

CHAPTER 3
PHYSICAL AND PSYCHOSOCIAL
IMPACT OF BREAST CANCER AND
ITS TREATMENT



CHAPTER 3 PHYSICAL AND PSYCHOSOCIAL IMPACT OF BREAST CANCER AND ITS TREATMENT

I. Introduction

3.1 Being diagnosed with breast cancer can be overwhelming for a woman. During treatment or recovery, women often experience emotional turmoil as a result of physical, psychological and social changes. This chapter analyses the physical

and psychosocial impact of breast cancer and its treatment on the 14,814 patients in the cohort. The mean time at which the patients did the survey was two years after initial cancer diagnosis.

Key findings

Physical impact of treatments

- ▶ Overall, slightly more than two-thirds (70.2%) of the patients who had surgery experienced no or minimal physical discomfort, while a small proportion (9.2%) experienced severe discomfort. Wound pain (16.8%) was the most common form of discomfort after surgery.
- ▶ Two-thirds (67.6%) of the patients who had radiotherapy experienced no or minimal discomfort. Dry skin (13.3%) and skin burns (10.4%) were the most common forms of discomfort the patients experienced after radiotherapy.
- ▶ Half (50.7%) of the patients who had chemotherapy experienced severe physical discomfort due to side effects. Vomiting (18.4%) and loss of appetite (15.3%) were the most common forms of discomfort experienced during or after chemotherapy.
- ▶ Four-fifths (80.6%) of the patients who had undergone endocrine therapy experienced no or minimal discomfort. Hot flushes (13.4%) was the most common form of discomfort experienced after endocrine therapy.
- ▶ The majority (83.1%) of the patients who had undergone anti-HER2 targeted therapy experienced no or minimal discomfort. Fatigue (5.3%) was the most common form of discomfort experienced after anti-HER2 targeted therapy.
- ▶ Nearly all (96.4%) the patients who received complementary and alternative therapies felt no or minimal discomfort.

Psychosocial impact and adjustments after diagnosis and treatment

- ▶ At diagnosis, 46.1% of the patients accepted their diagnosis with a calm or positive attitude. In contrast, 22.9% of the cohort could not accept their diagnosis.
- ▶ After treatment, about one-third (31.8%) of the patients felt that cancer was an alarm that caught them by surprise.
- ▶ About half (51.4%) of the patients reported having a positive change in their outlook on life and about two-fifths (41.4%) reported having a positive change in their self-image after cancer diagnosis and its treatment.
- ▶ Of the 14,814 patients in the cohort, 79.1% reported having changes in their lifestyle after diagnosis with breast cancer. A change in diet (75.4%) was the most common lifestyle change, followed by increased exercise (62.4%). In addition, 11.9% of the patients resigned from their jobs.
- ▶ In the patient cohort, the two most common ways of managing negative emotions were direct verbal expression (54.1%) and diverting attention from the negative emotions (31.9%).
- ▶ In the patient cohort, about a quarter (26.0%) of the patients did not worry about recurrence, while slightly more than half (54.9%) always or sometimes worried about recurrence. The proportion of patients who never worried about recurrence increased with increasing age, while the proportion of patients who always worried about recurrence decreased with increasing age.

II. Physical discomfort after treatment

A. Physical discomfort after surgery

3.2 Overall, slightly more than two-thirds (70.2%) of the patients who had surgery experienced no or minimal physical discomfort, while a small proportion (9.2%) experienced severe discomfort (Figure 3.1). In terms of level of discomfort by type of surgery, the proportion of the patients who reported severe physical discomfort was highest (13.7%) among those patients who had undergone both mastectomy and reconstruction (Figure 3.2). In addition, wound pain (16.8%) was the most common form of discomfort after surgery (Table 3.1).

