

## ABSTRACT

Understanding the Body Image Issues among Cancer Patients:

Developing Intervention Strategies

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The goal of this thesis is to understand body image distress surrounding cancer patients and find ways to enhance their self-image and quality of life. Changes in cancer patients' appearance contribute to altered body image, feelings of rejection, and conditions such as anxiety and depression. In addition, patients experience shame, embarrassment, and guilt related to intense and sometimes rapid body changes. Addressing body image problems is essential to improving their quality of life. I conducted a literature review involving studies related to breast, head and neck, stomach, and skin cancer patients' body image. The primary conclusion of the thesis is that cancer patients' subjective assessments of their bodies and the effects of their treatment are more relevant than the perspectives of others. The paper advocates for health-promoting interventions such as physical activity programs that can decrease morbidity and early mortality. In addition, fashion-oriented consumption can be considered as a strategic endeavor to manage mood and reduce negative feelings due to physical changes.

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UNDERSTANDING THE BODY IMAGE ISSUES AMONG CANCER PATIENTS:  
DEVELOPING INTERVENTION STRATEGIES

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## INTRODUCTION

There are many physical changes associated with the type of cancer and its treatment. For example, chemotherapy can cause hair loss, weight loss, and discoloration of the skin. Changes in the appearance of cancer patients contribute to altered body image, create feelings of rejection and stigmatization, and exacerbate anxiety and depression. The alterations in body image occur when there is a discrepancy between the way someone formerly perceives herself or himself and how she or he now sees herself or himself because of cancer and its treatment. In addition, body image disturbance due to cancer treatment can also lead to other problems such as social and sexual issues, especially among women. Addressing these problems of cancer patients is essential to improving their qualities of life. Retail therapy suggested in multiple studies can help patients gain confidence and enhance body image. Retail therapy includes the act of browsing, purchasing, interacting with others, and any processes involved in shopping. Therapeutic shopping can, therefore, be utilized to enhance self-image and positively impact emotional well-being by providing appropriate fashion products to camouflage their perceived flaws of the body. Garments or hat designs should be considered to accommodate the self-image needs of cancer patients and alleviate the side effects of treatment such as hair loss. The goal of this thesis is to understand the body image concerns surrounding cancer patients and find ways to enhance their self-image and quality of life.

## CHAPTER 1

### Body Image Concern

#### *Oncological Procedures*

Depending on the type and location of the cancer, there can be a huge variety of treatments. There are four basic oncological procedures – surgery, chemotherapy, radiation therapy, and hormone therapy. These procedures cause changes and disturbances in the body that contribute to the patients' perceptions of body image.

The goal of surgery is to physically remove a tumor or much of the cancer as possible. Chemotherapy uses drugs to kill cancer cells, which leads to the death of normal cells of the body that are necessary for functioning as well. Radiation therapy uses high-powered energy beams, such as X-rays or protons, to kill cancer cells. Hormone therapy is often used to treat cancers such as breast and prostate cancers that are fueled by the body's own hormones. Removing or blocking these hormones can cause the cancer cells to stop growing (*Cancer Treatment*, 2020).

#### *Breast Cancer*

Regarding breast cancer specifically, surgery stands as one of the most common treatment methods. A mastectomy is a procedure in which the whole breast is removed. A bilateral mastectomy is when both breasts are removed, but this has become rarer compared to 10 to 15 years ago due to the negative impact on body image the procedure had (*What is Mastectomy*, 2020). Rosenberg, Tamimi, et al. (2013) assessed the body

image of women diagnosed with breast cancer. A higher Cancer Rehabilitation Evaluation System (CARES) score indicates greater body image concerns. The researchers found the highest mean CARES score for women that underwent mastectomies compared to other surgical procedures in which they conserved their breasts. Surgeries tend to require patients to deal with the remnants of the operation such as postoperative scars, foreign bodies like surgical drains, swelling, redness, lymphedema, and many others (Kolodziejczyk & Pawlowski, 2019). The pain and suffering caused by these side effects can lead to a deterioration in quality of life. Many body image effects of surgeries can be dependent on the severity of the disease, the skill of the surgeons, and the way the patient views asymmetry or lack of cleavage with their breasts. Women may wear bra pads or loose-fitting clothing to hide their appearances. Reconstructive surgeries afterward can also rectify some of the body image concerns, but research has shown the importance of conserving the breast, especially for women (Rosenberg, Tamimi, et al. 2013).

