Perspectives of women about external breast prostheses

by Margaret I. Fitch, Alison McAndrew, Andrea Harris,
Jim Anderson, Todd Kubon and Jay McClennen

Abstract

As many as 90% of women who have undergone mastectomy or lumpectomy for breast cancer surgery will choose to wear a breast prosthesis. To date, there has been little systematic exploration of experiences and preferences related to wearing external breast prostheses, especially with new products. For this qualitative descriptive study, 24 women were interviewed regarding their perspectives about the conventional breast prosthesis and 19 about their perspectives regarding a newly available custom-designed breast prosthesis. Women spoke about difficulties obtaining information regarding available breast prostheses options; the awkwardness of being measured and fitted for a prosthesis, especially with seemingly untrained staff; challenges in wearing an external prosthesis; and how a prosthesis can foster increased confidence, enhanced body image and self-esteem, and a sense of normalcy. All recommended that women must make an individual decision about wearing a breast prosthesis and emphasized how important it is to have information about options early in the cancer journey. The study findings can guide oncology nurses in educating women about breast prostheses.

Introduction

Approximately 23,200 Canadian women are diagnosed with breast cancer each year (Canadian Cancer Society, 2010). The diagnosis and treatment of this disease has physical, emotional, psychosocial, spiritual and practical consequences (Dodd, Cho, Cooper, & Miaskowski, 2010; Fitch, Page, & Porter, 2008). In particular, surgical treatments result in the loss of the breast or an alteration in the shape or appearance of the breast. These changes can have a significant impact on a woman's sense of self, body image, and sexuality (Hassey-Dow, 2006). With an increasing number of women surviving breast cancer (Sun, Chapman, Gordon, Sivaramakrishna, Link, & Fish, 2002), there is now an emphasis on survivorship and rehabilitation (Braude, MacDonald, & Chasen, 2008).

Following breast cancer surgery, as many as 90% of women will decide to wear a breast prosthesis, either permanently or while awaiting breast reconstruction (Rowland, Holland, Chaglassian, & Kinne, 1993). A good quality breast prosthesis and prosthesis fitting service is seen as an important aspect of the recovery process following mastectomy (Gallagher, Buckmaster, O'Carroll, Kiernan, & Geraghty, 2010). To date, this area of care has had little systematic investigation regarding the perspectives of women who have had a mastectomy. Much of the existing literature regarding this topic

was generated at a time when prostheses options were more restrictive and prosthesis materials differed. This leaves oncology nurses with relatively little current research to guide their practice related to informing patients about breast prostheses. Yet, oncology nurses are instrumental in educating women about cancer recovery, promoting adjustment following treatment, and making referrals about breast prostheses and fitting services (Mahon & Casey, 2003).

Background

The emotional distress of breast cancer has been well documented (Andersen, Bowen, Morea, Stein, & Baker, 2008; Ashing-Giwa, Padilla, Tejero, Kraemer, Wright, Coscarelli, et al., 2004; Deshields, Reschke, Walker, Brewer, & Taylor, 2007). Elevated anxiety has been reported for almost all newly diagnosed women with breast cancer (Schnur, Montgomery, Hallquist, Goldfarb, Silverstein, Weltz, et al., 2008). Significant depression has been described for between 35% and 47% (Sjövall, Strömbeck, Löfgren, Bendahl, & Gunnars, 2010). The potential sources of this distress are wide-ranging (Ashing-Giwa, et al., 2004; Maunsell, Drolet, Brisson, Brisson, Mâsse, & Deschênes, 2004). In particular, after surgery, women reported grief related to the loss of the breast, a decreased sense of femininity, worry about scars, and breast asymmetry (Deshields et al., 2007; Roberts, Livingston, White, & Gibbs, 2003). Wilmoth & Ross (1997) found those who had a lumpectomy did not experience as much of an impact on body image or comfort with nudity as those who had more extensive surgery. Other studies have reported women who had a mastectomy expressed greater concerns with appearance and more sexual difficulties than those undergoing breast conserving surgery (Bloom, Kang, Petersen, & Stewart, 2007; Janz, Mujahid, Lantz, Fargelin, Salem, Morrow, et al. 2005).

