

Breast cancer survivors' experiences of partner support and physical activity participation

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Abstract

Objective: To examine women's experiences of enablers and constraints to physical activity participation after being diagnosed with breast cancer while mothers of dependent children.

Methods: In-depth, semi-structured interviews were conducted with 36 Australian women diagnosed with breast cancer while mothers of dependent children.

Results: Social, structural and individual enablers and constraints to women's participation in physical activity included level of intimate partner support, daily household and childcare responsibilities, post-treatment pain and fatigue and level of priority for and pleasure derived from physical activity participation.

Conclusions: The study concludes that social enablers and constraints, particularly partner support and gendered identity, were powerful in framing women's participation. Implications for those working in survivorship care include the need to consider ways to address women's gendered identities and their associated social roles, relationships and responsibilities when designing strategies to increase breast cancer survivors' physical activity participation. Further research is needed to understand the prevalence of the effects of perceived partner support on breast cancer survivors' physical activity participation.

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Background

Breast cancer is the most commonly reported cancer in women in Australia, with increasingly high survival rates [1]. Around one quarter of women diagnosed with breast cancer are under 50 years [1]. More than three quarters of Australian women become mothers, and of these, the majority have their first child in their late twenties or early thirties [2].

Breast cancer survivors experience higher than population prevalence of osteoporosis, bone fractures, cardiovascular disease, poor mental health, lymphoedema and fatigue [3,4]. Women diagnosed with breast cancer at a younger age (under 50) experience higher rates of health and social problems than those diagnosed when they are older [5–7].

Regular exercise ameliorates adverse effects of breast cancer treatments, for example by reducing fatigue and lymphoedema and improving bone mineral density and cardiovascular function [8,9]. Research suggests that physical activity also improves mental health and increases length of survival [10]. In Australia, women with dependent children are among the least active sub-groups, with the least amount of time available in which to participate in physical activity [11].

Studies suggest that Australian breast cancer survivors are no more likely to participate in regular physical

activity than women without a past breast cancer diagnosis [12,13]. One study found that the four key factors that constrain breast cancer survivors' participation are low socioeconomic status, low level of education, having a partner and having difficulty with tasks of daily living [14].

Numerous exercise intervention studies with breast cancer survivors have been conducted [15]. Most used behaviour change theories: the theory of planned behaviour [16], the transtheoretical model of behaviour change [17] and social cognitive theory [4]. A systematic review of women's maintenance of physical activity and nutrition interventions found that interventions are rarely evaluated in the long term, so there are few data regarding their long-term effectiveness [15].

A longitudinal study [18] investigated biopsychosocial influences on breast cancer survivors' physical activity participation and found that the strongest longer-term predictor was family support. Another study investigated the effects of marital distress on longer-term participation, comparing the experiences of women in stable, non-distressed relationships and in stable, distressed relationships. Both groups increased their participation initially, but after 18 months the distressed relationships group dramatically decreased their participation levels, whereas the non-distressed relationships group increased participation over the first 2 years, before gradually decreasing their participation [19].

Few studies have explored women's accounts of their participation in physical activity after breast cancer. In addition, there is little acknowledgement in the current physical activity intervention literature of how women's daily lives may affect their opportunities for participation in physical activity [5,20].

Survivorship care has become an integral part of cancer care and control, and in some cancer care centres, patient education regarding the health benefits of physical activity is part of survivorship care plans [18]. The extent to which education and provision of support to patients to undertake physical activity are occurring, however, is limited [18,19].

The current paper asks: how do women, diagnosed with breast cancer while mothers of dependent children, describe their experiences of constraints and enablers to regular participation in physical activity? The paper explores briefly implications for those working in survivorship endeavouring to enable breast cancer survivors to undertake regular physical activity.

Methods

Qualitative methods were used to explore women's experiences of participation in physical activity after breast cancer because these are best placed to study social and environmental influences on people's health promoting practices [21–23].

Sample recruitment

Contacts from cancer-related organisations and members of an advisory group associated with the study distributed information to potential participants (for more details see [24]).

