

## AN EVALUATION OF SUPPORT GROUPS FOR YOUNG WOMEN WITH EARLY BREAST CANCER

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### Abstract

This study evaluated the efficacy of a support group for young women with a diagnosis of early breast cancer. Participants were 44 women ranging in age from 23 to 50 years (mean = 40 years) who attended a ten-session support group held at one of two metropolitan teaching hospitals. Participants completed a pre- and post-group evaluation package. Significant decreases in psychological distress at completion of the program were observed ( $t = 3.44$ ,  $p = 0.001$ ). Those with higher levels of distress at baseline reported significantly greater decreases in distress at the post-group assessment compared to women with lower levels of psychological distress. Overall no changes were found for social support ( $t = 0.77$ ,  $p = 0.44$ ), although women with low levels of social support at baseline showed significant increases in perceived social support at completion of the program compared to those with higher levels of social support. No changes were observed for self-esteem ( $t = -0.55$ ,  $p = 0.58$ ); however, those with lower self-esteem before the group commenced showed greater increases in self-esteem compared to those with higher levels at baseline. None of the sociodemographic variables examined (age, marital status and having children or not) predicted improvement from the support groups. The clinical implications of the findings are discussed.

### Introduction

Approximately 10,000 Australian women are diagnosed with breast cancer each year and in NSW in 1999, 3,463 women were newly diagnosed with breast cancer.<sup>1</sup> Women under 50 years of age account for approximately 26 per cent of all new cases of breast cancer in Australia.<sup>2</sup> Research indicates that young women have unique needs in terms of potential impact of treatment options on fertility and sexuality, the interruption of career, financial concerns and how to cope with young children.<sup>3</sup>

A number of studies have found that younger age is a risk factor for the development of psychosocial morbidity in women with breast cancer and is associated with increased morbidity across all phases of diagnosis and treatment.<sup>4</sup> Younger women report higher levels of emotional distress, more unmet practical needs, more financial distress and greater disruption to their daily lives following treatment for breast cancer.<sup>4</sup> Dunn and Steginga suggest a number of reasons why young women with breast cancer may experience increased psychosocial morbidity compared with older women.<sup>3</sup> From a developmental perspective, younger women with breast cancer experience the stress of cancer concurrent to the multiple stressors associated with the early stage of the family life cycle.<sup>3</sup> Also, younger women have been found to experience more disruption to self-

image and sexuality.<sup>3</sup> Subsequent infertility as a consequence of cancer treatments may also negatively affect the younger woman's self-concept.<sup>3</sup> In addition, younger women may experience premature menopause as a result of ovarian toxicity from chemotherapy, resulting in distressing physiological and psychological symptoms, which may include vaginal dryness, hot flushes, dyspareunia, mood swings and short term memory loss.<sup>3</sup>

Hughson and colleagues studied women for a period of two years following mastectomy and found that depression, anxiety and irritability were significantly more common in women younger than 50 years of age, compared with women over 50 years, and with a control group.<sup>5</sup> In another study assessing the effects of mastectomy,<sup>6</sup> younger women were identified as being at greater risk for developing poor mental health and as being more likely to experience a deterioration in well-being. A large study of women commencing chemotherapy or radiotherapy also found younger age to be associated with lower levels of emotional well-being.<sup>7</sup> Bloom and Kessler found that being younger and having more children under the age of 21 years were predictive of women experiencing greater psychological morbidity after breast cancer treatment.<sup>8</sup> The authors highlighted that younger breast cancer patients experience greater affective distress in the first year following diagnosis and at 5-year follow-up than do those who are older with comparable disease severity, apparently due to the greater fear of recurrence and the presence of competing care-giving demands.<sup>8</sup>