Figure 3.1: Level of physical discomfort after surgery (N=14,681)

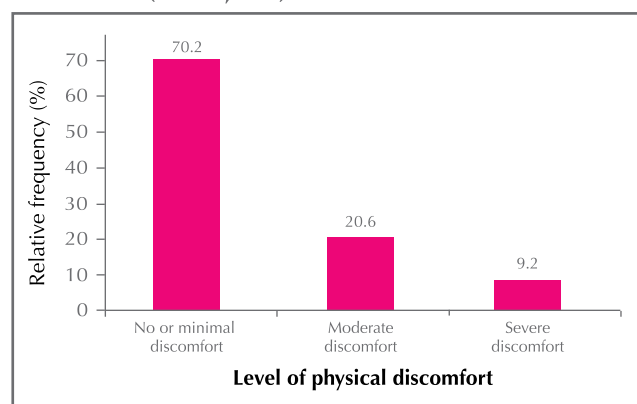


Figure 3.2: Level of physical discomfort by type of surgery (N=14,646)

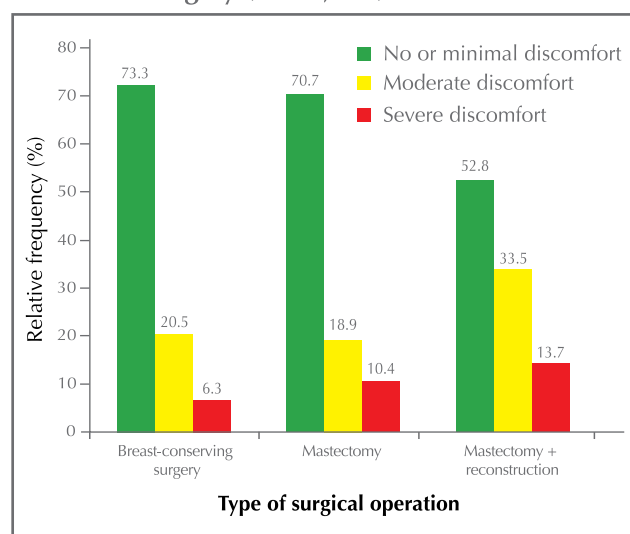
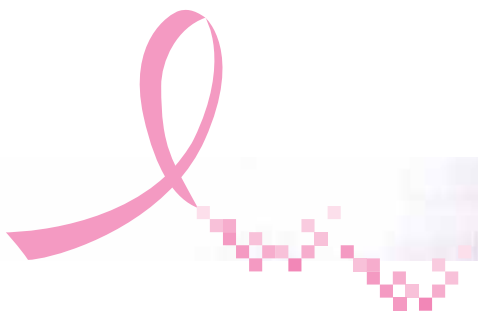


Table 3.1: Five most common forms of discomfort after surgery (N=14,681)

	Number	(%)
Wound pain	2,466	(16.8)
Wound problems (infection / inflammation / tightness / poor wound healing)	950	(6.5)
Difficulty in arm movement	807	(5.5)
Numbness	543	(3.7)
Lymphoedema	396	(2.7)



B. Physical discomfort after radiotherapy

3.3 Two-thirds (67.6%) of the patients who had radiotherapy experienced no or minimal discomfort (Figure 3.3). A higher proportion of patients who had undergone chest wall irradiation reported having severe discomfort than those who had undergone breast irradiation, regardless of whether or not they had regional lymph nodes irradiation (Figure 3.4). In addition, dry skin (13.3%) and skin burns (10.4%) were the most common forms of discomfort the patients experienced after radiotherapy (Table 3.2).

Figure 3.3: Level of physical discomfort after radiotherapy (N=8,769)