There can be problems with self-acceptance after breast cancer treatment, and it may result in problems relating to sexuality or intimate relationships. Boquiren et al. (2016) found that breast cancer survivors who had body image issues after treatment frequently experienced difficulties in sexual function. Vaginal dryness, body stigma, and relationship satisfaction were significant predictors of sexual functioning. Women must adapt to their new bodies and may have heightened fears of rejection, abandonment, and even disgust from their sexual partners. This can further lead to decreased frequency or avoidance of sexual activity. The sexual partner may also feel uncertain about what is medically permissible and may have fears of their own. Breast cancer patients should be



screened for body image concerns to avoid the negative effects on quality of life. After screening, treatment such as couples' therapy or renegotiations of the sexual relationship can be started (*What is Mastectomy*, 2020).

### *Stomach Cancer*

Stomach cancer is a unique form of cancer and can be severely debilitating since the cancer occurs in a central digestive organ. Early detection and timely surgery are necessary, but digestive issues may still occur post-treatment. This can be a source of physical and emotional distress for stomach cancer survivors. Some common symptoms reported by patients are fatigue, nausea, vomiting, pain, dyspnea, appetite loss, insomnia, constipation, and diarrhea (Yu et al. 2016). These symptoms can be burdensome and have a negative effect on patients' psychological adjustment even after they are disease-free. Han, Hwang, et al. (2013) found that subjects that experienced a change in body image were more depressed than those who did not suffer from this change. Depression can further lead to problems emotionally and physically.

There can also be post-treatment modifications when the cancer affects a major digestive organ that can affect daily life. Stoma surgery can be life-changing and resolve the severe and incapacitating issues associated with diseases such as Crohn's disease or Ulcerative Colitis. During the surgery, the bowel is diverted to empty into an opening (stoma) in the abdomen. The stoma allows for the attachment of a colostomy bag, which is a watertight bag that fills with urine or feces. The bag must be emptied manually and the frequency of that depends on the person. This can be a source of tension for many people since they must constantly care for the stoma by changing bags frequently and

preventing lesions and infections through proper cleaning. People may also make efforts to hide the bag to establish an illusion of normalcy. Patients worry about the perception their body may have on others. For example, a male patient refused to undergo surgery that would lead him to use a colostomy bag because he did not believe he could conceal the bag from others and worried about embarrassment (Fingeret et al. 2014). He also had concerns that his spouse may no longer find him sexually attractive.

### *Skin Cancer*

Skin cancers are the most common cancers of humans and malignancies occur most often in the cervicofacial region. Approximately 20% of melanomas and 80% of nonmelanoma skin cancer (NMSC) occur in the head and neck region. Melanoma is a common type of skin cancer that occurs in melanocytes, which are the pigment producing cells located in the epidermis or top layer of the skin. NMSC refers to any cancer that forms in the basal, squamous, or merkel cells of the skin. These cancers can cause functional and cosmetic issues for many patients. Potential physical effects of disease or treatment include corneal abrasions/erosions from incomplete eyelid closure, nasal obstruction, oral incompetence, oral microstomia, inability to use hearing aids or eyeglasses because of auricle loss, and facial nerve paralysis. Rhee, Loberiza, et al. (2003) assessed patients with cervicofacial skin cancer to determine a baseline health-related quality of life (QOL) measurement. One-third of their patients reported high levels of distress. This group of distressed individuals had low QOL scores and used maladaptive coping strategies, such as escape-avoidance coping.

Approximately 30% of all patients diagnosed with melanoma report high levels of psychological distress (Kasparian, 2013). This psychological distress, if untreated, can interfere with patients seeking medical help, adhering to treatment, and even their quality of life. Patients have chronic stress and concerns about body image since melanoma can produce significant physical changes such as visible scars. Additionally, a variety of measurable variables may be predictive of psychological distress in people with melanoma. Some examples are previous mental health problems, limited social support, younger age, female gender, lower education, and unemployment. Pereira, et al. (2016) concluded that psychological intervention should focus on offering body image and social support to patients with melanoma, short disease duration, tumors in the face, head, or neck, in an active professional status, and with lower education. Healthcare professionals should be aware of some of these variables to be more prepared for the potential stress that the individual may undergo.