Dunn and Steginga also found that, consistent with previous research, younger women reported fears about not surviving to see their children grow up, about loss of fertility, or about not being able to have children because of concerns about future cancer recurrence.<sup>3</sup> The women also described feeling that they were too young to get breast cancer and that they felt marginalised and isolated. In a qualitative study of very young women (aged less than 36 years) with early stage breast cancer, feelings of isolation and being different were identified as one of the predominant stressors.<sup>9</sup> Other significant stressors experienced by these women were: coping with the untimeliness of the diagnosis; their feelings about the impact of the illness on their partner and on their relationship with their partner; sadness about lost opportunities for childbearing; uncertainty about their future; and anxiety about the impact of the illness on their children. In this study, several women spoke about their experience of attending breast cancer support groups and not feeling a sense of connection with the older women they encountered there. Instead of gaining a sense of normality and mutual support from participating, they often felt even more isolated.<sup>9</sup>

Thewes and colleagues conducted a preliminary qualitative study to assess the on-going psychosocial needs of breast cancer survivors and compare the needs of younger versus older breast cancer survivors.<sup>10</sup> A wide variety of on-going psychosocial and information needs were reported by breast cancer survivors in the first two years after diagnosis, including support needs, psychological needs, practical needs, physical needs and information needs.<sup>10</sup> Younger women reported more needs than did older women, and many of these directly related to being younger or pre-menopausal at the time of diagnosis.<sup>10</sup> Younger women identified the impact their diagnosis and treatment had on their lifestyle and career as a concern and pre-

menopausal women spoke about a number of gynaecological late-effects of treatment.<sup>10</sup> A number also reported a lasting impact on their intimate relationships and sexuality.<sup>10</sup> The impact of treatment on fertility, and information about choices for contraception, were major concerns identified by younger women<sup>10</sup>. All of the women who had sought information about fertility felt that the information that they received was conflicting or inadequate.<sup>10</sup> The youngest sub-group in this study (<36 years) spoke about isolation or a sense of being alone as a younger woman treated for breast cancer.<sup>10</sup> There was a perception that support groups did not cater to the needs of younger women, or that they were for terminally ill people.<sup>10</sup> Whereas older women spoke about the educational benefits of attending support groups as well as emotional support, younger women emphasised the social and emotional aspects of attending support groups, and the younger women reported more need for emotional support from professional counsellors.<sup>10</sup> The findings of this study highlighted a strong need for young women to access other breast cancer patients of their own age.<sup>10</sup>

A number of authors have argued that the provision of appropriate support services that cater to the specific needs of young women is important.<sup>3,11</sup> In Dunn and Steginga's study, the supportive intervention most commonly endorsed by young women was peer support, which was seen as providing them with an opportunity to meet and share experiences with other young women with breast cancer.<sup>3</sup> The authors (p.144) state that 'group interventions that provide women with breast cancer with the opportunity to compare themselves with others in a similar situation can assist by normalising women's feelings of distress, and assisting women to develop resilience in the face of adversity. For this particular target group (i.e. *younger women*), peer support programs, professionally supported and supervised, are a priority'.

We recently carried out a systematic literature search using MEDLINE, PsychINFO, and EMBASE of studies, published in a peer-reviewed journal in the English language, which described a group therapy program for women with breast cancer, provided qualitative outcome data and had a prospective design (with a pre- and at least one post-counselling assessment) or a randomised controlled trial design. This systematic search of the literature demonstrates a large knowledge base on the efficacy of support groups for women with breast cancer.<sup>12,41</sup> This systematic review supports earlier reviews that have found that group psychosocial interventions provide psychological benefits for women with breast cancer.<sup>42,43</sup> Most studies assessing the efficacy of psycho-educational groups have demonstrated improvements in mood disturbance for groups of women with early breast cancer<sup>35</sup> or mixed stages of breast cancer.<sup>22</sup> Only two of the psycho-educational studies reviewed showed limited or no reduction in mood disorder, but both found positive effects as assessed by a measure of benefit finding.<sup>12,15</sup> The positive effects of psycho-educational interventions have been demonstrated over short-term<sup>17,22,28,35</sup> and longer-term periods<sup>22,28,35</sup>.

Although the unique psychosocial impact of breast cancer on younger women has been identified by a number of researchers,<sup>3-7,9,10,44-49</sup> and a number of authors have suggested that the needs of this group of women would be best addressed by the provision of groups specifically designed for younger women<sup>3,10,49,50</sup> very little work has been conducted to date with this group of young women.