Fifty-five women contacted me, and I invited those who met the selection criteria to attend an in-depth interview. Data saturation was reached after 36 interviews as no new themes relating to the research question emerged and interviews were achieved with women from the broadest available range of demographic backgrounds among those who contacted me [25,26]. I conducted interviews between May 2007 and April 2008.

Data collection

I developed a semi-structured interview guide to capture the complexity of participants' experiences [27]. The interview protocol included: (a) participants' breast cancer experiences [23,24], (b) what they had seen/heard about supporting their health, (c) knowledge of health benefits of regular physical participation for breast cancer survivors and (d) experiences of participation over the life-course, including current. Interviews ranged from one to three hours, averaging 90 minutes. Most women chose to be interviewed in their home, two in a local park and

one at her workplace. I digitally recorded interviews, which were professionally transcribed verbatim.

I obtained ethics approval from an Australian National Health and Medical Research Council approved social and behavioural human research ethics committee prior to commencing the study. Participants gave written consent at the time of their interviews. In the current paper, pseudonyms are used to maintain participant confidentiality.

Analysis

I analysed data using the Framework method, useful for systematically managing and interpreting qualitative data, involving familiarisation, identifying a thematic framework, indexing, charting, mapping and interpretation [28].

After three interviews I began developing an indexing and coding framework. Analysis of subsequent interviews confirmed or provided alternative explanations from early interpretations [29]. I examined critically structural elements embedded in the women's talk (e.g. gendered practices, managing paid/unpaid work) [30]. I developed a thematic framework, informed by the current study's research question and emergent themes from the interview transcripts. I used QSR International NVivo software to assist with analysis and coding.

An advisory group comprising breast cancer survivors and breast cancer care/support professionals contributed to the research process and increased researcher reflexivity [24]. Checking my interpretations with the advisory group and sending my analysis to study participants for comments contributed to interpretive rigour [31,32].

Results

Sample description

Seventeen participants lived in rural and 19 in urban locations (Table 1). Participants were 28 to 52 years at the time of their first breast cancer diagnosis; 21 were diagnosed within 5 years of the interview. They had one to four children, at least one dependent child at diagnosis. Thirteen had a degree or higher, eight a certificate/diploma, five had completed and nine had not completed the final year of school. Of those who stated that they were not of Anglo-European descent, one was first generation Thai and one had immigrated to Australia from Malaysia. Thirty were in intimate relationships, two were widowed and four were separated/divorced at interview.

Findings

All women described in detail health benefits of regular physical activity participation; two-thirds spoke about specific benefits for breast cancer survivors. Knowledge of health benefits provided insufficient impetus for women who were not regularly participating in physical activity to become regular participants. Social influences,

Table 1. Participant characteristics: physical activity participation and location, age at first diagnosis, time since first diagnosis, children's ages at first diagnosis, partner support and education