### *Head and Neck Cancer*

A study conducted by Fingeret et al. (2012) on surgically treated patients with oral cavity, midface, and cutaneous cancers of the head and neck found 75% of the patients reported feeling concerned or embarrassed by bodily changes because of cancer treatments. Head and neck cancers especially cause body image issues since the face is highly visible and a socially significant part of the body. Katre et al. (2008) found that appearance was among the top three most important concerns in the head and neck cancer population.

There can be bodily changes related to speech, swallowing, eating, dry mouth, and appearance changes, which can affect a patient's quality of life. Patients with speech and eating concerns were found to be avoidant of social activities due to fear of negative evaluation from others. Appearance issues can lead to anxiety, depression, negative coping strategies, psychological distress, alcohol misuse, aggression, and may even be a factor in suicide (Rhee, Loberiza, et al. 2003). A study concerning skin cancer primarily (Pereira, et al. 2016) found that patients with tumors in the face, head, and neck reported more threatening cognitive illness representations and a worse illness understanding. This result can be applied to the head and neck cancer discussion. The researchers hypothesized that patients with lower education who have a poor understanding of the disease are likely to see the illness as more threatening in terms of consequences, duration, control, and symptoms due to the tumor localization in a visible area.

Speech and eating concerns and issues after surgery are often treated through functional rehabilitation, which can help with some functions and skills (Rhee, et al. 2003). However, it is also imperative that body image issues are treated alongside it. Body image specialists and therapists can help reduce depression and anxiety, which are often tied to social situations. Healthy coping strategies can reduce distress and help patients deal with appearance-related change.

### *Gender*

Both men and women are affected by cancer and its treatment options, which can impact body images. It is important that researchers account for gender differences in conceptualized body image. Due to more rigid cultural beauty ideologies, women in the

United States experience higher levels of body dissatisfaction than men (Franko and Strigel-Moore, 2004). Additionally, men are thought to place greater importance on physical attractiveness in their mate choice than women which can lead to women feeling less satisfied with their physical appearance and worried about any abnormalities (Perrett, 2002). As we mentioned earlier, sources of female identity such as long hair and large breasts may be removed due to cancer treatment such as chemotherapy, which can negatively affect body image. Tekkis et al. studied patients that underwent rectal cancer excision and found women reported poorer body image as well as being less sexually active than men (2009). Interestingly, physical appearance-related side effects such as scars, hair loss, and prosthetics are seen as more distressing than side effects such as fatigue, nausea, and insomnia. Women have a higher prevalence of negative body image and dissatisfaction with some of the physical outcomes of the disease or treatment (Liu et al. 2019).

However, both men and women do hold a concern for physical appearance. Facial disfigurement is a feared possibility of skin cancer treatment of the face. Both men and women express equal concern about the appearance of a scar. Scarring can have a tremendous impact on a patient's psychosocial status, causing anxiety and self-consciousness (Sobanko et al. 2015).

## CHAPTER 2

### Consequences of Cancer Treatment

#### *Hair Loss*

Hair is important to a person's identity, especially for women. It can act as a symbol of femininity or even a physical embodiment of self-expression. Cancer treatments such as Chemotherapy can weaken hair or cause hair loss, which can negatively affect body image. Alopecia is chemotherapy-induced hair loss and often is unavoidable and transient. Women may feel less feminine or attractive with hair loss leading to a negative self-image and quality of life. Women who are bald can be construed as not conforming to social norms or may attract attention from people when they are in public. The stares and judgement can be uncomfortable and embarrassing. Additionally, women often begin resenting the pitiful looks of sympathy that are directed at them as it reminds them of the sick role they hold (Lemieux, 2008). In fact, 8% of women in one study refused chemotherapy because of the expected hair loss (Tierney, 1992).