The systematic literature search found no studies evaluating the outcomes of psychosocial group therapy for groups of younger

women, however two studies describing the content of groups for young women were identified. Smeardon describes a British group program for women under 55 years of age with breast cancer.<sup>51</sup> Psycho-educational groups, aimed to reduce psychological morbidity in young women with breast cancer, were conducted for 2 hours weekly over a 6-week period. Although formal evaluation was not reported, informal evaluation indicated that young women identified the opportunity to network with women in a similar situation as one of the most important aspects of the group and that they found the educational input and the overall support from the group to be beneficial.<sup>51</sup> A large project in California has commenced to develop and evaluate a psycho-educational group intervention for young women newly diagnosed with breast cancer.<sup>52</sup> This includes a 10-week psycho-educational group program for women 50 years and younger, and initial feedback has found that 87 per cent of participants rate the intervention as helpful.<sup>52</sup> The majority of women in the study rated 'being able to talk/relate to the other women' and 'emotional support' as most helpful, and also found the provision of education and information to be helpful.<sup>52</sup>

Given the dearth of empirical data in this area, this study is assessing the efficacy of a support group for younger women diagnosed with early stage breast cancer. The study tests the following hypotheses: (i) there will be significant improvements in psychological outcomes relative to baseline; (ii) women with lower social support, lower self-esteem and higher psychological distress at baseline will experience greater improvements in each of these outcomes; (iii) younger women will experience greater improvements in psychological outcomes as will women without a partner. Outcomes will also be dependent upon whether or not women have children.

## Methods

### Participants

Participation in the support groups was open to young women receiving treatment for early stage breast cancer at two treatment centres in Sydney. Women were referred to the group support facilitator by health care providers at the two treatment centres (the NSW Women's Breast Centre, a joint service of the Royal Hospital for Women and the Prince of Wales Hospital, and the Mater Hospital). Ethics approval was obtained from the two institutional ethics committees. Following referral women were telephoned by the group facilitator for a pre-group interview. All young women were eligible to participate, using a functional definition of young as developed by Dunn and Steginga that is not contingent upon chronological age, thereby avoiding the pitfalls of an arbitrary cut-off.<sup>3</sup> Three indicators were utilised for defining young as applied to women with breast cancer: (i) the woman is of childbearing age; (ii) the woman has young children, that is, children not yet at secondary school; or (iii) the woman has not yet reached menopause.<sup>3</sup>

A combination of CBT and mutual aid formed the theoretical framework underpinning the group program.<sup>53</sup> The groups were facilitated by a Clinical Psychologist with training in group facilitation (BT) and co-facilitated by a specialist breast care nurse, social worker or pastoral care worker. The group support program consisted of ten fortnightly sessions, offered on weekday evenings. The number of group participants was limited to twelve. The first session consisted of an introduction to the program and ice-breaker activities. Baseline questionnaires were collected prior to the first therapeutic session. The nine therapeutic sessions covered the following topics: (i) post-treatment issues and recovery from breast

cancer; (ii) feeling good about yourself; (iii) coping with fear, sadness, stress and worry; (iv) lymphoedema; (v) fertility and early onset menopausal symptoms; (vi) dealing with the impact of breast cancer on relationships and communication; (vii) complementary therapies in breast cancer; (viii) body image, sexuality, and the impact of breast cancer on intimate relationships; and a final session (ix) 'how far have I come' and 'where to from here'. Post-group questionnaires were completed after the last session. Reminder calls were made as required to obtain post-group questionnaires.

### **Demographic characteristics**

At baseline, age, educational level, marital status, number of children and disease related variables were assessed.

### **Measures**

#### **Profile of Mood States (POMS) - Brief Form**

The Profile of Mood States has been widely used in intervention studies with breast cancer patients for measuring mood outcome.<sup>54</sup> The POMS Brief Form is a 37-item questionnaire,<sup>55</sup> which contains six mood-related subscales: anxiety, depression, anger, vigour, fatigue and confusion. A Total Mood Disturbance Score is calculated by adding together scores on the other five subscales and subtracting vigour. On all subscales except vigour, a higher score indicates poorer outcome. High internal consistency and test-retest reliability has been reported for each of the six subscales.<sup>54</sup>

#### **The Coopersmith Self-esteem Inventory - Adult Form**

This is a 25-item unidimensional self-assessment instrument measuring self-esteem.<sup>56</sup> It has been widely used in a range of research trials and in intervention studies with breast cancer patients<sup>18</sup> and has adequate psychometric properties.<sup>56</sup> Scores range from 0 to 100 and higher scores denote greater self-esteem.