Pseudonym	Rural/urban	Age	Time (yrs)	Children (yrs)	Partner support ^a	Education
Regular participators (continuous exercise ½ h ≥3 times per week)						
Danielle	Rural	46	3	16, 12, 9, 7	S	Diploma
Bernadette	Rural	39	0.5	4, 2	S	Degree
Therese	Rural	48	1	9, 7	S	Degree
Grace	Rural	33	5	6, 4	S	Certificate
Manee	Rural	48	1	18	S	Certificate
Rebecca	Urban	39	6	9, 4	S	Diploma
Jane	Urban	38	8	11, 8	S	Diploma
Candice	Urban	44	10	16, 14	S	Degree
Adele	Rural	40	5	17, 14, 10, 6	S	Certificate
Alana	Urban	28	16	3, 2	S	Degree
Blanche	Urban	38	20	13, 20 mo	S	Certificate
Louise	Urban	44	2	16, 13, 11	S	Yr 11
Isobel	Rural	46	3	5, 7	S	Yr 12
Joanna	Urban	35	3	4, 2, 3 mo	V	Yr 12
Jess	Rural	40	15	7, 5, 2	V	Yr 12
Monique	Rural	51	1	18, 12	V	Yr 11
Emma	Urban	40	5	3, 10 mo	U	Degree
Jill	Rural	46	2	16, 14, 12	N/P	Certificate
Melissa	Rural	52	1	18, 20	N/P	Yr 12
Philippa	Urban	41	16	9, 8	N/P	Diploma
Janine	Urban	40	6	17, 14, 8	N/P	Yr 9
Rare/irregular participators (continuous exercise ½ h <3 times per week)						
Annette	Rural	40	5	9, 5	S	Yr 10
Sarah	Rural	37	11 mo	19, 16, 13	S	Yr 11
Jen	Rural	42	3	19, 18, 17	S	Yr 11
Tanya	Urban	45	2	14, 12, 8, 6	S	Degree
Elena	Rural	40	5	11, 6, 4	V	Diploma
Justine	Urban	51	5	5	V	Degree
Lauren	Urban	40	4	6, 4	V	Diploma
Kate	Urban	32	4	1.5	V	Yr 11
Vanessa	Urban	33	9	4	V	Degree
Zoe	Urban	37	3	3	V	Degree
Anna	Urban	35	3	6, 4, 1	U	Yr 12
Sophie	Urban	28	1	1	U	Diplomas
Penelope	Rural	52	1	11, 14	U	Certificate
Jodie	Urban	39	4	4	N/P	Yr 11
Nora	Rural	50	7	31, 29, 23, 13	N/P	Yr 10

^aS = supportive, V = variably supportive, U = unsupportive and N/P = no partner.

particularly level of partner support and gendered identity, had the strongest effects on participation. Less influential although still evident were socioeconomic factors, paid/unpaid work, treatment-related fatigue and/or pain and preferences for use of available time. Urban or rural location did not influence their participation; however, those participants who had relocated experienced short-term changes in participation because of leaving (or returning to) existing social networks. Intimate partner support was more influential over the longer term.

The analysis is structured according to the groups of women who were regular participators and rare/irregular participators and then by level of partner support, with attention to the interconnections between other social and individual factors.

Defining partner support

Women's accounts of partner support included expectations they had of their partners (e.g. emotional, practical support). Women frequently described their experience of their household's division of labour (e.g. paid work, child care, and housework) and social roles (e.g. emotional, nurturing, and relationship-building work). I define *supportive* partners as those the women described as being supportive equal to or beyond their expectations. *Variably supportive* partners are those the women described as supportive in some ways and unsupportive in others. *Unsupportive* partners are those the women perceived did not provide adequate support and/or were unwilling to provide support.

Defining level of physical activity participation

Two definitions of 'sufficient physical activity to produce health benefit' are used in Australian population self-report physical activity surveys [33]. In the current paper, women's participation in physical activity at interview is defined as:

regular participators—reported participating in non-occupational or incidental physical activity (e.g. walking, dragon boat paddling, swimming, cycling, sport, treadmill, and gym) at least three times per week for at least half an hour per session.

rare/irregular participators—reported participating in physical activity fewer than three times per week.

Applying these definitions to the women's descriptions, 21 women were *regular participators*, and 15 were *rare/irregular participators*. Those who experienced greater gender equity in their relationships and greater accessibility to social and material resources were most likely to report regular participation in physical activity. For these women, gender operated in their households to produce more equitable sharing of paid and unpaid roles and responsibilities. Women already in supportive relationships and regularly active prior to their breast cancer diagnosis either continued participation through treatment or resumed after treatment/recovery.

Regular participators

Thirteen of the 17 partnered regular participators (see Table 1) described having supportive partners. Most were in relationships that had always been supportive, while a few were more able to expect and receive support after their diagnosis of breast cancer. Grace, who viewed exercise as 'my medicine', described how her partner had always contributed extensively to their unpaid domestic and childcare responsibilities.

In hindsight, [my husband] really wore a lot of the stress and life changes more than me. I just slipped out of our life on the side and had the treatment and then came back done (Grace).

Bernadette described physical activity being extremely important to her, having played team sport until her children were toddlers. She had moved from an urban to rural location prior to her breast cancer diagnosis and found losing her support network contributed to a reduction in physical activity participation.