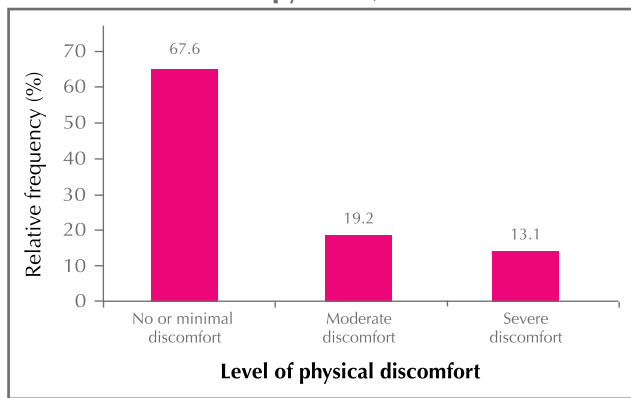
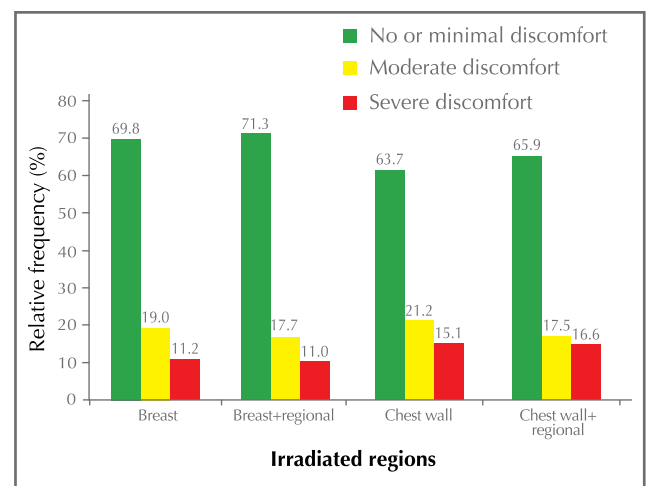


Table 3.2: Five most common forms of discomfort after radiotherapy (N=8,769)

	Number	(%)
Dry skin	1,166	(13.3)
Skin burns	912	(10.4)
Pain	526	(6.0)
Fatigue	298	(3.4)
Skin ulceration	236	(2.7)

Figure 3.4: Level of physical discomfort after radiotherapy by irradiated regions (N=5,998)



C. Physical discomfort after chemotherapy

3.4 Half (50.7%) of the patients who had chemotherapy experienced severe physical discomfort due to side effects (Figure 3.5). Vomiting (18.4%) and loss of appetite (15.3%) were the most common forms of discomfort experienced during or after chemotherapy in the patient cohort (Table 3.3).

Figure 3.5: Level of physical discomfort after chemotherapy (N=8,954)

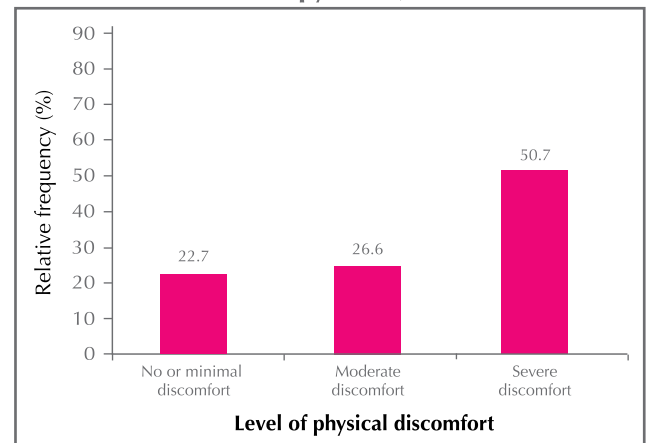
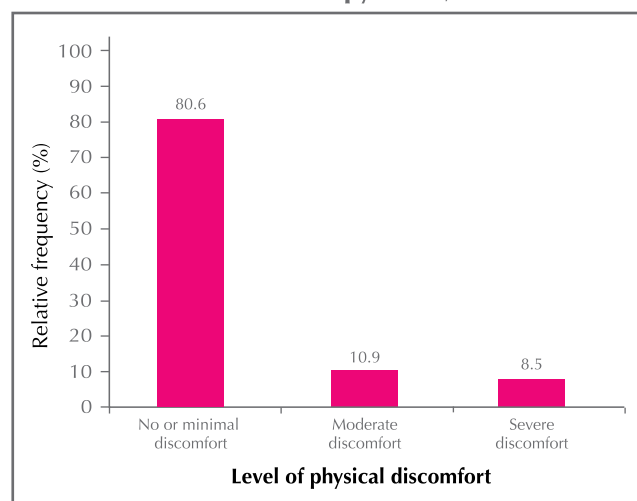