Wearing a breast prosthesis can help women cope with the aftermath of breast cancer treatment (Wilmoth & Ross, 1997). However, recent research regarding women's perspectives on breast prostheses has been relatively limited and not conducted in Canada. It is not well documented how women learn about breast prostheses, decide about wearing one, go through the process of being fitted, or experience wearing currently available prostheses. New materials and new styles of prostheses are now available compared to the 1970s and 1980s when much of the existing evidence on this topic was reported.

Studies on this topic have emerged from other countries. In the United States, Glaus and Carlson (2009) reported on a convenience sample of 59 women who wore external breast prostheses. All were satisfied. However, those who were more than five years post-mastectomy were more satisfied than those who were less than five years (90% versus 67%) and those who wore the prosthesis consistently (six to seven days/week) were more satisfied than those who only wore it only in public (89% versus 50%) (Glaus & Carlson, 2009). In Ireland, a survey of breast cancer survivors (N=627) concluded that women considered the breast prosthesis as important because it enhanced their shape, appearance, sense of well-being, confidence, and femininity (Gallagher, Buckmaster, O'Carroll, Kiernan, & Geraghty, 2010). These same investigators also conducted focus groups (N=47) to explore women's experiences with the fitting and use of breast prostheses (Gallagher, Buckmaster, O'Carroll, Kiernan, & Geraghty, 2010). Their work emphasized the importance of the fitting process and fitting environment, as well as the characteristics of the prosthesis itself, for women's physical and emotional comfort.

A similar picture emerged in Australia from focus groups held with women following breast cancer treatment (Roberts et al., 2003). The women grew more comfortable with their prostheses over time and the device had a clear impact on body image, appearance, and feminine identity. Finally, in the Netherlands, a comparison of self-

About the authors

Margaret I. Fitch, RN, PhD, Head, Oncology Nursing, Co-director, Patient & Family Support Program, Sunnybrook Odette Cancer Centre, 2075 Bayview Avenue, Toronto, ON M4N 3M5. Telephone: 416-480-5891; Fax: 416-480-7806; Email: marg.fitch@sunnybrook.ca

Alison McAndrew, BA, RAP

Andrea Harris, BA, (MA Candidate)

Jim Anderson, BSc, DDS, MScD

Todd Kubon, BA, MAMS(CCA)

Jay McClennen, AOCA

adhesive breast prostheses with traditional external prostheses, in a prospective randomized crossover study with 101 women with one-sided mastectomy, 59.3% preferred the self-adhesive type (Thijs-Boer, Thijs, & van de Wiel, 2001). Preference for the self-adhesive type was mainly related to the perception of it feeling more a part of the body (Thijs-Boer, Thijs & van de Wiel, 2001).

Access to information about breast prostheses has also been reported as an issue for women (Glaus & Carlson, 2009). Women indicated they were not always told about breast prostheses by health care providers and they found it difficult to obtain relevant information (Gallagher et al., 2010). Often they had to depend on communication from friends and other women with breast cancer and search for appropriate vendors to purchase a breast prosthesis on their own. Many expressed the view that it was important to have information about prostheses early in the cancer journey, preferably before surgery (Roberts et al., 2003).

Purpose

At our cancer centre, a new type of external custom-designed breast prosthesis was developed (Kubon, McClellenn, Fitch, McAndrew, & Anderson, 2011). The evaluation of this new product provided an opportunity to explore women's perspectives about external breast prostheses. We conducted a qualitative study with the aim of better understanding women's viewpoints and preferences concerning external breast prostheses, including the conventional types (see Figure 1) and newly designed custom-fitted type (see Figure 2). We anticipated the findings would provide research-informed knowledge for providing nursing care to women with breast cancer and holding conversations about prostheses.

Figure 1: Conventional prosthesis
Odette Cancer Centre
Sunnybrook Health Sciences Centre

Figure 2: Custom-designed prosthesis
Odette Cancer Centre
Sunnybrook Health Sciences Centre

Methods

Design

This descriptive qualitative study utilized a semi-structured interview approach with convenience samples to explore women's perspectives about external breast prostheses. The study protocol was approved by the hospital ethics committee.

Sample and accrual procedures

The eligibility criteria for this investigation included: over 18 years; had a mastectomy or lumpectomy for breast cancer, and able to understand and read English. Outpatient nursing staff informed eligible women attending a well follow-up breast clinic about the availability of the new type of breast prosthesis and gave them an information sheet describing the study. The women took the prerogative to contact the research coordinator to find out more about the new prosthesis and study participation if they were interested. Flyers about the study were also posted in the patient support centre.

