

Body image concerns among women with breast cancer

Helena Lewis-Smith is a PhD Researcher at the Centre for Appearance Research, University of the West of England, Bristol.

Abstract

Whilst breast cancer remains the most common cancer amongst women in the United Kingdom, advances in medicine have seen survival rates improve over the years and the number of women living with the residual consequences of the disease and its treatment is growing. Women are likely to undergo a number of treatments at once, or in succession of one another, each of which brings about various changes to appearance, e.g. hair loss. These wide ranging appearance alterations can impose an adverse impact on body image, causing substantial distress for many women (Dahl et al., 2010).

This article reviews research exploring the body image of women with breast cancer, a group who experience a wide range of changes to their appearance as a side effect of treatment for the disease.

Key search terms: women, breast cancer, body image, interventions

Breast cancer is the most common cancer in women in the United Kingdom and the incidence is rising. There were 49,936 new cases in 2011 and incidence rates have increased by 7% in the last ten years (Office for National Statistics, 2013). Fortunately however, survival rates of women with breast cancer are improving, of which can be attributed to faster diagnosis and medical improvements (Office of National Statistics, 2011; Rachet et al., 2009). Consequently, the number of women living with the residual consequences of the disease and its treatment is growing. Treatment for breast cancer usually entails several methods over a prolonged period of time. The initial intervention is typically surgery, which can subsequently be followed by chemotherapy, radiotherapy and hormone treatments. There are various side-effects associated with each of these interventions, many of which alter appearance.

How is appearance affected due to treatment for breast cancer?

Due to the partial to complete loss of one or both breasts, breast surgery may lead to breast asymmetry, the need for a breast prosthesis or breast reconstruction, severe scarring, loss of breast and nipple sensation, and lymphedema (Collins et al., 2011). Mastectomy is a very common procedure, as demonstrated by the National Mastectomy and Breast Reconstruction Audit which reported 16,485 women to have received this intervention across a 15 month period as from the beginning of 2008. Of these women, 21% had chosen immediate reconstruction, whilst 10.5% underwent a delayed breast reconstruction following an earlier mastectomy (National Mastectomy and Breast Reconstruction Audit, 2011).

Chemotherapy treatment brings about numerous side-effects which change appearance, including hair loss, weight fluctuation, hot flushes related to early-onset menopause, and skin and nail discolouration (Nozawa et al., 2013). Challenges can arise from radiation treatment due to skin

reactions and discolouration, in addition to slow progressive long-term neurological changes (Sanitt, 2006). Furthermore, hormone treatments can bring on early menopause and the associated changes to appearance this brings with it. Some women will receive a combination of these treatments, resulting with having to deal with an extensive range of changes to appearance often at the same time, but sometimes one after another if the treatment is ongoing over months or potentially years.

What is the impact of an altered appearance for women with breast cancer?

These wide ranging appearance changes can be a significant source of distress and body dissatisfaction for women (Falk Dahl et al., 2010; Helms et al., 2008), particularly because they are out of the individual's control (Tacon, 2011). Indeed, one study reported appearance concerns among 17% to 33% of women within 7 months of their diagnosis (Fobair et al., 2006). Furthermore, disturbances to body image can persist long after treatment, as identified among 27% of long-term survivors in a further study (Falk Dahl et al., 2010).

Particularly debilitating upon body image are the alterations to breasts and hair loss. The breast is associated with attractiveness, sexuality, femininity, identity, motherhood and nurturance (Levin, 2006). The loss of a breast can therefore adversely impact upon body image, feelings of femininity, sexuality and sense of self (Falk Dahl et al., 2010; Manderson & Stirling, 2007). Following surgery, women can report feeling mutilated or like a part of them is missing (Kunkel et al., 2002; Lindop & Cannon, 2001). Mastectomy and scarring from surgery in particular, have also been found to have a profoundly negative impact on body image and feelings of sexuality (Sheppard & Ely, 2008). Furthermore, women who undergo radical mastectomy without subsequent breast reconstruction tend to have greater body dissatisfaction than women who have had breast conserving surgery or breast construction (Arndt et al., 2008). This can have profound effects on their social life, with more of those women who have undergone mastectomy avoiding activities such as going to the beach and isolating themselves compared with women having undergone conservative surgery (Monteiro-Grillo et al., 2005). Furthermore, a study reported only 55% of women who had previously undergone a mastectomy would chose the same procedure again, based on post-surgery awareness of the psychological challenges which arise due to breast alterations (Margolis et al., 1989).

Hair holds meaningful value across many cultures, reflecting beauty, gender, age, and religious affiliations, whilst being associated with personal growth and life (Batchelor, 2001; Freedman, 1994). Hair loss is also a traumatic experience and can impose detrimental and long-lasting impacts on body image, sexuality and self-concept (Batchelor, 2001; Münstedt et al., 1997). In fact, women with breast cancer often consider scalp hair loss as the most distressing appearance-altering side effect of chemotherapy treatment, followed by the loss of eyebrows and loss of eyelashes (Nozawa et al., 2013). One study found that body satisfaction which dropped during treatment, failed to improve to pre-treatment levels when the hair started to grow back (Münstedt et al., 1997). The loss of hair is often experienced more negatively than the loss of a breast, with hair considered integral in the sense of identity and its loss representing a visible reminder of the cancer, leaving the person to feel like a "cancer patient" (Browall et al., 2006; Freedman, 1994).