[After the move] we didn't have family support for baby-sitting—we didn't play a lot of sport for a long time because it was hard taking a baby with us (Bernadette).

Bernadette found this difficult, describing herself as 'sports mad'; however, she slowly established new

networks through work and school and started walking with a group three mornings a week (while her husband remained home with their children), which she continued during her treatment.

Bernadette's account was typical of the few women who were more likely to negotiate with their partner to take time for exercise following their breast cancer diagnosis, commonly describing having become more assertive in their relationships.

I said to him 'yes we can go to the pool but you've got the kids, I'm doing laps'. [He] would always say to me 'you do what you want to do, don't worry about everybody else' and I used to worry about everybody else and now I think 'well no, I know everyone else is fine, this is what I want to do' (Bernadette).

Three partnered regular participators obtained variable support from their partners. Joanna spoke about her husband's strong emotional support throughout her breast cancer journey, but limited practical support.

...whilst [my husband] is fantastic and everything, he doesn't think of things to do himself. He will still be sitting, or trying to attempt to watch the news when there are 3 screaming children that need to be bathed. [...] I don't think he's a strange male. I think he's like a regular male (Joanna).

Joanna also described women (especially mothers) as being 'bottom of the pile', which was a common perception among participants.

Emma was the only regular participator with an unsupportive partner. She worked in the fitness industry so being regularly physically active was her job. She described having to work throughout her treatment because her family relied on her income. Emma illustrated the way in which the women typically described the meaning of being a mother, where in relation to physical activity, mothers' needs come last.

As a mother I think we tend to fit the kids and husbands in and working in before we fit ourselves in. I always find time to exercise, but I think it's the industry I'm in (Emma).

Four of the six women who were not in relationships were regular participators. Three who had separated/divorced or were in the process of separating gave lack of support from their partners during their breast cancer journeys as a major reason for the end of the relationship. Janine had separated from her partner who had been violent and abusive, particularly after her mastectomy. After separating, Janine started walking regularly: 'I decided I would go for a walk three nights a week for an hour which I've been doing'.

In addition to women with supportive partners being the most likely to be regular participants, these findings suggest that women with dependent children who are in unsupportive relationships are less likely to participate in regular physical activity than those who do not have partners.

Rare/irregular participants

The four partnered rare/irregular participants with supportive partners gave reasons such as lasting treatment effects, never having enjoyed physical activity before breast cancer or exercise not being a priority for their low participation. Sarah still felt extreme fatigue after her breast cancer treatment and had never liked exercise. Her account was typical of these four women, describing how her partner had been incredibly supportive by arranging his workdays to manage their household and caring work.

I'm very lucky. Imagine if I had a man who didn't know how to cope or you know, didn't know how to cook. The kids would've faded away to nothing [...]. They weren't coming to me for help or advice or just a chat [...] but I'd always hear them around here chatting to [my husband] [...]. [He] did the whole lot (Sarah).

Six rare/irregular participants reported variable support from their partners. Kate's account is characteristic of how a few participants described the reasons for their partner's lack of support being because they were unable to cope with her breast cancer diagnosis in addition to other demands—particularly paid work.

I think he really wanted to be supportive but it was just too much for him [...] like if I got upset he actually got angry with me but I think that was a lot to do with [being] under so much pressure at work (Kate).

Similarly, Vanessa described her partner as being supportive in the beginning, but finding longer-term support difficult, particularly when they began to suffer financially.

In the early days he was good because he was around and then it got to the point where it was 'oh my God, we've got no money, we need to do something about this' and he almost went the other way in that, and I think this is sort of a male thing almost [...] that was his way of coping (Vanessa).

The three rare/irregular participants who described their partners as being exclusively unsupportive perceived their partners as placing their needs and wishes above the women's. Anna's husband worked interstate and was only

home for weekends and provided little support while at home.

For example when we got back from Queensland he spent Saturday going for a half hour walk and then working out in the gym. I did all the unpacking and the washing and all of that (Anna).

Anna's family had moved to be closer to her parents to access their support during and after treatment. She initially increased her physical activity participation with their support; however, over the longer term she only sought their support when she felt it was essential, stating 'I've got to do this, got to do that' (i.e. not physical activity).