When women called, the research coordinator explained the study participation. Those who consented underwent an interview concerning their perspectives about the conventional breast prosthesis while waiting to be fitted for the new type of prosthesis. Subsequently, the women who proceeded to be fitted and wear the custom-designed prosthesis underwent an interview concerning their perspectives about this new type of prosthesis. These interviews were conducted after women had worn the new type of prosthesis for two to three months. The interviews were conducted over the telephone by the research coordinator who has extensive experience with qualitative interviewing. Telephone interviews were used to avoid asking women to return to the clinic setting unnecessarily. All interviews were recorded and lasted between 30 and 60 minutes.

Interview guide

The semi-structured interview guide was designed for this study (see Table 1) to elicit women's perspectives about external breast prostheses. The questions focused on how women learned about prostheses, obtained one, the process of making decisions about prostheses, how it was worn, and satisfaction with the product. A question was also included about what the women thought would improve the experience of purchasing and wearing an external breast prosthesis for other women following surgery for breast cancer.

Table 1: Semi-structured interview guides	
Questions for the women regarding conventional breast prosthesis	Questions for the women regarding new custom-designed prosthesis
1. What was the process involved in receiving the conventional prosthesis? (Probes: How did you hear about it? When did you hear about it? When did you receive your conventional prosthesis? From whom did you hear about it? Where did you get it?)	1. What was the process involved in receiving the customized prosthesis? (Probes: How did you hear about it? When did you hear about it? When did you receive your custom-designed prosthesis? From whom did you hear about it?)
2. What was the decision-making process you went through to decide on the conventional breast prosthesis?	2. What was the decision-making process you went through to decide on the customized breast prosthesis?
3. What influenced you to go ahead with this prosthesis?	3. What influenced you to go ahead with this custom prosthesis?
4. What has the experience been like for you?	4. What has the experience been like for you?
5. What has it been like for you since you got it? (Probes: Buying the prosthesis? When you first received the prosthesis? Living with the prosthesis?)	5. What has it been like for you since you got it? (Probes: Getting the prosthesis? When you first received the prosthesis? Living with the prosthesis?)
6. What kinds of things can you suggest to improve service and to improve the care? (Probes: Things that surprised you? Things that are good about it? Things that are difficult and/or troublesome?)	6. What kinds of things can you suggest to improve service and to improve the care? (Probes: Things that surprised you? Things that are good about it? Things that are difficult and/or troublesome?)
7. Is there anything else you would like to add at this point? Any other comments?	7. Is there anything else you would like to add at this point? Any other comments?

Analysis

The interview data were subjected to a standardized content analysis (Denzin & Lincoln, 2000). Three team members (MF, AM, AH) read through the interview data and created content category labels for each question following discussion of their impressions of the information from the women. Once agreement was reached regarding the coding labels and definitions, one team member (AH) coded all the data. Subsequent review of the coded data by three team members allowed comparison across participants' responses and identification of commonly held perspectives within each question's content category. The common perspectives for each prosthesis type are reported in narrative terms for each content category and quotations included for illustration where relevant.

Findings

Sample characteristics

During the five months of accrual, 40 women came to the prosthetics unit to obtain the new custom-designed prosthesis (see Figure 3). Of these women, 24 agreed to be interviewed about their experiences with conventional prostheses before they went through the process of being fitted with the new type. Although all who were interviewed had had previous experiences with conventional prostheses, only 11 wore one regularly.

Of the 40 women who came to the prosthetics unit, 31 proceeded to be fitted and wear the new custom-designed prosthesis. After wearing the new type for two to three months, 19 of these women agreed to be interviewed about their experiences with the new type. Six of these women had also participated in the first interview for the study.

The demographic characteristics of each interview group are presented in Table 2.

Perspectives about the conventional breast prostheses

The perspectives women shared during the initial interviews are summarized below for each content category.