How can the body image of women who have had breast cancer be improved?

A number of psychosocial interventions targeting the body image of women with breast cancer have been evaluated; however current research primarily supports the use of cognitive behaviour therapy-based interventions (Baucom et al., 2009; Fadaei et al., 2011; Sebastian et al., 2008). This psychotherapeutic approach uses techniques including goal setting, cognitive restructuring, and skills training, in order to target dysfunctional thoughts, emotions and behaviours (Cash, 2011). With regards to other interventions, various physical activity-based programmes have reported an improvement in appearance dissatisfaction, through the use of yoga (Van Puymbroeck et al., 2011), strength training (Speck et al., 2010), and a combination of several activities (Mehnert et al., 2011). An education-based approach has also been found to positively affect the body image of women with breast cancer in two studies (Hsu et al., 2010; Helgeson et al., 1999). Both programmes provided information regarding the disease, the treatment and prognosis, whilst Hsu et al (2010) also included information regarding appearance changes following surgery. Psychosexual therapy is an additional method which has been found to improve the body of image of women with breast cancer (Kalaitzi et al., 2007), whilst the provision of beauty treatments has also demonstrated the potential to alleviate appearance dissatisfaction (Quintard & Lakdja, 2008).

Whilst the number of studies reporting a positive impact on the body image of women with breast cancer is promising, this area requires further study. Greater methodological rigour in the design and evaluation of psychosocial interventions is important. Of particular importance is the conduct of randomized controlled trials, well powered sample sizes and longer follow-up periods. This would increase our confidence in the findings and allow for replication and comparison of psychosocial interventions.

Key Points

- Treatment for breast cancer can bring about a number of changes to appearance, including loss of one or both breasts, hair loss, weight change, and skin and nail discolouration.
- Appearance alterations can be a cause of great distress for women with breast cancer, which can persist long beyond treatment.
- These changes to appearance can negatively impact upon body image, sexuality, feelings of femininity, identity and self-concept.
- A number of psychosocial interventions based on different approaches have been developed to target appearance concerns amongst women with breast cancer. These interventions include cognitive-behaviour therapy, physical activity, education, psychosexual therapy, and beauty treatments.

References

Arndt, V., Stegmaier, C., Ziegler, H. & Brenner, H. (2008). "Quality of Life over 5 Years in Women with Breast Cancer after Breast-Conserving Therapy versus Mastectomy: A Population-Based Study," *Journal of Cancer Research and Clinical Oncology*, 134(12), 1311 – 1318.

- Batchelor, D. (2001), Hair and cancer chemotherapy: consequences and nursing care – a literature study. *European Journal of Cancer Care*, 10, 147–163.
- Baucom, D. H., Porter, L. S., Kirby, J. S., Gremore, T. M., Wiesenthal, N., Aldridge, W., ... & Keefe, F. J. (2009). A couple-based intervention for female breast cancer. *Psycho-Oncology*, 18(3), 276-283.
- Browall, M., Gaston-Johansson, F., & Danielson, E. (2006). Postmenopausal women with breast cancer: their experiences of the chemotherapy treatment period. *Cancer Nursing*, (1) 34–42.
- Cash, T.F. (2011). Cognitive-behavioral perspective on body image. In T.F. Cash & L. Smolak (Eds.), *Body Image: A Handbook of Science, Practice and Prevention* (pp. 39-47). New York, NY: Guildford Press.
- Collins, K. K., Liu, Y., Schootman, M., Aft, R., Yan, Y., Dean, G., ... & Jeffe, D. B. (2011). Effects of breast cancer surgery and surgical side effects on body image over time. *Breast cancer research and treatment*, 126(1), 167-176.
- Fadaei, S., Janighorban, M., Mehrabi, T., Ahmadi S.A., Mokaryan, F. Gukizade, A., Mohammadi, A. (2011). Effects of cognitive behavioral counseling on body image following mastectomy. *Journal of Research in Medical Sciences*, 16(8), 1047-1054.
- Falk Dahl, C. A., Reinertsen, K. V., Nesvold, I. L., Fosså, S. D., & Dahl, A. A. (2010). A study of body image in long-term breast cancer survivors. *Cancer*, 116(15), 3549-3557.
- Fobair, P., Stewart, S., Chang, S., D'Onofrio, C., Banks, P., & Bloom, J. (2006). *Psycho-Oncology*, 15, 579-594.
- Freedman, T. (1994). Social and cultural dimensions of hair loss in women treated for breast cancer. *Cancer Nursing*, 17, 334-341.
- Helgeson, V.S., Cohen, S., Schulz, R., Yasko, J. (1999). Education and peer discussion group interventions and adjustment to breast cancer. *Arch Gen Psychiatry*, 56(4), 340-347.
- Helms, R. L., O'Hea, E. L., & Corso, M. (2008). Body image issues in women with breast cancer. *Psychology, Health and medicine*, 13(3), 313-325.
- Hsu, L.K.G., & Zimmer, B. (1988). Eating disorders in old age. *International Journal of Eating Disorders*, 7, 133-138.
- Kalaitzi, C., Papadopoulos, V. P., Michas, K., Vlasis, K., Skandalakis, P., & Filippou, D. (2007). Combined brief psychosexual intervention after mastectomy: Effects on sexuality, body image, and psychological well-being. *Journal of surgical oncology*, 96(3), 235-240.
- Kunkel, E. J., Chen, E. I., & Okunlola, T. B. (2002). Psychosocial concerns of women with breast cancer. *Primary care update for ob/gyns*, 9(4), 129-134.
- Levin, R. J. (2006). The breast/nipple/areola complex and human sexuality. *Sexual and Relationship Therapy*, 21(02), 237-249.