#### *Skin Disfigurement*

Skin cancer treatment such as surgery to remove tumors can leave scars that change physical appearance as well as patient's psychosocial functioning. Physical appearance can impact how a person is judged and subsequently treated by others. The

fear of appearing different than “normal” and stigmatized is strong in many skin cancer patients. Rankin and Borah (2015) had strangers observe photographs of various people and evaluate them on different scales of social functioning such as attractiveness, honesty employability, and others. People with facial abnormalities such as scars were judged as dishonest, unsuitable for employment, unintelligent, and unattractive. Additionally, medical professionals may underestimate or misinterpret a patient’s concerns for their physical appearance. Patients stated that their physicians have dismissed their scars as trivial or have not been concerned by their self-consciousness (Brown et al. 2008).

### *Weight Loss / Gain*

Both weight loss and gain are important predictors of body image concerns for cancer patients. Fobair et al. (2006) found that more than one-third of their participants of young women with breast cancer were concerned about weight gain or loss. Women with partners were more likely to be embarrassed by this change and worried more about their sexual attractiveness. Many other studies focused on weight gain exclusively since it appears to be more common amongst certain groups of patients such as younger women who begin menopause due to treatment (Howard-Anderson, 2012). Avis et al. (2004) evaluated the psychosocial problems among younger women with breast cancer and 62% of the cohort studied reported they were moderately to severely bothered by weight gain. Weight gain along with hair loss affected many women more than the mastectomies did since they saw it as more public. One woman stated, “The weight gain from the chemo and then being pushed into menopause has been a difficult body change to accept.” (Avis et al. 2004).

Overeating does not appear to be the sole reason for the weight gain observed in younger women. A study found that younger women undergoing chemotherapy had more weight gain than the control group despite the same daily calorie intake (Demark-Wahnefried, et al. 2001). The study also found that there was a significant increase in body fat percentage but not in lean body mass in women receiving chemotherapy.

### *Psychological Distress*

Twenty percent of cancer patients have depression along with 10% having anxiety compared to the general population with 5% and 7% respectively (Park, et al. 2015). Risk factors for depression in cancer patients include being a younger age, social deprivation, female gender, and having a previous mental illness. In fact, mortality rate in cancer patients with schizophrenia is 90% higher while it is 20% higher for patients with prior depression (Chang, et al. 2013). Common side effects of cancer treatment such as vomiting, hair loss, mucositis, and peripheral neuropathy can be chronic psychological stressors. There is even psychological distress present after the patient is clear of cancer and ceases treatment. For many patients, there can be rapid lifestyle change to an intense schedule of clinics, imaging, and treatment appointments. The patient may not be able to process the physical and psychological changes that occur until after the treatment ceases (Kreitler, 1999). During this time, they can also feel a sudden decrease in social support from family and friends, which lead to thoughts of abandonment. Additionally, fear of recurrence is reported by long-term breast cancer survivors and can contribute to depression and poor quality of life.



## CHAPTER 3

### Cancer Experience Based on Demographic Information

#### *Method*

Using the website “Google Scholar”, journal articles were searched for using the keywords “cancer”, “body image”, “stomach cancer”, “brain cancer”, “breast cancer”, “quality of life”, “cancer and appearance”, “cancer and body image”, and “weight. To be further considered for analysis, publications had to be peer reviewed and written or available in English as well published after 2010. Depending on the number of articles available for a particular topic, the selection of articles would be opened to those published after 2000. This literature search was supplemented by reviewing the citations of the studies previously identified. The literature table was created using the relevant articles found. The second column clarifies “the number of participants”, “Type of Cancer”, “Gender of the participants”, and “Age of the Participants” of each study. The search method is replicated from the study “Chemotherapy-induced alopecia and effects on quality of life among women with breast cancer: a literature review” (Lemieux et al. 2007).

Table 1: Qualitative Studies related to Body Image and Cancer

Study (author, year of publication)	(a) Total number of patients (b) Cancer Type (c) Gender (d) Age (years)	Objective(s)	Results relevant to body image
Avis et al. 2004	(a) 204 (b) Breast cancer (c) Female (d) 25 to 50 years	Describe the problem areas and symptoms reported by younger women with breast cancer	-Type of surgery impacts body image and that chemotherapy affects sexual functioning -These problems are of particular concern to younger women.
Boquiren et al. 2016	(a) 127 (b) Breast Cancer (c) Female (d) $49.0 \pm 7.9$	Examine the sexual functioning of breast cancer survivors who had body image issues after treatment and were engaged in sexual activity	-Breast Cancer survivors who had body image issues after treatment frequently experienced difficulties in sexual function. Vaginal dryness, body stigma, and relationship satisfaction were significant predictors of sexual functioning.
Brown et al. 2008	(a) 34 (b) NA (scar patients) (c) Males and Females (d) 14 to 70 years	Explore the influence of skin scars on patients' quality of life (QoL) and identify potential implications for clinical practice	- Patients stated that their physicians have dismissed their scars as trivial or have not been concerned by their self-consciousness -There should be support services available for scar patients to reduce patient distress
Brown et al. 2010	(a) 82 (b) NA (scar patients)	Assess the effects of objective and	-A patient's own subjective assessment