Learning about breast prostheses. There was very little consistency in the way women learned about breast prostheses. Some were informed by health professionals (surgeon, nurse), others learned through family or friends, and some searched out information on

their own. When and how women learned also varied. For example, one woman described finding a folder or pamphlet in her doctor's office, but never having an actual conversation with her doctor while another talked about an extensive dialogue with her surgeon and nurse. Another woman described knowing about breast prostheses because a friend was a breast cancer survivor. In some cases, conversations about breast prostheses occurred prior to surgery, but many women did not have these conversations until after surgery and/or discharge from hospital. Only a few received written documents with information about prostheses and a list of prostheses vendors.

There was also variation in the length of time before women obtained their prosthesis. This time interval ranged from obtaining the prosthesis before surgery to as long as one year following surgery. The majority had a prosthesis within a month following their initial surgery. Some described receiving a "sponge" or foam piece during their hospital stay to use until proper fitting for a prosthesis could take place. Most described waiting to be fitted until healing had fully occurred following surgery, and in some cases radiation treatment, or because they were expecting further surgery.

Decision-making about the prosthesis. The process of decision-making about wearing the breast prosthesis was fairly straightforward once women had the relevant information. Most wanted to have something to wear, to appear normal, and to not feel lopsided or unbalanced. Women spoke of the prosthesis as their only viable option. Not many considered reconstructive surgery at the time of their original breast surgery and most indicated they did not want any further surgery. One woman commented, *"There was really not much option otherwise; it was a good alternative to surgery."* If they anticipated reconstructive surgery in the future, wearing a prosthesis was seen as a temporary measure. For example, one woman stated, *"It filled in the time until surgery could be done."*

Overall, women described facing two challenges in making their decision. One challenge was getting information about options regarding breast prostheses and where they could be fitted. The second challenge was resolving the financial issue. The women had to determine what was reimbursed through insurance plans or government assistance programs and what they had to pay for themselves. They found the cost of the prosthesis and bras ranged widely and the financial aspect was a key consideration for them.

Figure 3: Accrual of convenience samples for interview study

Table 2: Demographic characteristics of participants

Demographic characteristics	Categories	Conventional prosthesis group (Number of completed interviews = 24)	Custom prosthesis group (Number of completed interviews = 19)
Age in years	Average (St Dev)	52.0 (14.8)	50.8 (10.9)
	Range	28-83	28-76
Highest level of schooling	High school	5%	5%
	University/college	27%	53%
	Post-graduate	41%	32%
Marital status	Single	9%	16%
	Married/common law	23%	68%
	Separated/divorced/widowed	14%	1%

Process of fitting and obtaining the prosthesis. Overall, women described the process of being fitted as difficult, embarrassing, awkward, and emotionally disturbing. Only the privacy of the environment and communication by the staff made the experience, in any way, positive. Vendor settings ranged from a solitary woman selling breast prostheses from her home basement office, to a specialized section of a department store or a specialty boutique shop. In general, women found the feminine nature of the surroundings and attractiveness of the bras gave them "...a lift" and helped them "...feel like a woman again." The women liked having an array of breast prostheses from which to choose and having the chance to try on several styles. They found a bright, cheerful, roomy setting with a private fitting area felt supportive.

In some instances, the staff had special preparation for fitting breast prostheses and possessed a good understanding of the challenges women were facing. When women interacted with these staff they felt supported, cared for, and reassured. In the words of one woman, "It was nice to have someone acknowledge the loss I had experienced." Other women felt vendor staff did not appear to possess any special knowledge about women with breast cancer. Interaction with these staff members was experienced as non-supportive. It was experienced as helpful to have professional staff who were discreet, knowledgeable about prostheses, and able to provide advice about wearing it. Vendor staff who were sensitive to women who were feeling vulnerable was important, as this woman illustrates: "Why is a breast any different than an ear, or an eye, or a nose? We need supportive humanistic care—other people really do not understand the reality of the situation." Finally, women found it helpful when the vendors had printed information about the prostheses and staff who were able to help them complete government financial reimbursement forms.

Wearing the prosthesis. Women had various approaches to wearing the prosthesis. Some only wore it when outside their homes for work or formal social engagements. Others wore the prosthesis all the time, including when they were swimming or exercising. For some women, wearing the prosthesis was more for the comfort of others than for themselves. They described feeling societal pressure to look feminine. One participant stated, "If society didn't expect it, I wouldn't wear it." Others said they felt lopsided, off balance or disfigured without the prosthesis. Women also described using different prostheses for different situations. For example, some wore a different prosthesis at home when they were alone, but would wear another style at the gym or when wearing a dress. They liked having the choice for different situations or circumstances. As one participant noted, "I wear the foam type in the winter."