#### **The Duke UNC Functional Social Support Questionnaire (DUFSS)**

The DUFSS is an 8-item, 2-scale questionnaire that assesses four content areas: quality of support, confidant support, affective support and instrumental support. Factor analysis demonstrates that it assesses two dimensions of social support: affective support (three items) and confidant support (five items).<sup>57</sup> Reliability and validity data have been reported and are satisfactory.<sup>57</sup> Scores range from 8 to 40 and higher scores denote greater social support.

#### **Satisfaction with group intervention**

As well as the psychometric measures, post-group questionnaires included 18 purposively designed items assessing satisfaction with aspects of the group program. Response options ranged from 'strongly agree' to 'strongly disagree'. Scores ranging from 1 to 5 were allocated with higher scores denoting greater satisfaction. A mean satisfaction score was calculated by adding all individual scores and dividing by the total number of scores.

#### **Statistical analyses**

A significance level of  $p < 0.05$  was used for statistical tests. Due to the limited sample size, differences in outcome between women seen at different treatment centres were not explored. For normally distributed related continuous variables, paired t-tests were conducted. For non-normally distributed related continuous variables, Wilcoxon matched-pairs signed rank tests

were performed to test whether there were any changes in patient outcomes from baseline to follow up. To test whether women with lower social support, lower self-esteem and higher psychological distress at baseline would experience greater improvements in each of these outcomes, linear regressions were used to regress the follow up values on the baseline values for each set of outcomes. Each regression was examined to ascertain whether the confidence intervals around the regression coefficient did not include 1.0 and that the coefficient was significantly smaller than 1.0. To test whether marital status and whether or not a woman had children predicted patient outcomes, Mann-Whitney U tests were conducted for non-normally distributed dependent variables and independent t-tests were conducted for normally distributed variables, using change scores.

### **Results**

#### **Characteristics of the sample**

Of the 53 women who participated in the support groups, none declined participation in the questionnaire assessment. Five women completed only the pre-group assessment and four only the post-group questionnaire, leaving a total of 44 women who completed both questionnaires and were included in the analysis (participation rate for both questionnaires was 83 per cent). Twenty (45 per cent) of the participants had attended groups at the NSW Women's Breast Centre, and 24 (55 per cent) at the Mater Hospital. The mean age of the sample was 40 years, ranging from 23 to 50. Eighty-six per cent had education beyond high school, compared to 37 per cent of women in the general Australian population,<sup>58</sup> indicating above-average educational levels. These high educational levels could at least in part be a reflection of the catchment area of the two treatment centres where the groups were conducted.

Women were diagnosed between one and 12 months prior to commencement of the group (mean = 4 months). Table 1 summarises the sociodemographic and disease related variables.

**Table 1: Sociodemographic and treatment related variables of study sample (N = 44)**

Variable	Level	N per cent	
Sociodemographics			
Age (years)	< 30	1	2
	30-39	18	41
	40-49	24	55
	50+	1	2
Marital status	Married	31	74
	Not married	11	26
Educational level	Post-school	37	86
	No post-school	6	14
Type of surgery (a)	Lumpectomy	27	61
	Unilateral mastectomy	20	45
	Bilateral mastectomy	4	9
	Breast reconstruction	7	16
Adjuvant treatment (a)	Chemotherapy	36	82
	Radiotherapy	31	70
	Tamoxifen	28	64
	Zoladex	5	11

