

## Chapter 2

# Clothing and Accessories for Post Mastectomy Survivors: An Update

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## Abstract

The paper provides an update for advances and availability of apparel and accessories for post-mastectomy survivors. Clothing is an integral part of human experience that has been used for centuries to enhance appearance, to protect from environmental factors, and to seek social approval and psychological satisfaction [1]. Clothing serves as an interface between body and the external environment. Clothing and accessories can be used as power extenders to reflect achievement, fear, status, mood and lot more. Breasts represent femininity, motherhood and womanhood and their loss can impact a woman's appearance and self-esteem adversely [2]. Their removal can impact socio-emotional wholeness. Appropriate selection of apparel and accessories can help a woman to feel whole again. One must understand the optimal selection of apparel and accessories could be function of body responses to surgery, length and location of scars, and type of surgery.

## History

Historically, access and availability of appropriate clothing features for post mastectomy survivors has improved significantly since the 1980s. Initially, post-mastectomy survivors used stockings with cotton/polyester/wool fiberfill or birdseeds before prosthesis with silicone gel was developed. Use of prosthesis required bras with pocket. Ruth Handler was the first executive woman who developed a bra with pocket. Silicone-gel filled prosthesis

provided natural shape. However, single prick with pin or sharp object made it to ooze [3]. A team of researchers offered a workshop in June of 1985 and asserted that use of bras with wider straps, higher number of hook and eyes with wider placket opening, and pocket to hold prosthesis were important considerations [4]. They also recommended use of bosom buddies for night and lounge wear the idea that initially came from Pitts for her extension programing and dissemination activities. A paper reported that attractive looks, comfort, easy care, reasonable cost and well-fitted clothes were important to post-mastectomy survivors [5]. A slide set developed by the team included designs with high necklines, bosom buddies, bias cut styles, stoles to cover the affected parts, and padding of sunken areas. In mid 1980s, Jobst offered lymphedema sleeves. Using bras with front opening are recommended by some during the healing process.

Other group of researchers emphasized the importance of a well-fitted bra and prosthesis. They reported that women were not satisfied with available formals, nightwear and swimwear [6,7]. The women in their study preferred sleeveless styles rather than lower necklines. Therefore, the participating women were more concerned with the adaptation for shoulder rather than neckline treatments. They also indicated that those mastectomy survivors who were dissatisfied with their prosthesis chose to go for breast reconstruction that was not very common in late 1980s. Camp International (Now known as Bissell Healthcare) offered both hear shaped and tear

drop type prostheses. The former was good choice for the simple mastectomy and the later one for modified radical and radical surgeries [2].

## Hair Treatment

Treatment of breast cancer with chemotherapy can result in hair loss. Hair has historically been associated with pride and their loss also results in declining self-esteem. Several scholars and retailers have addressed this need [8-10]. They suggested use of bangs, hair pieces, hats, kerchiefs, scarves, shags, turbans and wigs to accommodate for variety of needs and preferences of the Postmastectomy survivors. In another study, The researchers designed a headgear for women with mastectomy who had lost their hair during chemotherapy [11]. While designing, needs of women who had hair loss were taken into consideration. Some of needs identified through the survey used for the study were accessorizing, care, coverage, feeling looking better and weight. They created three designs. For lining of all three hats, the 'aviator's cap' style was used. Another hat had possibility of using different accessories to provide different looks. The third one could be worn with different scarves to provide changing appearances. Of course, hair transplant is another possibility. However, these are expensive treatments and unless covered by insurance becomes an expensive ordeal.

In 1980s, health insurance did not cover the cost of prosthesis and cost was very high. However, the health

insurance companies now cover the cost prosthesis. The silicone-gel prostheses could also create imbalance for those women who only had one breast removed because it is heavier than the natural breast. Those women who did not like the imbalance went for breast reconstruction. It is very important that silicone gel prosthesis are placed in a cover before placing in the bra pocket to accommodate for the accidents happening for its puncturing as a result of contacting a sharp object. Jodee offers prosthesis in cover, has designs of bras with front opening, and wider straps along with camisole bra and camisole that add comfort and appearance by hiding scars and providing easy to use bras [12].

