wang A. Incidence and severity of sexual dysfunction among women with breast cancer: a meta-analysis based on female sexual function index. Support Care Cancer. 2019;27(4):1171-1180. doi:10.1007/s00520-019-04667-7

8. Vitali M, Ripamonti CI, Roila F, et al. Cognitive impairment and chemotherapy: a brief overview. Crit Rev Oncol Hematol. 2017;118:7-14. doi:10.1016/j.critrevonc.2017.08.001

9. Runowicz CD, Leach CR, Henry NL, et al. American Cancer Society/American Society of Clinical Oncology breast cancer survivorship care guideline. J Clin Oncol. 2016;34(6):611-635. doi:10.1200/JCO.2015.64.3809

10. Lester J, Crosthwaite K, Stout R, et al. Women with breast cancer: self-reported distress in early survivorship. Oncol Nurs Forum. 2015;42(1):E17-23. doi:10.1188/15.ONF.E17-E23

11. Schapira L, Zheng Y, Gelber SI, et al. Trajectories of fear of cancer recurrence in young breast cancer survivors. Cancer. 2022;128(2):335-343. doi:10.1002/cncr.33921

12. Flanagan J, Tetler D, Winters LN, Post KE, Habin K. The Experience of initiating oral adjuvant treatment for estrogen receptor–positive breast cancer. Oncol Nurs Forum. 2016;43(4):143-152. doi:10.1188/16.ONF.E143-E152

13. Bollinger S. Biopsychosocial challenges and needs of young African American women with triple-negative breast cancer. Heal Soc Work. 2018;43(2):84-92. doi:10.1093/hsw/hly006

14. Swisher AK, Abraham J, Bonner D, et al. Exercise and dietary advice intervention for survivors of triple-negative breast cancer: effects on body fat, physical function, quality of life, and adipokine profile. Support Care Cancer. 2015;23(10):2995-3003. doi:10.1007/s00520-015-2667-z

15. Meleis AI. Transitions Theory: Middle Range and Situation Specific Theories in Nursing Research and Practice. Springer Publishing Company, LLC; 2010.

16. Mishel MH. The measurement of uncertainty in illness. Nurs Res. 1981;30(5):258-263. doi:10.1111/j.1547-5069.1988.tb00082.x

17. Saunders B, Sim J, Kingstone T, et al. Saturation in qualitative research: exploring its conceptualization and operationalization. Qual Quant. 2018;52(4):1893-1907. doi:10.1007/s11135-017-0574-8

18. Harris P, Taylor R, Minor B, et al. The REDCap consortium: Building an international community of software platform partners. J Biomed Inf. 2019;95(10328).

19. Zigmond A, Snaith R. The hospital and anxiety and depression scale. Acta Psychiatr Scand. 1983;67(6):361-370. doi:10.1111/j.1600-0447.1983.tb09716.x.

20. Simard S, Savard J. Screening and comorbidity of clinical levels of fear of cancer recurrence. J Cancer Surviv. 2015;9(3):481-491. doi:10.1007/s11764-015-0424-4

21. Lebel S, Simard S, Harris C, et al. Empirical validation of the English version of the Fear of Cancer Recurrence Inventory. Qual Life Res. 2016;25(2):311-321. doi:10.1007/s11136-015-1088-2

22. Pilkonis PA, Choi SW, Reise SP, Stover AM, Riley WT, Cella D. Item banks for measuring emotional distress from the patient-reported outcomes measurement information system (PROMIS®): Depression, anxiety, and anger. Assessment. 2011;18(3):263-283. doi:10.1177/1073191111411667

23. Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol. 2006;3(2):77-101. doi:10.1191/1478088706qp063oa

24. Goerling U, Hinz A, Koch-Gromus U, Hufeld JM, Esser P, Mehnert-Theuerkauf A. Prevalence and severity of anxiety in cancer patients: results from a multi-center cohort study in Germany. J Cancer Res Clin Oncol. 2023;149(9):6371-6379. doi:10.1007/s00432-023-04600-w

25. Mitchell AJ, Ferguson DW, Gill J, Paul J, Symonds P. Depression and anxiety in long-term cancer survivors compared with spouses and healthy controls: A systematic review and meta-analysis. Lancet Oncol. 2013;14(8):721-732. doi:10.1016/S1470-2045(13)70244-4

26. Dunn LB, Langford DJ, Paul SM, et al. Trajectories of fear of recurrence in women with breast cancer. Support Care Cancer. 2015;23(7):2033-2043. doi:10.1007/s00520-014-2513-8

27. McGinty HL, Small BJ, Laronga C, Jacobsen PB. Predictors and patterns of fear of cancer recurrence in breast cancer survivors. Heal Psychol. 2016;35(1):1-9. doi:10.1037/hea0000238

28. Gormley M, Ghazal L, Fu MR, van Cleave JH, Knobf T, Hammer M. An integrative review on factors contributing to fear of cancer recurrence among young adult breast cancer survivors. Cancer Nurs. 2021;45(1):E10-E26. doi:10.1097/NCC.0000000000000858

29. Crist J V., Grunfeld EA. Factors reported to influence fear of recurrence in cancer patients: A systematic review. Psychooncology. 2013;22(5):978-986. doi:10.1002/pon.3114

30. Thewes B, Butow P, Bell ML, et al. Fear of cancer recurrence in young women with a history of early-stage breast cancer: A cross-sectional study of prevalence and association with health behaviours. Support Care Cancer. 2012;20(11):2651-2659. doi:10.1007/s00520-011-1371-x

31. Wagner LI, Tooze JA, Hall DL, et al. Targeted eHealth intervention to reduce breast cancer survivors' fear of recurrence: Results from the FoRtitude randomized trial. J Natl Cancer Inst. 2021;113(11):1495-1505. doi:10.1093/jnci/djab100

32. Burm R, Thewes B, Rodwell L, et al. Long-term efficacy and cost-effectiveness of blended cognitive behavior therapy for high fear of recurrence in breast , prostate and colorectal Cancer survivors : follow-up of the SWORD randomized controlled trial. BMC Cancer. 2019;19(462):1-14. doi:10.1186/s12885-019-5615-3

33. Vadaparampil ST, Christie J, Donovan KA, et al. Health-related quality of life in Black breast cancer survivors with and without triple-negative breast cancer (TNBC). Breast Cancer Res Treat. 2017;163(2):331-342. doi:10.1007/s10549-017-4173-0

34. Greer JA, Jacobs JM, El-Jawahri A, et al. Role of Patient Coping Strategies in Understanding the Effects of Early Palliative Care on Quality of Life and Mood. J Clin Oncol. 2018;36(1):53-60. doi:https://dx.doi.org/10.1200/JCO.2017.73.7221

35. Ośmiałowska E, Misiąg W, Chabowski M, Jankowska-polańska B. Coping strategies, pain, and quality of life in patients with breast cancer. J Clin Med. 2021;10(19). doi:10.3390/jcm10194469

36. Beesley VL, Smith DD, Nagle CM, et al. Coping strategies, trajectories, and their associations with patient-reported outcomes among women with ovarian cancer. Support Care Cancer. 2018;26(12):4133-4142. doi:10.1007/s00520-018-4284-0

37. Turkman YE, Kennedy HP, Harris LN, Knobf MT. "An addendum to breast cancer": the triple negative experience. Support Care Cancer. 2016;24(9):3715-3721. doi:10.1007/s00520-016-3184-4