Table 3.3: Five most common forms of discomfort after chemotherapy (N=8,954)

	Number	(%)
Vomiting	1,648	(18.4)
Loss of appetite	1,370	(15.3)
Hair loss	1,048	(11.7)
Weakness	895	(10.0)
Nausea	555	(6.2)

D. Physical discomfort after endocrine therapy

3.5 Four-fifths (80.6%) of the patients who had undergone endocrine therapy experienced no or minimal discomfort (Figure 3.6). Hot flushes (13.4%) was the most common form of discomfort experienced after endocrine therapy in the patient cohort (Table 3.4).

Figure 3.6: Level of physical discomfort after endocrine therapy (N=9,452)**Table 3.4 : Five most common forms of discomfort after endocrine therapy (N=9,452)**

	Number	(%)
Hot flushes	1,267	(13.4)
Bone pain	652	(6.9)
Tiredness	539	(5.7)
Menstrual Disorder	406	(4.3)
Emotionally unstable	217	(2.3)

E. Physical discomfort after anti-HER2 targeted therapy

3.6 The majority (83.1%) of the patients who had undergone anti-HER2 targeted therapy experienced no or minimal discomfort (Figure 3.7). Fatigue (5.3%) was the most common form of discomfort experienced after anti-HER2 targeted therapy in the patient cohort (Table 3.5).

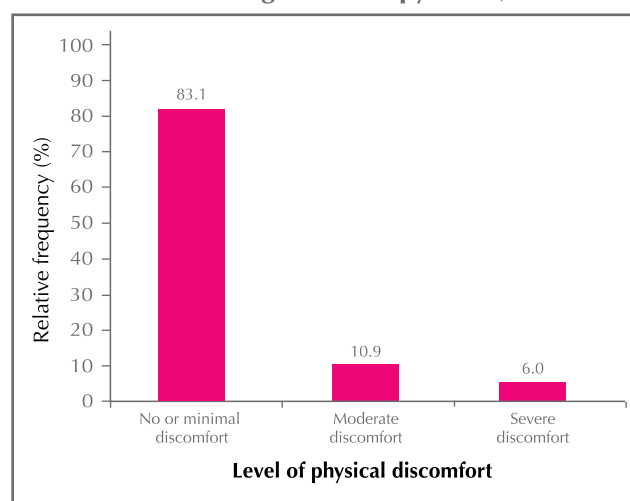
Figure 3.7: Level of physical discomfort after anti-HER2 targeted therapy (N=1,810)

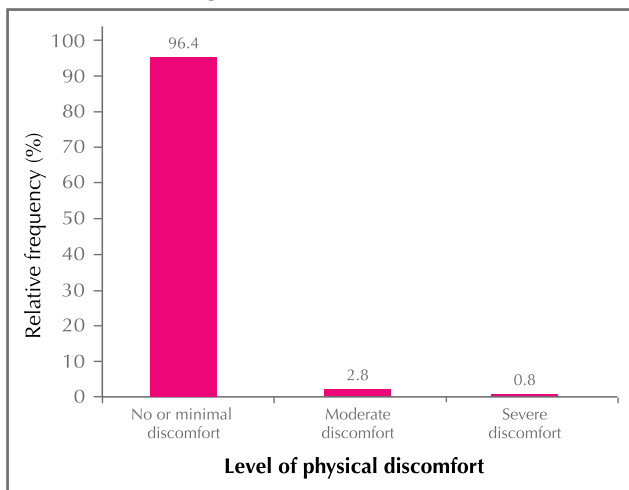
Table 3.5: Five most common forms of discomfort after anti-HER2 targeted therapy (N=1,810)

Discomfort	Number	(%)
Fatigue	96	(5.3)
Other organs affected	43	(2.4)
Pain	42	(2.3)
Numbness	22	(1.2)
Dizziness	18	(1.0)

F. Physical discomfort after complementary and alternative therapies

3.7 Nearly all (96.4%) the patients who received complementary and alternative therapies felt no or minimal discomfort (Figure 3.8).