	(c) Males and Females (d) $34 \pm 15$ (16–65) years	patient-rated scar severity, scar type and location on psychosocial distress.	of the scar visibility and severity is the primary influence on a patient's psychosocial morbidity
Falk Dahl et al. 2010	(a) 248 (b) Breast Cancer (c) Female (d) $50.2 \pm 7.9$	Examine body image in breast cancer survivors in cross-sectional and longitudinal studies	-Body image dissatisfaction associated with breast cancer survivors varies depending on the types of surgeries and radiotherapy. It is associated with mental distress, reduced health, and reduced quality of life.
Fingeret, Yuan et al. 2012	(a) 280 (b) Head and neck cancer (c) Males and Females (63.9% male) (d) $59.91 \pm 15.11$ years	Describe body image concerns for surgically treated patients with head and neck cancer	-75% of the patients reported feeling concerned or embarrassed by bodily changes because of cancer treatments
Fobair et al. 2006	(a) 549 (b) Breast Cancer (c) Female (d) 22 to 50	Determine the frequency of body image and sexual problems in the first months after treatment among women diagnosed with breast cancer at age 50 or younger.	-Difficulties related to sexuality and sexual functioning were associated with mastectomy, hair loss from chemotherapy, concern with weight gain or loss, poorer mental health, and other body image problems.
Han et al. 2013	(a) 391 (b) Stomach Cancer (c) Males and Females (d) $54.5 \pm 10.6$ years	Determine the prevalence of depression in disease-free stomach cancer patients	-Forty-four percent of survivors suffered from depression, and more women (49%) than men (42%) had high depression scores. Self-esteem and perceived emotional support

			were closely related to depression.
Jun et al. 2011	(a) 60 (b) Breast cancer (c) Female (d) 30 to 59	Examine the effect of a sexual life reframing program on marital intimacy, body image, and sexual function among breast cancer survivors	-The sexual life reframing program improved the quality of sexual life and satisfaction.
Kendall et al. 2005	(a) 374 (b) Breast cancer (c) Female (d) 39 to 57 years	Explore the potential effects on current QOL that exercise activity prior to diagnosis and during the follow-up interval might have	-Greater than half of the participants of the study were either exercising consistently or increased the level of physical activity level from before to after (mean of 2 and 9 years) diagnosis
Kose et al. 2016	(a) 200 (b) NA; elective cranial surgery (c) Males and Females (62% Male) (d) 20 to 60	Determine the effects that different shaving techniques have on body image and surgical site infection in elective cranial surgery.	-No difference in surgical site infection between strip shaving and regional shaving. However, there was a decrease in patients' body image with regional shaving.
Pendley et al. 1997	(a) 21 (b) Various cancer types (c) Males and Females (12 males) (d) 11 to 21	Determine body image and social adjustment in adolescents who completed cancer treatment	-Within the cancer group, adolescents who has been off treatment for longer reported lower self-worth, more social anxiety, and more negative body image perceptions. Therefore, this finding suggests that body image and social anxiety may not develop until several after the completion of cancer treatment.
Pereira, 2016	(a) 106	Analyze the relationships	-Psychological intervention should

