

treatment, the majority of breast cancer survivors will live many years after diagnosis. Breast cancer survivors may experience many symptoms that impact their quality of life, and these symptoms may vary by age. The purpose of this study is to compare breast cancer survivors who were diagnosed at 45 and under ($n = 469$) with survivors diagnosed at 55 to 70 ($n = 584$) years of age.

Materials and Methods: Participants were identified through a large cooperative group (Eastern Cancer Cooperative Group). Eligibility criteria included use of chemotherapy at initial diagnosis, being 3 to 8 years from diagnosis, and not having a recurrence of breast cancer. The mean current age of younger survivors was 45.2 and for older survivors was 66.7. Women who agreed to participate were sent a survey and informed consent which was completed and returned via mail. Overall, 80% of eligible women contacted by researchers agreed to participate. Measures included physical, psychological, social, spiritual, and overall quality of life constructs. All measurements had good reported validity and reliability. A total of 469 younger and 584 older breast cancer survivors are included. Linear regression was used to compare the two groups on continuous outcomes while adjusting for the following potentially confounding covariates: marital status (married versus not), years of education, and total household income, and years since diagnosis.

Results: Younger survivors scored significantly worse than older survivors on gynecological problems, sexual enjoyment, attention function, and overall reported symptoms. Psychologically, younger survivors demonstrated greater symptom distress, greater depression, and greater state and trait anxiety than older survivors. Younger survivors had lower marital satisfaction scores. Younger survivors reported greater fear of recurrence and less favorable body image. Younger survivors reported lower perceived social support from their partners and greater social constraint. Older survivors held higher spiritual beliefs and behaviors as compared to younger survivors. Perceived self efficacy for dealing with problems related to cancer survivorship was lower in younger survivors as compared to older survivors. For overall quality of life measures, younger survivors reported lower index of well being scores than older survivors and reported that breast cancer had a greater impact on their life. Health care service use was greater for younger as opposed to older survivors both during and after treatment.

Conclusions: Younger survivors reported significantly more problems on several, physical, psychological, social and generic quality of life issues as compared to older survivors. Results indicate a need to proactively assess quality of life issues in younger women at time of diagnosis.

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Poster

Development of a structured yoga DVD for women following breast and axillary surgery

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Background: Post operative shoulder and arm complications following breast cancer surgery still occur despite advances in surgical techniques. One disadvantage of early discharge from hospital following breast surgery is that patients are less likely to be taught specific post operative arm exercises. Many are merely given a leaflet of exercises to follow at home. Yoga classes are offered in some cancer centres and studies suggest that it improves quality of life, and mood, and reduces fatigue in cancer patients. We conducted a pilot study of a yoga programme specifically designed to improve arm and shoulder mobility following axillary surgery for breast cancer. We then produced a structured DVD for use in a subsequent randomised clinical trial. This abstract describes the production of the DVD.

Material and Methods: A breast cancer surgeon, experienced yoga teacher, physiotherapist and volunteers from the local breast cancer support group all contributed to development of a structured yoga programme of poses suitable for women following breast cancer surgery. First we conducted a ten week pilot course with women from the local support group who were receiving different breast cancer treatments. The pilot study was conducted to assess the acceptability of the postures and give feedback on the structure of the course. Following those changes we invited volunteers to work with us on producing a user friendly DVD that was accessible and acceptable for women with different levels of ability.

Results: The DVD took 3 days of filming and two months of editing. The final version with accompanying booklet will only be available following its evaluation in a randomised clinical trial. The DVD has two discs. Disc 1 includes a description of some of the arm problems experienced after breast cancer surgery, an introduction to yoga and the equipment including

which props (e.g. cushions, folded blankets) patients can use at home in order to help them with their practice. There is also a step by step guide to each posture at different levels, 1, 2 and 3. Level 1 is aimed at practise during the 12 week post operative period and makes use of props such as sitting in a chair to perform an arm stretch, or standing or using a wall for support. Disc 2 features an hour long class of yoga for women with breast cancer led by an experienced yoga teacher. The class comprises of women of different ages and abilities who belong to the Brighton Breast Cancer Support Group. The programme is now being tested in an RCT.

Conclusions: As more patients survive breast cancer with improved surgical techniques, radiotherapy and systemic therapies it is also important to ameliorate symptoms and side effects of treatment. These supportive interventions demand patient input during development then rigorous evaluation through RCTs before implementation.

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Poster

Communication to children about mother breast cancer: how can physicians help?

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Background: A quarter of French breast cancer cases are diagnosed in women less than 50 years old. A majority of them have got children living at home. Communication about illness is known to be associated with more favourable outcomes in children of parents with cancer. The objectives of this study are to determine timing of first communication to children about the mother's breast cancer, frequency of further discussions about mother illness, and factors that may influence communication to the children.

Methods: Since July 2005 all consecutive women included in the long duration disease registry of the French National Health Insurance Fund for a diagnosis of primary breast cancer, aged 18–40 years and living in South Eastern France have been asked to participate in a 5 years follow-up. Until March 2009, 291 women have been included (response rate: 70%), 235 of them had at least one child at the time of diagnosis. 10 months after diagnosis, women were asked about frequency of discussions with their children about their illness. This was studied in relation to socio-demographic factors, clinical variables and children's characteristics using logistic models.

Results: Children were usually told about their mother disease at the time of diagnosis (65%), but a minority of women waited until after treatment to inform their children (32%) or said nothing at all (3%). Concerning further discussions about their illness, 53% of women reported frequent discussions with their children, 38% few discussions and 9% no discussion at all. In multivariate analysis further communication with children was more often reported in women having a high level of education, living in couple, with a known family history of breast or ovarian cancer, who received chemotherapy and hormonal adjuvant therapy and who declared they have had the opportunity to ask questions about their disease at the time of diagnosis announcement. Age of women, maternal language, tumour size, cancer prognosis, depression, perceived quality of life, number of children, age and sex of children, and spouse contribution were unrelated to discussions about maternal cancer.

Conclusion: Our results suggest that maternal factors, but also physician's factors strongly influence communication to the children. Physicians on charge of cancer announcement should be aware of the importance of the information they provide to women to help them to better communicate with their children.

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Support group intervention after breast cancer treatment: first results of a prospective randomized study

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Background: Many women confronted with a breast cancer diagnosis react with anxiety and depression. Previous studies have demonstrated that 20–35% of women treated for breast cancer has measurable anxiety and depression, compared with 6% in a population of healthy women. Psychological distress has been proposed as a predictive factor for