Figure 3.8: Level of physical discomfort after complementary and alternative therapies (N=6,378)



III. Psychosocial impact and adjustments after diagnosis and treatment

A. Psychosocial impact after diagnosis and treatment

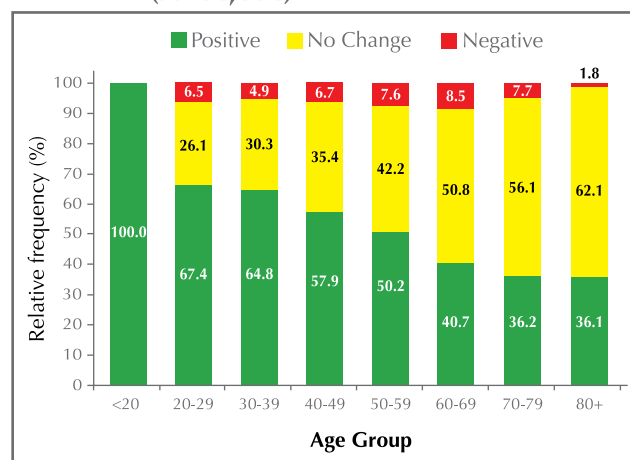
3.8 At diagnosis, 46.1% of the patients accepted their diagnosis with a calm or positive attitude. In contrast, 22.9% of the cohort could not accept their diagnosis (Table 3.6). After treatment, about one-third (31.8%) of the patients felt that cancer was an alarm that caught them by surprise. About half (51.4%) of the patients reported having a positive change in their outlook on life and about two-fifths (41.4%) reported having a positive change in their self-image after cancer diagnosis and its treatment (Table 3.6).

Table 3.6: Psychosocial impact of breast cancer

	Number	(%)
Feelings at time of breast cancer diagnosis (N=14,410)		
Acceptance and positive attitude to fight	3,041	(21.1)
Calm acceptance	3,608	(25.0)
Acceptance with depression	4,197	(29.1)
Lack of acceptance ("It cannot be true.")	3,305	(22.9)
Acceptance with anger ("Something must be wrong.")	259	(1.8)
Feelings after breast cancer treatments (N=10,404)		
Cancer was an alarm that caught patient by surprise	3,307	(31.8)
Life was not fair	2,913	(28.0)
Cancer changed patient's value system	3,503	(33.7)
Cancer took away something from patient	681	(6.5)
Change in outlook on life (N=14,477)		
Positive	7,435	(51.4)
Negative	1,043	(7.2)
No change	5,999	(41.4)
Change in self-image (N=14,470)		
Positive	5,997	(41.4)
Negative	1,354	(9.4)
No change	7,119	(49.2)

3.9 In the patient cohort, positive change in outlook on life was negatively associated with increasing age. Higher proportions of patients in the age groups 50 to 59, 60 to 69, and 70 to 79 reported having a negative change in their outlook on life (Figure 3.9).

3.10 In the patient cohort, positive change in self-image was reported by around 40% of the patients aged 20 to 59, where a higher proportion of patients in the age group 20 to 29 reported having negative change in self-image (Figure 3.10).

Figure 3.9: Change in outlook on life by age group (N=14,114)

*Only 1 patient belonged to the <20 age group.