## Support Systems

Another study highlighted the importance of support system in the healing of post-mastectomy survivors [13]. Komen Foundation raises funds for breast cancer research on advocacy and care. Reach to Recovery program of the American Cancer Society provides one to one support through volunteers who have gone through similar experiences. Several Postmastectomy survivors form groups and meet periodically to support each other and discuss problems. American Cancer Society has *tlc* catalog for meeting the needs of breast cancer survivors. Another study reported that support groups are important for the socio-emotional support to postmastectomy survivors [14].

## Bosom Buddy, Breast Prosthesis and Reconstruction

In a study, 64 women used prosthesis and 31 went for breast reconstruction. Findings revealed that younger women with higher income chose to go for reconstruction rather than prosthesis. However, no difference existed between two groups for attitudes [15]. Today, breast forms are available in tear drop, triangular, asymmetrical and oval forms. They have concave back so that circulation between the breast and chest wall is allowed [14]. Another study reported that women preferred horizontal scar from surgery and wanted to have breast reconstructed to their original [16]. A team of scholars also identified three steps of breast reconstruction as breast mound, projecting nipple creation, and color areola through tattooing [17].

Scholars stressed the increased choice of breast reconstruction dramatically since 1992 [18]. The study examined trends and rates of reconstructive surgery and hypothesized that number increased between 1992-2001. Findings revealed that number of reconstructive surgeries increased fifteen times from 1992-2001. They excluded “lumpectomies and quadrantectomies” because they do not necessarily require reconstruction. They found that reconstruction was highest for women between 40-49 and reduction. “Reduction mammoplasties” were reported to peak for women between 20-29. Women from urban cit-

ies were more likely to go for breast reconstruction than those from the rural areas.

A team of scholars reported that participants were dissatisfied with comfort, movement and weight of prosthesis. Replacement decisions were impacted by cost and travel distance. Overall, prosthesis was deemed important to enhance appearance for self and others, have enhanced self-esteem and confidence, and restore sense of femininity. Need for trained fitter was also stressed. This study focused on the Ireland populace [19]. Another study completed in Ireland emphasized fitting experience and environment very important for Postmastectomy survivors [20].

The participants of another study conducted in the United States examined different types of mastectomy, different stages of cancer, various treatments and therapies, subjects 18 years or older, and demographically diverse population [22]. Different types of prostheses used were adhesive attached, custom, fiberfill, foam, lightweight silicone, standard silicone, and waterproof. Overall, all participating women were satisfied. Findings revealed that those who wore light-weight silicone were more satisfied than those who wore the standard one. Very few wore the non-silicone option and did not allow for any analysis. Therefore, they were excluded from the analysis. Comfort was the most important attribute. Durability and ease of cleaning also impacted their satisfaction. Other impor-

tant variables were weight, versatility of use, natural look, money's worth, fit, body movement and appearance. Additionally, heavy users more satisfied than light users. Participants admitted that prosthesis helped with restoration of their body image, femininity and sexuality.

In another study, the scholars emphasized that 90% of women who underwent mastectomy or lumpectomy chose to go for breast prostheses over breast reconstruction to regain their sense of wholeness [23]. They asserted that research in Canada is limited and they use information from studies conducted in United States. They also reported that their review of studies conducted in other countries revealed that women in United States who have had mastectomy for more than five years were more satisfied with external breast prostheses than those with less than five years. Postmastectomy women from Ireland reported that external breast prostheses made them feel better about themselves, enhanced their confidence and sense of femininity. However, they did ask for better fitting process and environment. So was true for Australia. They also noted that a comparison was made between traditional and self-adhesive prosthesis. Postmastectomy survivors preferred self-adhesive over the traditional one. Using preceding as the basis, scholars developed a custom-designed prosthesis. They asked same questions for both conventional and custom-designed prosthesis. Even though women participating in the study found that

custom-designed prosthesis were much improved, they found some technical issues that were not outlined in the published article. However, the scholars acknowledged that these prostheses made them feel better and whole. Further investigations were recommended. Scholars also mentioned that number of women undergoing breast reconstruction is increasing [22].