	<p>(b) Skin cancer (melanoma and carcinoma)</p> <p>(c) Males and Females</p> <p>(d) <math>58.8 \pm 13.2</math></p>	<p>between illness representations, psychological morbidity, family stress, and quality of life and whether these variables were mediated by body image and social support</p>	<p>focus on body image and social support, particularly in patients with melanoma, less disease duration, tumors in the face, head or neck, in an active professional status, and with lower education.</p>
Przedziecki et al. 2013	<p>(a) 279</p> <p>(b) Breast Cancer</p> <p>(c) Female</p> <p>(d) 23 to 73</p>	<p>Determine if self-compassion mediates the relationship between body image and distress.</p>	<p>-Higher levels of self-compassion can serve as a protecting effect against body image disturbance.</p>
Rankin et al. 2003	<p>(a) 210</p> <p>(b) NA (facial scars)</p> <p>(c) Males and Females</p> <p>(d) NA</p>	<p>Establish a large, sample-based evaluation of the perceived social functioning, interpersonal characteristics, and employability indices for a range of facial appearances (normal and abnormal).</p>	<p>-Facial deformities have a significant negative effect on perceptions of social functionality, including employability, honesty, and trustworthiness</p>
Rhee, Loberiza, et al. 2003	<p>(a) 121</p> <p>(b) Nonmelanoma cervicofacial skin cancer (NMSC)</p> <p>(c) Males and Females (46% Male)</p> <p>(d) 19 to 90 years</p>	<p>Determine the baseline quality of life (QOL) of patients with cervicofacial NMSC before surgical intervention</p>	<p>-Approximately one-third of the patients were found to report high levels of distress. This subgroup of "distressed" individuals reported poorer QOL and used maladaptive coping strategies, such as escape-avoidance coping</p>
Rosenberg, Tamimi, 2013	<p>(a) 419</p> <p>(b) Breast cancer</p> <p>(c) Female</p>	<p>Assess body image concerns among young women after</p>	<p>highest mean CARES score for women that underwent</p>

	(d) 17 to 40 years	breast cancer diagnosis using the psycho-social scale of the Cancer Rehabilitation Evaluation System (CARES)	mastectomies compared to other surgical procedures in which they conserved their breasts
Trusson et al. 2017	(a) 24 (b) Breast cancer (c) Female (d) 42 to 80	Use a sociological perspective to explore women's experiences of hair loss resulting from breast cancer treatment.	-Hair is important to identity, which is why there is a body image issue with the loss of hair associated with cancer treatment. Women may choose to disguise their hair loss with wigs, scarves, or hats.
Turk et al. 2018	(a) 57 (b) Breast cancer (c) Female (d) 28 to 78	Examine the quality of life and body image levels of breast cancer survivors after a mastectomy	-Mastectomy has a negative impact on body image and quality life in breast cancer survivors. There was also a strong positive correlation between body image and quality of life.
Yu et al. 2016	(a) 254 (b) Gastric cancer (c) Males and Females (d) 54.9±10.7	Evaluate the chronological changes in QoL after a gastrectomy over a 5-year postoperative period in a large group of patients	- Digestive issues may still occur post-treatment. This can be a source of physical and emotional distress for stomach cancer survivors. -Management of gastrointestinal symptoms should be specifically targeted as a part of long-term patient care after a gastrectomy

### *Results from Table*

A patient's own subjective assessment of their body and the effects of the cancer treatment are more relevant than the perspectives of others. Visibility and location of scars can influence body image concerns. Rankin et al. (2003), Brown et al. (2008), and Brown et al. (2010) showed that facial scars and deformities can cause patients to feel subconscious and worried about judgement from others. When physicians or family members dismiss scars as trivial, it can cause people to avoid the topic and foster negative thoughts of their own body.

Body image issues can lead to difficulty in relationships as well as issues with sexual functioning. Fobair et al. (2006), Boquiren et al. (2016), and Jun et al. (2011) demonstrated the issues of sexuality and sexual functioning that can occur such as weight gain, decreased sexual drive, vaginal dryness, and anxiety. These can lead to problems in relationships and decreased intimacy.

Patients feel embarrassed and subconscious about the change their body undergo and can develop mental health issues such as anxiety and depression. Han et al. (2013), Rhee, et al. (2003), and Przewdziecki et al. (2013) showed that patients can have significant distress due to their cancer treatment and body image issues. It can be associated with mental distress, reduced health, and reduced quality of life. Patients with difficulties adjusting to body image changes may avoid social situations to minimize shame, embarrassment, or guilt (Fingeret et al. 2012; Falk Dahl et al. 2010). This can further lead to emotional distress as well as relationship problems that harm the patient's daily functioning.