The women found the breast prosthesis "...took some getting used to." During the first several months of wearing it, women felt self-conscious and somewhat awkward. One woman commented, "You just have to adjust to it and learn to live with it." Over time,

women became more comfortable with the prosthesis. In many instances, they found they were able to obtain a "...pretty good, natural fit..." for them. Many were actually surprised about the variety of products that existed and how feminine they looked. As one participant said, "Some of them are actually quite sexy." They felt most people would be unaware they were wearing a breast prosthesis or what they had been through. Wearing a prosthesis gave them the "...correct shape or profile..." and helped them in "...feeling healthy again" or "...like a normal person."

Nonetheless, there were challenges in wearing the conventional prosthesis and women were not entirely satisfied. They described a range of complaints (see Table 3) about the prosthesis feeling heavy, moving, and not being like the other breast. As one woman stated, "I consider it is sort of a necessary evil, but I am glad there is at least something out there."

Recommendations. Overall, many of these women would recommend using a conventional breast prosthesis to other women, but emphasized it has to be an individual decision. In the words of one woman, "It's a personal decision. It depends on your body and breast size. But it can make you feel normal and confident again, and it's better than nothing." Above all, they emphasized that women need to be informed early in the cancer journey about the available options regarding prostheses.

Perspectives about the custom-designed prosthesis

The perspectives women shared after wearing the new custom-designed prosthesis are summarized below for each content category.

Learning about the custom-designed prosthesis. The majority of the participants learned about the newly designed custom breast prosthesis from the nurse at the cancer centre. They were motivated to investigate the new type because they wanted access to a prosthesis that was potentially better than the conventional one they were wearing. They expressed their motivation in these words: "I wanted something better suited to my active lifestyle"; "I cannot stand the prosthesis I have. It's heavy, doesn't fit, and doesn't look normal" and "I wanted something that is more like my own breast."

Decision-making about the prosthesis. The women had the opportunity to see an example of the new customized prosthesis prior to deciding if they would try it. All indicated they liked the appearance of the custom prosthesis as soon as they saw it and were ready to proceed. One woman stated, "It was natural, light, and the right colour—very attractive."

Process for fitting and obtaining the prosthesis. The measurement and fitting for the custom-designed prostheses occurred at the cancer centre in the Craniofacial Prosthetics Unit. Although the process

Table 3: Examples of concerns wearing an external breast prosthesis

Wearing a conventional prosthesis	Wearing a newly designed custom prosthesis
<ul style="list-style-type: none"> • The weight of the prosthesis (heavy); chafes and bruises; there are pressures on the bra strap; it feels like it is hanging; pulls to the side • Prosthesis moves/shifts about often and can fall out • Cannot wear some types of clothes (v-necks, sheer materials, tight clothes) • Cannot bend over with ease • Fit and size all not entirely correct; it does not match the other breast • Can be tight and constricting • Can be too warm (especially in summer) • Feel against skin can be uncomfortable • Have to keep getting new prostheses (the prostheses deteriorates) 	<ul style="list-style-type: none"> • Difficulties with the adherence; worry about it falling off if exercising or swimming • Can deflate (i.e., when flying, when the prosthesis was packed away for a time) • Skin under the adhesive backing becomes itchy (i.e., in the warm weather, when active and perspiring, if worn a long time) • Hard to wear some normal or sports bras (the prosthesis did not fit some bras) or wear revealing or tightly structured or pocketed clothing • Prosthesis moved or slipped on occasion • Prosthesis can make a particular noise if it was squeezed or hit • Nipple may not be entirely like a normal nipple

required several appointments for measurements and time to make the prosthesis, the women indicated they felt prepared for this time interval because they had been fully informed about the process steps at the onset.

Several described the process of making the prosthesis “*interesting*”. They marvelled at how the prosthesis became so realistic once it was formed and coloured. Women reported they learned a great deal about making the prostheses and caring for it from the staff. Throughout the process, they found the staff members were knowledgeable, respectful, caring, and sensitive; their attention to detail was reassuring and supportive. This attention was evident in the making of the prosthesis, the way privacy was handled, and in having a female in attendance during the appointments.