Another article focused on “re-Contour dressing” [23]. Another goal was to enhance post-mastectomy women’s look similar to pre-mastectomy times. The purpose was to enhance aesthetics of the garment and dignity and self-respect of the post-mastectomy survivor. The article focuses on breast reconstruction that includes the “rebuilding the breast mound as well as nipple and areola”. It was noted that nipple of reconstructed surgery flattens over time. With the help of a medical prosthetics professional, an invention engineer modified the design from the 3D CAD file. Dressing covers breast mound and nipple is prevented from getting pressure from the clothes. One manufacturer has agreed to bring this design to the market [23].

Even though the number of women choosing breast reconstruction is increasing, more post-mastectomy survivors choose external breast prostheses. These choices are impacted by rural/urban domicile and age of the women. Comfort, fitting and trained fitters, price, replacement cost and weight also impact their choices. These trends are similar across different countries.

## Apparel

Bosom Buddy is a good alternate for athletic wear, casual wear, lounge wear and night wear. Three bosom buddy designs are provided in *Fashion or function in dress* [12]. Contoured shaping with built-in form for swimwear is a good way to meet the special need via mainstream style. Chowdhary provided several sources to acquire apparel and accessories for Postmastectomy survivors [12,21]. Another source focuses on the need for strengthening the body image of post-mastectomy survivors after losing the most important part of their body that represented femininity and womanhood [25]. Their product lines are chic and flattering. They have seductive bras with safe and subtle aesthetically pleasing trims. They also have sports bra, swimsuits and camisoles with pockets to collect post-surgery fluid. The institute also has adhesive forms that can be used to fit for styles that are sleeveless or strappy. Most insurances cover bras (\$30-40) and breast forms (Average \$230) for the lumpectomy and mastectomy women. However, swimwear is not covered and could be between \$75-90. Stewart Institute planned a fashion show to provide visibility and support. Several online sources merchandise dress forms, prostheses, camisoles, mastectomy bras and swimwear.

## Retailing

Until the 1980s, a sales person in retail environment took a women with mastectomy looking for a bra was tak-

en in a corner and whispered quietly to ask her need. It was treated as a stigma not to be discussed openly. However, today after Betty Ford's efforts as well as enhanced awareness through Komen Access and availability are open to public. However, today several catalogs and websites also offer post-mastectomy supplies [21]. A manufacturer in Canada launched post-mastectomy bra in 2010 and called it Muse Collection after one of their customers who died of cancer [25]. It uses same materials as for the mainstream bras. They have it available in breast cancer clinics and stores near hospitals. They sought help from doctors and nurses while designing this bra. Trained associates sell this bra. The retailer planned to donate 5000 Muse bras in 2014 [26]. Another study reported that loss of body image, femininity and distortion of real body were the side effects of undergoing mastectomy and related procedures [27].

## Conclusions and Implications for Future

Post-mastectomy survivors face several socio-emotional as well as medical issues that call for optimized apparel and accessories that can provide comfort, fit and enhanced appearance and body image. Women who have gone through mastectomy feel that their motherhood, femininity, body image and appearance are threatened by this loss. Existing apparel does not fit properly. External prostheses have higher weight than natural breasts and can

cause balance issues particularly in unilateral surgeries. Breast reconstruction can be good solution to match the lost breast. However, lack of education and/or information, domicile in rural versus urban setting, and income can deter women from making this choice. A majority of the post-mastectomy survivors choose to go with external prosthesis that requires trained fitters and compassionate fitting environment. Great progress has been made to meet the needs of mastectomy survivors. However, a lot needs to be done.

Despite efforts by several agencies, scholars and manufacturers, this area of special needs is specialized and calls for individualized efforts to optimally meet the needs of each person. Socio-emotional needs cannot be separated from the physical and physiological needs. Both need to be met for making them to feel whole again. It is important to pay attention to adaptation necessary for all categories of apparel: casual, formal, lingerie, and swimwear. It is also necessary to come up with comfortable substitutes for heavy prostheses by creating contoured clothing that enhances comfort and meets functional needs.

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