## CHAPTER 4

### Enhancing quality of life for cancer patients

#### *Exercise*

Two studies, Demark-Wahnefried et al. (2001) and Kutynec et al. (1999) found either a decreased or constant amount of physical activity during treatment could be a likely contributor of weight gain. Other longer studies have shown that after treatment, participants have increased the level of physical activity level from before (Kendall et al. 2005). Greater than half of the participants of the study were either exercising consistently or increased the level of physical activity level from before to after (mean of 2 and 9 years) diagnosis. Many times, the weight gain bothers women and inspires them to begin an exercise regimen to take extra effort into their appearance (Avis et al. 2004). A greater amount of physical activity prevents additional weight gain and is associated with a greater QOL.

An expert panel of the International Agency for Research on Cancer of the World Health Organization estimated a 20% to 40% decrease in the risk of developing breast cancer among the most physically active women, regardless of menopausal status, type, or intensity of the cancer (Bianchini, 2002). Along with a protective effect, physical activity after a breast cancer can reduce the risk of death from the disease. Holmes et al. (2005) found that women that walked with 3 to 5 hours per week at an average pace improved their breast cancer survival the most.



### *Hair Loss Coping Strategies*

Physicians and healthcare professionals have influence on the body image of their patients. Changing certain shaving techniques or medications to avoid drastic hair loss can reduce body image dissatisfaction. For example, Kose et al. (2016) found no difference in surgical site infection between strip shaving and regional shaving for patients undergoing elective cranial surgery. However, there was a decrease in patients' body image with regional shaving (Kose et al. 2016). There are also ways to rectify body image disturbances and increase confidence in patients. Trusson et al. (2017) demonstrated that women undergoing breast cancer treatment may choose to disguise their hair loss with wigs, scarves, or hats. These fashion items can protect women from public scrutiny and allow someone to leave the sick role behind them. This can be empowering for the women but also may be a way to “conceal the cancer identity out of consideration for the other people’s feelings” (Trusson, et al. 2017). Cancer patients who wear wigs tend to find one that looks like their actual hair in order to maintain their appearances, but many also use the wigs as a time to experiment. The wigs can help patients create a new persona, have fun, or re-invent themselves. However, there are also some drawbacks to wigs – they are expensive, uncomfortable, and require a lot of readjustments throughout the day.

Additionally, a treatment that is used predominantly in Europe to prevent or reduce the degree of alopecia is scalp cooling. The effects of scalp cooling are vasoconstriction with reduced delivery of chemotherapy to the scalp, reduced cellular drug uptake, and decreased follicular metabolic rate. Rugo et al. (2017) evaluated

whether the scalp cooling would reduce the amount of hair loss among women receiving chemotherapy for early-stage breast cancer. They found that the scalp cooling was associated with less hair loss at 4 weeks after the last dose of chemotherapy.

#### *Retail Therapy:*

Retail Therapy (RT) is a prevalent consumer behavior practiced by many as a strategic endeavor to manage mood, particularly to reduce negative feelings by purchasing self-treats (Atalay & Meloy, 2011). This could be used to elevate negative moods, decrease body shame, and provide positive mood reinforcement. Avis et al. (2004) evaluated the psychosocial problems among younger women with breast cancer and 62% of the cohort studied reported they were moderately to severely bothered by weight gain. This can be due to hormonal factors, chemotherapy, or even induced menopause. In past studies, women with greater body dissatisfaction and disordered eating behaviors are more likely to engage in clothing-related appearance-management behaviors. (Gilbert, et al. 2004; Kacen and Friese, 1999), This includes the use of clothing for camouflage purposes, such as avoiding brightly colored or tight-fitting clothing (Trautmann, Worthy, and Lokken, 2007). Therefore, retail therapy could offer cancer patients ways to mitigate feelings of shame using clothing.

Additionally, clothing can be used as a coping strategy. In a study conducted on the major stressors experienced by children diagnosed with cancer, a child cited “wearing a baseball cap, which is like a comfort cap” (McCaffrey, 2006, Page 63) as a coping mechanism. Shopping for hats, scarves, and wigs to camouflage hair loss and other

symptoms may be beneficial to reducing body image concerns. Kwon and Parham (1994) explored the impact of feelings of fatness on clothing practices. They found that when women feel overweight, they tend to use clothing for comfort and camouflage. When women think they are fit, they use clothing to express their individuality, to gain confidence, and to look fashionable. Therefore, shopping could benefit cancer patients who have undergone weight loss and gain, which are common symptoms.