Sophie expressed frustration at being unable to participate in regular physical activity. She spoke specifically about her lack of partner support in the organisation of domestic work, including housework, shopping, cooking and childcare. While Sophie acknowledged that her partner was the sole income earner after her breast cancer diagnosis, she talked of feeling unsupported because he had the capacity to help in small ways, such as phoning other people to arrange help. Like Anna's account above, Sophie voiced dissatisfaction that her partner fitted in his regular exercise no matter what was happening in the household, whereas she was unable to do the same.

Well this is the thing, he is very into his fitness, so he runs at 6:30 three mornings a week with some friends, and so that's his time. He gets home at 7 at night [...]. So I could possibly say then "I'm going for a walk" [but] I'm exhausted 'cause I've run after her most of the day, it's her bedtime, like that's a bonding time for her when she has her cup of milk and we read a couple of books [...] I've got to detach and think "Well he's capable, he can put her to bed." But I think as mothers, we tend to... (Sophie).

Sophie's account suggests a tension between having an unsupportive partner and also, typical of most of the women in the study sample, feeling responsible for their children and general household chores; that it would be morally wrong, as mothers, to put themselves first.

Some women who described their partners as unsupportive or variably supportive sought, or were offered support from other family members and friends. Zoe described how her parents looked after her daughter while she was undergoing treatment, but when it came to asking for help so that Zoe could participate in physical activity, Zoe said 'my parents live next door so they could, but that is not fair on [my daughter]. [My husband] thinks it is fine but I don't'. Zoe's rare/irregular participation was not because she was unable to seek childcare; she did not believe that it was fair for her daughter to be cared for by grandparents rather than a parent.

Conclusion

The findings suggest that the extent to which women in the current study reported regular participation in physical activity depended on their daily lives; the support they received from their partners, their beliefs about motherhood, their household socioeconomic circumstances and also their physical bodies (pleasure/pain/fatigue). Only one of the 17 regular participants reported having an unsupportive partner. The main reasons women gave for participating or not were similar to those found in the literature on physical activity participation of mothers of dependent child/ren [11,34–36]. Social enablers and constraints, including partner support and gendered identity [37], were powerful in framing the extent to which physical activity participation was possible for the women. Normative expectations of gendered roles, particularly motherhood, featured strongly. The women typically spoke about continuing to put themselves last in spite of a breast cancer diagnosis as part of being a mother.

There is some evidence that the experience of illness potentially brings about a change in gendered expectations [38]. By contrast, in the current study, women who spoke of experiencing gendered constraints in their daily lives and were not participating in regular physical activity did not tend to re-negotiate their gendered social position. While breast cancer was a catalyst to increase participation in physical activity for some, for the three rare/irregular participants in unsupportive relationships, the durability of their gendered identities [37] appeared to be the stronger force. For women in variably or unsupportive relationships, gender-power imbalances were implicitly or explicitly maintained by their partners and/or by the women because of their gendered identities [37].

The main limitation of this study is that the sample is weighted toward women from higher socioeconomic status

and fluent English-speakers. Besides limited advertising and editorials in local South Australian newspapers, the sample was recruited through contacts in cancer/breast cancer-related organisations, so women who have not been in contact with these may have been excluded. Although steps were taken to maximise interpretive rigour by checking the analysis with the advisory group and participants, raw data analysis was undertaken by one person, which may reduce the range of possible interpretations [31].

Implications for those working in survivorship care include the need to consider addressing women's gendered identities and their associated social roles, relationships and responsibilities when designing strategies to increase breast cancer survivors' physical activity participation. Partner and family involvement in cancer care is recognised as important for achieving optimal care [39]. Extending involvement of partners and family to the development of cancer survivorship care plans may be an avenue in which conversations about the effects of gendered roles on breast cancer survivors' physical activity participation may be approached. Further research is needed to understand the prevalence of the effects of perceived partner support on breast cancer survivors' physical activity participation.

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Conflict of interest

The author declares no conflict of interest.

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