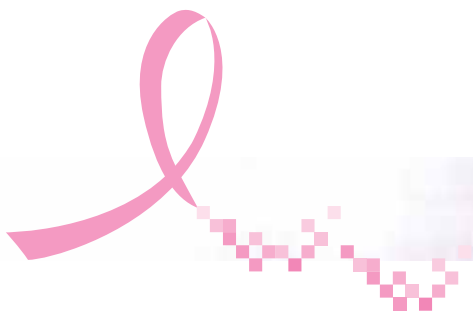
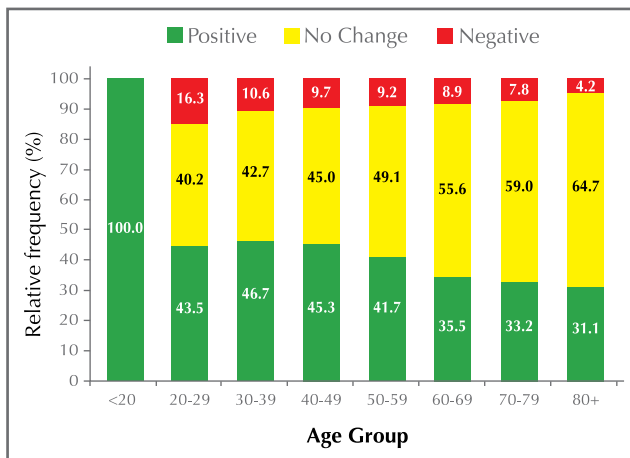


Figure 3.10: Change in self-image by age group (N=14,114)



*Only 1 patient belonged to the <20 age group.

B. Psychosocial adjustments and coping strategies

3.11 Of the 14,814 patients in the cohort, 79.1% reported having changes in their lifestyle after diagnosis with breast cancer. A change in diet (75.4%) was the most common lifestyle change, followed by increased exercise (62.4%). In addition, 11.9% of the patients resigned from their jobs (Table 3.7).

3.12 In the patient cohort, the two most common ways of managing negative emotions were direct verbal expression (54.1%) and diverting their attention away from negative emotions (31.9%) (Table 3.7).

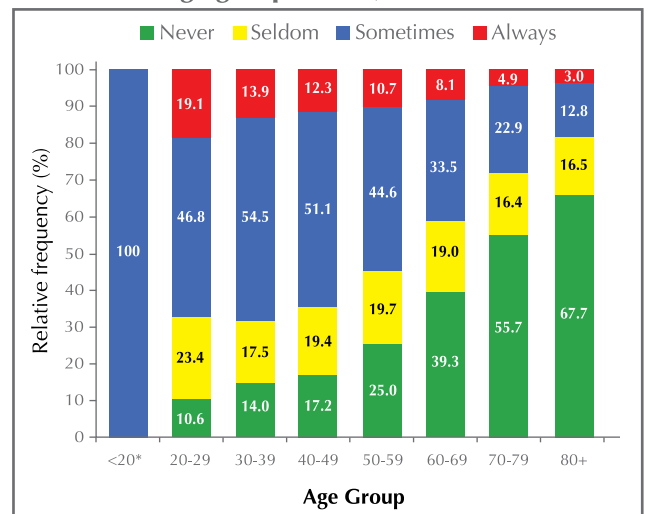
C. Level of worry about recurrence

3.13 In the cohort, about a quarter (26.0%) of the patients did not worry about recurrence, while slightly more than half (54.9%) always or sometimes worried about recurrence (Table 3.7). The level of worry about recurrence showed correlation with the patients' age: the proportion of patients who never worried about recurrence increased with increasing age, while the proportion of patients who always worried about recurrence decreased with increasing age (Figure 3.11).

Table 3.7: Psychosocial adjustments and coping strategies for survivorship

	Number	(%)
Types of lifestyle changes (N=11,714)		
Changing diet	8,827	(75.4)
Doing more exercise	7,314	(62.4)
Taking health supplements	2,597	(22.2)
Reducing workload	2,223	(19.0)
Quitting job	1,393	(11.9)
Ways of managing negative emotions (N=14,814)		
Direct verbal expression	8,011	(54.1)
Divert attention from them	4,728	(31.9)
Ignoring them	1,583	(10.7)
Feeling depressed	1,008	(6.8)
Others	1,555	(10.5)
Levels of worry about recurrence (N=14,503)		
Never	3,777	(26.0)
Seldom	2,761	(19.0)
Sometimes	6,411	(44.2)
Always	1,554	(10.7)

Figure 3.11: Level of worry about recurrence by age group (N=14,150)



*Only 1 patient belonged to the <20 age group.