(a) Some women had more than one type of surgical and/or adjuvant treatment

**Table 2: Mean psychological outcome scores by testing group**

Measure	Baseline			Post group			Z/t value	P value
	N	M	(SD)	N	M	(SD)		
POMS (total score)	42	20.7	(21.5)	43	9.4	(18.9)	3.44	0.001
Anger (a)	42	3.3	(4.0)	43	2.2	(3.5)	2.31	0.026
Tension (a)	43	5.2	(4.6)	43	4.3	(4.0)	0.82	0.42
Vigour (b)	42	8.5	(5.7)	43	10.8	(4.8)	-2.59	0.013
Depression (a)	42	5.5	(6.0)	43	2.9	(3.5)	-2.39	0.017
Fatigue (a)	42	9.5	(5.8)	43	6.6	(5.4)	3.22	0.003
Confusion (a)	42	5.5	(3.9)	43	4.3	(3.6)	2.08	0.044
DUFSS (total score) (c)	44	33.2	(5.4)	43	32.6	(5.2)	0.77	0.44
Affective support	44	13.1	(2.0)	43	12.1	(2.3)	-2.56	0.10
Confidant support	44	20.1	(4.1)	43	20.4	(3.6)	-0.030	0.98
Coopersmith Self-Esteem Inventory	43	71.6 (18.1)	42	72.7	(17.7)	-0.55	0.58	

(a) Higher scores signify greater distress. (b) Higher scores signify greater vigour. (c) DUFSS = Duke UNC Functional Social Support Questionnaire.

### Changes in patient outcomes relative to baseline

At baseline, the means for the psychological outcome measures were as follows: Profile of Mood States (total mood disturbance score) – 20.7 (SD = 21.5), DUFSS – 33.2 (SD = 5.4), and Coopersmith Self-Esteem Inventory – 71.6 (SD = 18.1). At the post-group assessment, the means for the psychological outcome measures were: Profile of Mood States (total mood disturbance score) – 9.4 (SD = 18.9), DUFSS – 32.6 (SD = 5.2), and Coopersmith Self-Esteem Inventory – 72.7 (SD = 17.7). Table 2 summarises means and standard deviations for all psychological outcome variables.

### Improvements of psychological outcomes relative to baseline (Hypothesis i)

Paired samples t-tests showed a statistically significant decrease in psychological distress from baseline to follow up ( $t = 3.44$ ,  $p = 0.001$ ). Significant decreases were found for fatigue ( $t = 3.2$ ,  $p = 0.003$ ) and depression ( $z = 2.90$ ,  $p = 0.006$ ), and a significant increase in vigour ( $t = -2.59$ ,  $p = 0.013$ ). No changes were observed for the anger ( $t = 2.31$ ,  $p = 0.026$ ), tension ( $t = 0.82$ ,  $p = 0.42$ ) and confusion ( $t = 2.08$ ,  $p = 0.044$ ) subscales of the POMS. No significant changes were found for social support ( $t = 0.77$ ,  $p = 0.44$ ) and self-esteem ( $t = -0.55$ ,  $p = 0.58$ ).

The mean satisfaction score was 4.4 (SD=0.47), indicating very high satisfaction with the group. Table 3 shows the means and standard deviations for all satisfaction items.

### Baseline levels of psychological distress as predictors of improvements (Hypothesis ii)

Women with higher psychological distress at baseline showed greater decreases in psychological distress at the post-group assessment compared to women with lower psychological distress ( $b = 0.312$ ; 95 per cent CI 0.003-0.487). Women with lower social support at baseline showed significantly greater increases in social support at post-group assessment compared to women with higher social support ( $b = 0.505$ ; 95 per cent CI 0.222- 0.740). Women with lower self-esteem at baseline were more likely to increase their self-esteem at the post-group assessment compared to women with higher self esteem ( $b = 0.657$ ; 95 per cent CI 0.413-0.900).