- Lindop, E., & Cannon, S. (2001). Evaluating the self-assessed support needs of women with breast cancer. *Journal of Advanced Nursing*, 34(6), 760-771.
- Manderson, L., & Stirling, L. (2007). The absent breast: speaking of the mastectomized body. *Fem Psychology*, 17, 75-92.
- Margolis, G. J., Goodman, R. L., Rubin, A., & Pajac, T. F. (1989). Psychological factors in the choice of treatment for breast cancer. *Psychosomatics*, 30(2), 192-197.
- Mehnert, A., Veers, S., Howaldt, D., Braumann, K.M., Koch, U., & Schulz, K.H. (2011). Effects of a physical exercise rehabilitation group program on anxiety, depression, body image, and health-related quality of life among breast cancer patients. *Onkologie*, 34(5), 248-253.
- Monteiro-Grillo, I., Marques-Vidal, P., & Jorge, M. (2005). Psychosocial effect of mastectomy versus conservative surgery in patients with early breast cancer. *Clinical & Translational Oncology*, 7, 499-503.
- Münstedt, K., Manthey, N., Sachsse, S., & Vahrson, H. (1997). Changes in self-concept and body image during alopecia induced cancer chemotherapy. *Supportive Care Cancer*, 5, 139-143.
- NHS Information Centre (2011). National mastectomy and breast reconstruction audit (2011) A national audit of provision and outcomes of mastectomy and breast reconstruction surgery for women in England Fourth Annual Report 2011.
- Nozawa, K., Shimizu, C., Kakimoto, M., Mizota, Y., Yamamoto, S., Takahashi, Y., Ito, A., & Izumi, H., & Fujiwara, Y. (2013). Quantitative assessment of appearance changes and related distress in cancer patients. *Psycho-Oncology*, 22(9), 2140-2147.
- Office for National statistics (ONS; 2013). Cancer Statistics Registrations, England (Series MB1), No. 42, 2011. London: ONS; 2013
- Office for National Statistics (ONS: 2011). Cancer survival in England: Patients diagnosed 2005-2009 and followed up to 2010. London: ONS; 2011.
- Quintard, B. & Lakdja, F. (2008). Assessing the effect of beauty treatments on psychological distress, body image, and coping: a longitudinal study of patients undergoing surgical procedures for breast cancer. *Psycho-Oncology*, 17, 1032-1038.
- Rachet, B., Maringe, C., & Nur, U. (2009). Population-based cancer survival trends in England and Wales up to 2007: an assessment of the NHS cancer plan for England. *Lancet Oncology*, 10 (4) 351-369.
- Sanitt, J.S. (2006). Breast reconstruction: a patient's story. *The Breast Cancer in Young Women*, 15(Suppl.2), S31-S33.
- Sebastián, J., Manos, D., Bueno, M. & Mateos, N. (2008). Body image and self esteem in women with breast cancer participating in psychosocial intervention program. *Psychology in Spain*, 12(1), 13-28.
- Sheppard, L. A. and Ely, S. (2008), Breast Cancer and Sexuality. *The Breast Journal*, 14, 176-181.

Speck, R.M., Gross, C.R., Hormes, J.M., Ahmed, R. L., Lytle, L. A., Hwang, W. T., & Schmitz, K.H. (2010). Changes in the Body Image and Relationship Scale following a one-year strength training trial for breast cancer survivors with or at risk for lymphedema. *Breast Cancer Research and Treatment, 121*, 421-430.

Tacon, A. M. (2011). Mindfulness: existential, loss, and grief factors in women with breast cancer. *Journal of psychosocial oncology, 29*(6), 643-656.

Van Puymbroeck, M., Schmid, A., Shinew, K. J., & Hsieh, P. C. (2011). Influence of hatha yoga on physical activity constraints, physical fitness, and body image of breast cancer survivors: a pilot study. *International journal of yoga therapy, 21*(1), 49-60.