Wearing the custom prosthesis. All of the women began to wear the new custom-designed prosthesis immediately and many were very pleased. In the words of one woman, “*I was so excited I felt like a kid with a new toy. I was thrilled.*” All reported that it took a little time to get used to wearing the new prosthesis and to managing its application and care. Several women indicated they kept the conventional prosthesis they had worn previously as a back-up and still wore it occasionally. A few simply did not wear the new prosthesis at home. However, most of the women reported wearing the custom-designed prosthesis every day for longer periods of time than they had been able to wear the conventional type (i.e., seven to 10 hours with comfort). The new prosthesis was light in weight and much easier to wear than the conventional one. The women made comments such as: “*Once I put it on I almost forgot it was there*”; “*I found it much more comfortable. It feels like me. I don’t have to think twice about it.*” They did report feeling a sensation in their skin for a short time after its removal. As one woman said, “*It’s like the prosthesis is still there, but it is not. It takes about half an hour before the feeling goes away.*”

Women thought the prosthesis looked very real because of the shape, colour, size, and nipple. One individual concluded, “*I was impressed. It looks like the other breast in the bra...even the nipple looks real with the bra on.*” Because it looked so real, these women found the prostheses helped them feel normal again. In the words of one woman, “*The prosthesis is tailored to my body—it looks like it is part of my body...*” while another stated, “*I felt that my profile and curves were right again.*” The women described the custom prosthesis as feeling more part of their bodies than the conventional one had. For example, “*With the conventional one, once I got home and into the house, off it came. But with the custom, I only take it off when it comes time to change it.*” In the words of another, “*It’s one more part of my life that I can reclaim. It is not a constant reminder about the cancer to me and to the people around me.*” Additionally, they expressed the belief that most people looking at them would not know they had had surgery and lost a breast, as the following comments illustrate: “*I could wear it with most clothing—and the clothing I wanted to wear*”; “*When people look at me, I don’t think it’s noticeable.*”

Not all women were entirely pleased with the new custom design (see Table 3). In the words of one woman, “*The custom prosthesis is not a breast, it doesn’t solve everything.*” Women found they were still challenged in wearing some clothing items and the prosthesis moved or slipped on occasion. There were also some issues of a technical nature. For example, it could deflate during an airplane flight given it was filled with air.

Comparing the two types of prostheses. Overall, women reported many of the issues that they had experienced with the conventional prosthesis had been markedly improved with the new customized version. Despite the issues in actually using the customized prosthesis, the women emphasized the emotional and psychological benefits of wearing this external type. In the words of one woman,

“*This was the most positive experience throughout the whole cancer journey.*” The women emphasized feeling a heightened sense of confidence once they began to wear the custom-designed prosthesis because of their increased self-esteem and improvement in appearance. They found they did not have to worry as much about how they looked, felt less like a victim, and believed they were in a better position to live with the cancer. Examples of their comments include: “*When I saw the empty cup in my bra I felt disfigured...Now I have a match to my remaining breast*”; “*I have more choices in my clothes and in my appearance*” and “*I have a breast again without having to have another surgery, a reconstruction.*”

Additionally, for some women, the feelings of loss they had experienced after the mastectomy had been altered. Examples from two women include: “*It hits you emotionally... I did not think the mastectomy would be a loss, but it hits you unexpectedly that it is a loss. The prosthesis helps with that. It helps you return to a sense of normalcy*” and “*It hits you that you are not scarred any more. You are normal again.*”

Recommendations. All of the women who wore the custom-designed prosthesis recommended it for others. However, they emphasized women have to make their own decisions. Above all, they thought women needed to have choices. One woman stated, “*It is wonderful having options.*” The participants expressed the opinion that women need to know what is available to them regarding breast prostheses early in the cancer journey, but did not agree about when the conversation ought to occur. Many thought the focus on getting the initial surgery underway was overwhelming and could preclude attention to the issue of breast prostheses. Most thought the topic ought to be raised with women prior to surgery, even if there is no extensive conversation at that time. They also thought information about prostheses needed to be available in writing and a peer support volunteer could be helpful at the time of the measurement and fitting appointments. The peer volunteer would be able to talk with the woman about wearing a prosthesis and “*...offer tips about how to cope with it.*”

Discussion

This study was undertaken to describe current perspectives regarding external breast prostheses, especially in light of new products that are now available. The women’s perspectives can be valuable to oncology nurses who are teaching others about breast prostheses.