**Table 3: Means and standard deviations for satisfaction items**

Item	Mean	SD
I would recommend the group to other women in my situation	4.8	0.45
I think the group was well facilitated	4.8	0.39
I think the group covered topics which were appropriate to young women with breast cancer	4.7	0.46
The Younger Women's Cancer Support Program met my expectations	4.5	0.86
I feel more supported as a result of attending the group	4.5	0.80
I have learned more about the emotional impact of breast cancer as a result of attending the group	4.5	0.66
The pre-group interview prepared me about what to expect from the group	4.4	0.67
Attending the group has had a positive impact on my life	4.4	0.74
I think the venue for the group was appropriate	4.4	0.79
I think the length of time allowed for meetings was appropriate	4.4	0.66
I feel less isolated as a result of attending the group	4.3	1.01
I have learned strategies to help me feel more positive about the future as a result of attending the group	4.3	0.82
I think the meeting time (i.e. weekday/ afternoons-evenings) was appropriate	4.3	0.96
I have learned more about breast cancer and its treatment as a result of attending the group	4.2	0.83
I feel I have been able to help or support other members of the group as a result of attending the group	4.0	0.57
I have learned strategies to better manage my fears as a result of attending the group	4.0	0.76
I have learned strategies to resolve relationship or communication problems which may have occurred during or after my treatment as a result of attending the group	3.8	0.76

### **Association with age, and having a partner and children (Hypothesis III)**

No significant associations were observed for changes in psychological distress depending on women's age ( $r = 0.017$ ,  $p = 0.91$ ), and whether or not they had children ( $t = 0.42$ ,  $p = 0.68$ ) or a partner ( $t = 0.13$ ,  $p = 0.90$ ). Likewise, a test for an association between changes in social support and age showed a trend for significance ( $r = -0.30$ ,  $p = 0.052$ ), and having children ( $t = -2.01$ ,  $p = 0.84$ ) or a partner ( $t = -0.71$ ,  $p = 0.48$ ) were not significantly associated with changes in social support. No significant correlations were observed for changes in self-esteem depending on age ( $r = 0.015$ ,  $p = 0.93$ ), having children ( $t = -0.26$ ,  $p = 0.80$ ) or being partnered ( $t = -1.55$ ,  $p = 0.88$ ). None of the significance tests for associations between satisfaction with the group depending on age ( $r = 0.18$ ,  $p = 0.28$ ), having children ( $t = -0.91$ ,  $p = 0.37$ ) or a partner ( $t = 0.17$ ,  $p = 0.87$ ) were significant.

### **Discussion**

This study evaluated the efficacy of a support group for young women with a diagnosis of early breast cancer. Psychological outcomes assessed were psychological distress, self-esteem and perceived social support. Consistent with our hypothesis (i) that there would be significant improvements in psychological outcomes relative to baseline, we found that participation in a group program evaluated by this study for young women with early stage breast cancer resulted in a significant decrease in psychological distress.

Although the authors know of no other group intervention evaluation conducted exclusively with young women with breast cancer to date, the finding of reduced psychological distress in women with early stage breast cancer following participation in a short-term support group is consistent with a growing number of previous studies of women of mixed ages.<sup>17,33,35</sup> Previous randomised controlled trials with women with mixed or unspecified stages of breast cancer<sup>21,22,28-30,39</sup> have also showed reductions in psychological distress following participation in support groups, as have studies with women with more advanced cancer.<sup>18,24,59</sup> However, not all group intervention studies have shown reductions in psychological distress in women with early stage breast cancer.<sup>12,15</sup> Interestingly, a study conducted by Spiegel and colleagues failed to find improvements on a number of psychometric measures of emotional well-being at the end of a 12 week supportive-expressive group therapy program for women with early breast cancer, but significant improvements were evident at six and 12 months relative to baseline assessments.<sup>38</sup> Inconsistent findings across studies could be the result of variations in the length of group programs and differences in when women join the group (ie. shortly after diagnosis or towards the end of treatment).

Women with higher psychological distress at baseline showed greater decreases in psychological distress at the post-group assessment compared to women with lower psychological distress. The increased reductions in psychological distress found for those women who were most distressed at pre-group assessment indicates that those women who were most in need of psychological intervention made greater gains than those who were less distressed. These findings are similar to findings in a study of women with metastatic breast cancer, which found that women who were more distressed benefited from a group intervention, compared to those who were less distressed, who, in that study, did not benefit from participation.<sup>24</sup>

On average, social support was not significantly improved by participation in the group. Although the potential for oncology support programs to assist women to increase their social support networks, to use their support network more effectively and to maintain quality in their interpersonal relationships, has been clearly documented,<sup>60</sup> the effect of group interventions on perceived social support is far from clear. Some studies have found no improvement in perceived social support from group support programs,<sup>17,20</sup> while others have found the effects to be dependent on pre-group social support levels.<sup>26</sup> Fobair and colleagues found, in a study of a supportive group for lesbians with primary breast cancer, that perceived social support declined following group participation.<sup>21</sup> The authors suggested that the participants may have become more critical of the levels of support provided to them by their social networks as contact with other women in similar situations led them to raise their expectations regarding social support.<sup>21</sup> Factors such as these may account for our finding that perceived social support was not significantly improved overall by participation in the support group.