## CHAPTER 5

### Discussion and Conclusion

#### *Discussion*

Physical appearance has an influential social role that impacts almost all aspects of human life including interpersonal relationships, sense of well-being, employment opportunities, mental health, and judgement of others. When a person feels that their physical appearance has deteriorated or changed drastically, they can become self-conscious, and their body image can decrease. Cancer patients who have undergone treatment may have sudden changes that occur such as scarring, hair loss, weight loss, or even removal of a body part. These disfigurements may lead to a diminished ability to cope with the cancer or social interactions. Therefore, it is necessary for healthcare professionals to find options that account for this loss of a sense of well-being.

The speed at which the body image change occurred can influence psychological adjustment. For example, a patient who experienced gradual loss of hair over a long period of time may be more accepting than someone who had a sudden loss due to surgery. Therefore, cancer centers should have professionals that can intervene and evaluate patients with psychosocial adjustment issues. Proper protocols can ensure that certain types of cancers are given more attention and body image assessment tools are utilized (Pruzinsky, 2004).

It is interesting to see that exercise emerged as a way to increase one's perceived body image. Physical activity can reduce extra weight gain, combat aspects of depression, and increase quality of life in patients (Bianchini, 2002; Holmes et al. 2005).

Health promoting interventions such as physical activity and exercise programs can decrease morbidity and early mortality (Scartoni et al. 2020); therefore, it is an approach that should be explored and possibly suggested to cancer patients. In fact, some studies suggest that regular physical activity can be effective in the primary and secondary prevention of chronic diseases such as cancer (Haskell et al. 2007; Warburton et al. 2006).

When discussing physical appearance, it is important that physicians remain sympathetic to their patients' concerns. With skin cancer, specifically, determining the degree of psychosocial distress through an objective determination of the severity or size of a scar can be inaccurate. A patient's own subjective assessment of the scar visibility and severity is the primary influence on a patient's psychosocial morbidity (Brown et al. 2010). A minimal scar for a physician may be a source of anxiety and self-consciousness for a patient. Therefore, it is important for physicians to demonstrate empathy and listen to their patients' concerns without judgement.

With proper knowledge and training, physicians should start screening for psychosocial distress such as body image dissatisfaction, anxiety, or depression in patients with cancer such as skin cancer. Those with skin cancer can have significant facial deformities due to surgeries to remove tumors. Studies have shown that skin cancer patients with the highest risk for anxiety are young, female, and have tumors on visible locations (Caddick et al. 2012). Knowing these characteristics can enable a physician to address the psychosocial status of their patient or start a referral to mental health care professional. Skin cancer patients with high psychosocial distress to their appearance can be offered support services such as self-help handouts, support organizations, therapy,

and understanding loved ones to help cope with the effects of treatment and recovery (Caddick et al. 2012).

Researchers Yu et al. (2016), Han, Hwang, et al. (2013), and Fingeret et al. (2014) showed that cancers that affect digestive organs can be debilitating and cause patients to suffer from poor quality of life from the disease itself as well as the consequences of surgery or treatment. Some common symptoms reported by patients are fatigue, nausea, vomiting, pain, dyspnea, appetite loss, insomnia, constipation, and diarrhea, which put a burden on the psychosocial aspects of a patient's life. The studies showed that proper nutritional care will improve food intake, resulting in weight gain and improved physical functioning, role functioning, and body image. Additionally, counseling and support groups can help patients adjust to their new lives as well as maintain social activity.

### *Conclusion*

Physical and emotional distress can occur in cancer patients before, during, and even after treatment. This body image disturbance can contribute to feelings of rejection, anxiety, and insecurity. Health promoting interventions such as physical activity and exercise programs can decrease morbidity and early mortality; therefore, it is an approach that should be explored and possibly suggested to cancer patients. Additionally, Retail Therapy (RT) is another behavior practiced by many as a strategic endeavor to manage mood, particularly to reduce negative feelings by purchasing self-treats. This could be used to elevate negative moods, decrease body shame, and positive mood reinforcement.

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