Clearly, the individuals who participated in this study were self-selected. They came forward because of a specific interest in trying a new breast prosthesis primarily because they had been experiencing difficulties with the conventional breast prostheses. Many of the comments these women made about the impact of losing a breast, the change in body image, and the resulting emotional distress mirror what has been reported in other studies (Gallagher et al., 2010; Roberts et al., 2003). However, given the nature of the sample, the descriptions about difficulties with conventional prostheses may not reflect the wider breast cancer survivor population. Nevertheless, their insights provide valuable understanding about women’s perspectives regarding currently available breast prostheses that can be helpful for oncology nurses.

The difficulties in seeking information about breast prostheses, locating a vendor, and being fitted for a prosthesis were issues for these Canadians, just as they had been for women in other countries (Gallagher et al., 2010; Glaus & Carlson, 2009; Roberts et al., 2003) and added to the emotional distress women felt. It is disappointing to learn there is so much variation in these processes. There is room for improvement regarding distribution of information about prostheses, training of vendor staff, and creating supportive environments for measurement and fitting appointments based on women’s preferences.

Wearing a conventional breast prosthesis continues to be challenging for breast cancer survivors. Although women gained experience with the prosthesis over time and learned how to manage their own situation, much of this learning happened on their own through trial and error. Education approaches by oncology nurses or through community-based agencies could enhance the learning and lessen the distress women experience regarding these challenges.

The women who had the opportunity to wear the new prosthesis, customized for them, described improvements in many of the physical issues they had experienced while wearing the conventional prosthesis. It is noteworthy, however, the number of psychosocial benefits they described when wearing the new type of prosthesis in terms of body image, self-image, and sense of normalcy. These observations merit further study in a larger sample, as well as across other cultural groups. The role played by body image and self-esteem in long-term adjustment of breast cancer survivors warrants deeper understanding.

Implications for oncology nurses

The findings from this work have implications for oncology nurses. There is a need to provide information to women about breast prostheses and the options available to them. Introducing the topic early in the cancer journey is important, but having a more

in-depth conversation about wearing a prosthesis will need to be based on the individual's readiness for it. The oncology nurse needs to be able to assess the woman's readiness for the conversation and tailor the conversation to the individual woman's concerns.

Oncology nurses need to be prepared to share information with women about where they can obtain prostheses. This may mean creating a list of available vendors and providing that list to women. Establishing a formal partnership with vendors could also create an opportunity to provide education for the vendor staff about the needs of women with breast cancer and how interactions can be supportive.

The difficulties women experienced with the new customized breast prostheses were technical issues that have now been improved based on the women's feedback. Evidently, women found this type of prosthesis to be more like their own bodies and that it gave them a greater sense of normalcy than the traditional type did. Hence, it is important to continue to develop and test products such as this one and to pursue avenues to reduce the cost of the prosthesis. Future research would also be valuable to explore the experiences, at a deeper level than was completed in this study, of a wider range of women who are wearing breast cancer prosthesis. There may be differences in various age or cultural groups that would be valuable to understand. ✕