Our finding that women with lower social support at the commencement of the group program showed significantly greater increases in social support following the support group, compared to women with higher social support at baseline is consistent with other group intervention studies. Fobair and colleagues found that people who experience problems with stress or social isolation or are in need of social support are those most likely to benefit from participation in groups.<sup>21</sup> Hegelson and colleagues in a comparison of educational and peer support group interventions, found that women who lacked emotional support from their partners, or who reported more negative interactions with their partners, benefited from peer support groups.<sup>26</sup>

On average we found no changes in self-esteem resulting from the support groups; however, we did find significantly greater increases in self-esteem for women with lower self-esteem before the group commenced compared to women with higher self-esteem. The previous literature on the efficacy of support groups on self-esteem is inconsistent. Edelman and colleagues found improvements in self-esteem in women with early stage breast cancer following group therapy,<sup>17</sup> as did Hegelson and colleagues in women with mixed stages of breast cancer. However, studies conducted with women with more advanced breast cancers have shown mixed results with regard to self-esteem.<sup>18,25,31,36</sup> These inconsistent results suggest that the impact of support groups on self-esteem may be more complex than has previously been anticipated. Future research should seek to clarify the patient characteristics and types and duration of group therapy most likely to lead to increases in self-esteem.

Hypothesis (iii) that women would experience greater improvements in psychological outcomes depending on their age and whether or not they have a partner, or children, was not supported. The lack of significant associations between these sociodemographic variables and the benefits obtained from the support group may reflect the different, but not lesser, concerns of women in different life circumstances. While we found no association between these life variables, pre-group psychological distress and perceived social support predicted psychological outcomes, suggesting that psychological characteristics are more powerful predictors of benefit from support groups than sociodemographic variables. The authors are not aware of previous studies that have examined the associations between these sociodemographic variables and

improvement from support groups and future studies should seek to replicate our findings.

In interpreting the findings of our study the strengths and limitations of this study should be noted. Although to our knowledge this is the first study to provide empirical data on the effect of a support group conducted specifically for young women, the number of women in this sample is small. Despite this, statistically significant improvements were found in levels of psychological distress following group participation. The sample was a highly educated group compared with the general Australian population, which may limit the generalisability of the findings. It would also be of interest to explore the effect of group participation for women from differing cultural backgrounds by evaluating the efficacy of culture-specific support groups. A pre-and post-intervention design, rather than a randomised control design, was utilised for this study. Previous research has shown that women with breast cancer improve on psychosocial measures even without psychosocial intervention,<sup>44</sup> so further research with young women using a control group design would overcome this limitation. Post-intervention measures were conducted following completion of the group and further longer-term follow-up would be of value in ascertaining whether gains were sustained over longer periods, as previous studies have shown mixed results in terms of the sustainability of psychological benefits of support groups for women with early-stage breast cancer.<sup>17,35,38</sup>

### **Clinical Implications**

The finding that women who participated in a psychoeducational group for young women with early stage breast cancer experienced a significant decrease in psychological distress supports suggestions that these women, who are at high risk of psychosocial morbidity, will benefit from age-specific support groups. Women who were most distressed before participation in the group program experienced significantly greater improvements on a number of measures than women who were less distressed, indicating that the program was of particular benefit to those women with a greater need for intervention.

The provision of this short-term group intervention for young women was conducted with relatively limited resources. This approach thus provides cost-effective, accessible psychosocial support and promotes opportunities for young women to meet with others of their own age in similar circumstances, reducing the sense of isolation that many young women experience when faced with a diagnosis of breast cancer.

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