REFERENCES

- Andersen, M.R., Bowen, D.J., Morea, J., Stein, K., & Baker, F. (2008). Frequent search for sense by long-term breast cancer survivors associated with reduced HRQOL. *Women & Health, 47*(4), 19-37.
- Ashing-Giwa, K.T., Padilla, G., Tejero, J., Kraemer, J., Wright, K., Coscarelli, A., et al. (2004). Understanding the breast cancer experience of women: A qualitative study of African American, Asian American, Latina and Caucasian cancer survivors. *Psychosomatic, 13*(6), 408-428.
- Bloom, J., Kang, S., Petersen, D., & Stewart, S. (2007). Quality of life in long term cancer survivors. In M. Feuerstein (Ed.), *Handbook of Cancer Survivorship* (pp. 43-63). New York: Springer.
- Braude, H.D., MacDonald, N., & Chasen, M. (2008). Healing and survivorship: What makes a difference? *Current Oncology, 15*(4), 20-22.
- Canadian Cancer Society (2010). *Canadian Cancer Statistics 2010*. Toronto, ON: Canadian Cancer Society.
- Denzin, N.K., & Lincoln, Y.S. (Eds.) (2000). *Handbook of Qualitative Research*. Thousand Oaks, CA: Sage.
- Deshields, T.L., Reschke, A., Walker, M.S., Brewer, A., & Taylor, M. (2007). Psychological status at time of diagnosis and patients' ratings of cosmesis following radiation therapy for breast cancer. *Journal of Psychosocial Oncology, 25*(2), 103-116.
- Dodd, M.J., Cho, M.H., Cooper, B.A., & Miaskowski, C. (2010). The effect of symptom clusters on functional status and quality of life in women with breast cancer. *European Journal of Oncology Nursing, 14*(2) 101-110.
- Fitch, M.I., Gallagher, P., Buckmaster, A., O'Carroll, S., Kiernan, G., & Geraghty, J. (2009). Experiences in the provision, fitting, and supply of external breast prostheses: Findings from a national survey. *European Journal of Oncology Nursing, 18*(6), 556-68.
- Fitch, M.I., Page, B.D., & Porter, H.B. (Eds.). (2008). *Supportive Care Framework: A foundation for person-centred care*. Pembroke, ON: Pappin Communications.
- Gallagher, P., Buckmaster, A., O'Carroll, S., Kiernan, G., & Geraghty, J. (2010). External breast prostheses in post-mastectomy care: Women's qualitative accounts. *European Journal of Oncology Nursing, 19*(1), 61-71.
- Glaus, S.W., & Carlson, G.W. (2009). Long-term role of external breast prostheses after total mastectomy. *Breast Journal, 15*(4), 385-93.
- Hassey-Dow, K. (2006). *Nursing Care of Women with Cancer*. St Louis, MO: Mosby.
- Janz, N., Mujahid, M., Lantz, P., Fargelin, A., Salem, B., Morrow, M., Deapen, D., Katz, S.J. (2005). Population-based study of the relationship of treatment and sociodemographics on quality of life for early stage breast cancer. *Quality of Life Research, 14*(6), 1467-79.
- Kubon, T.M., McClennen, J., Fitch, M.I., McAndrew, A., & Anderson, J. (2011). A mixed method cohort study to determine feasibility and perceived patient benefit in providing custom breast prostheses. (Submitted for publication).
- Mahon, S.M., & Casey, M. (2003). Patient education for women being fitted for breast prostheses. *Clinical Journal of Oncology Nursing, 7*(2), 194-9.
- Maunsell, E., Drolet, M., Brisson, J., Brisson, C., Mâsse, B., & Deschênes, L. (2004). Work situation after breast cancer: Results from a population-based study. *J Natl Cancer Inst, 96*(24), 1813-22.
- Roberts, S., Livingston, P., White, V., & Gibbs, A. (2003). External breast prosthesis use: Experiences and views of women with breast cancer, breast care nurses, and prosthesis fitters. *Cancer Nursing, 26*(3), 179-186.
- Rowland, J.H., Holland, J.C., Chaglassian, T., & Kinne, D. (1993). Psychological response to breast reconstruction: Expectations for and impact on post-mastectomy functioning. *Psychosomatics, 34*(3), 241-50.
- Schnur, J.B., Montgomery, G.H., Hallquist, M.N., Goldfarb, A.B., Silverstein, J.H., Weltz, C.R., et al. (2008). Anticipatory psychological distress in women scheduled for diagnostic and curative breast cancer surgery. *International Journal of Behavioral Medicine, 15*(1), 21-28.
- Sjövall, K., Strömbeck, G., Löfgren, A., Bendahl, P.O., & Gunnars, B. (2010). Adjuvant radiotherapy of women with breast cancer—Information, support & side-effects. *European Journal of Oncology Nursing, 14*(2), 147-153.
- Sun, J., Chapman, J., Gordon, R., Sivaramakrishna, R., Link, M., & Fish, E. (2002). Survival from primary breast cancer after routine clinical use of mammography. *Breast Journal, 8*(4), 199-208.
- Thijs-Boer, F.M., Thijs, J.T., & van de Wiel, H.B. (2001). Conventional or adhesive external breast prosthesis? A prospective study of the patients' preference after mastectomy. *Cancer Nursing, 24*(3), 227-30.
- Wilmoth, M.C., & Ross, J.A. (1997). Women's perception: Breast cancer treatment and sexuality. *Cancer Practice, 5*(6), 353-9.