



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

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This chapter studies the physical, psychological and social impact of breast cancer, its diagnosis and its treatment, on patients.

Key findings

Physical Impact

- ▶ 56.1% of patients reported severe discomfort after chemotherapy, with vomiting, loss of appetite and hair loss as the most common forms of discomfort.
- ▶ 45% found surgery to have minimal discomfort with wound pain being the most common form of discomfort. 48.9% of patients reported minimal discomfort after having breast conserving surgery, and 44.2% reported minimal discomfort after having mastectomy.
- ▶ 38.1% of patients complained of moderate discomfort after mastectomy and reconstruction, while 34.7% had minimal discomfort.
- ▶ 51.4% of patients reported minimal discomfort after radiotherapy with dry skin and skin burns being the most common form of discomfort.
- ▶ 48% of patients reported minimal discomfort after endocrine therapy, with hot flushes as the most common form of discomfort.
- ▶ 39.6% of patients reported minimal discomfort after targeted therapy with fatigue as the most common complaint.
- ▶ 32.4% of patients reported minimal discomfort after complementary and alternative therapies.

Psychological/Social Impact

- ▶ 34.1% of patients felt depression but accepted their diagnosis.
- ▶ 53.3% of patients felt life was not fair.
- ▶ 60.5% changed their outlook on life. Women of ages 50-79 had the highest frequency of negative change in outlook towards life.
- ▶ 41.3% of patients had positive change in self-image. Women of younger age groups had higher frequency of negative change in self-image.
- ▶ 81.5% reported lifestyle changes after diagnosis. The most common change being diet (73.7%) and increased exercise (61.6%).
- ▶ 60.6% of patients sometimes or always worried about recurrence.

3.1 Physical discomfort after treatment

7,990 patients participated in the survey to study physical discomfort after treatment, psychological impact after diagnosis, treatment and psychosocial adjustment.

3.1.1 Physical discomfort after surgery

45% of patients experienced minimal discomfort after surgery while 26.2% had moderate discomfort (Figure 3.1).

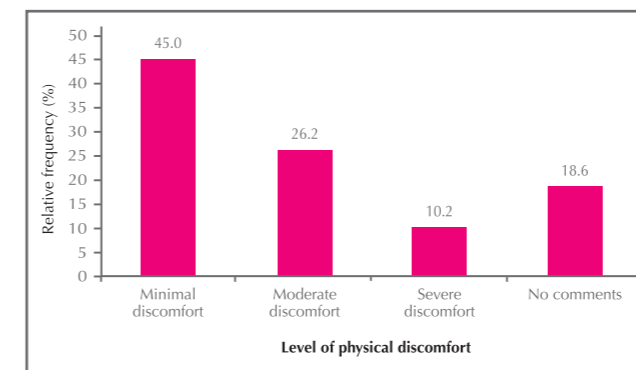


Figure 3.1 Level of physical discomfort after surgical operations (N=8,084)

While similar percentages of patients reported minimal discomfort and moderate discomfort for breast conserving surgery (48.9% minimal, 27.4% moderate) and mastectomy (44.2% minimal, 23.5% moderate), more patients reported moderate discomfort and less patients reported minimal discomfort for patients who had mastectomy and reconstruction (34.7% minimal, 38.1% moderate) (Figure 3.2).

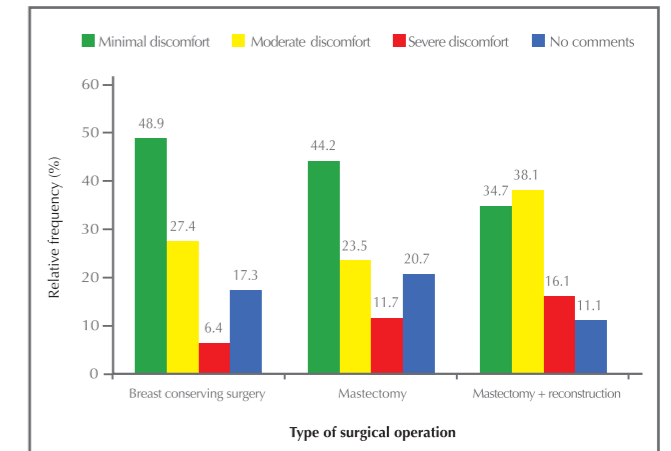


Figure 3.2 Level of physical discomfort by type of surgery (N=8,076)

The most common form of discomfort was wound pain after surgery (Table 3.1).

Table 3.1 The five most common forms of discomfort after surgery

	Number	(%)
Wound pain	1,261	(15.6)
Difficulty in arm movement	526	(6.5)
Wound problems (infection / inflammation / tightness / poor wound healing)	333	(4.1)
Numbness	250	(3.1)
Lymphoedema	249	(3.1)

3.1.2 Physical discomfort after radiotherapy

51.4% of patients reported minimal discomfort after radiotherapy. 23.1% of patients reported moderate discomfort (Figure 3.3).

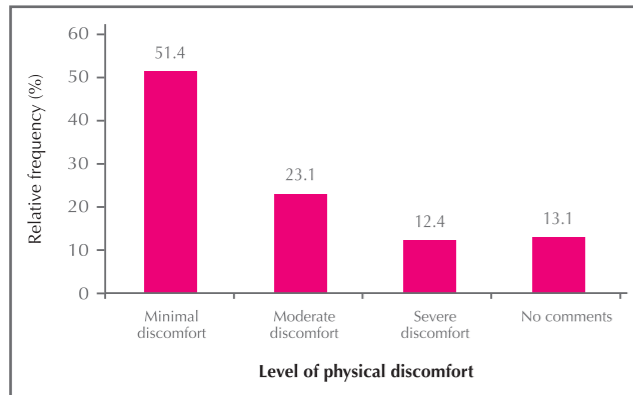


Figure 3.3 Level of physical discomfort after radiotherapy (N=4,885)

Patient discomfort by region irradiated are shown in Figure 3.4.

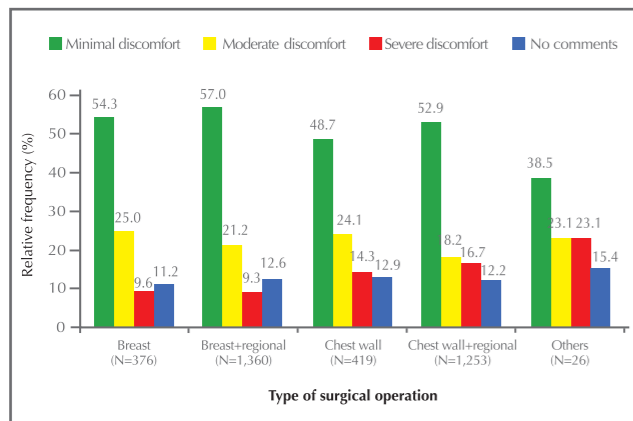


Figure 3.4 Level of physical discomfort after radiotherapy by irradiated regions (N=3,434)

Dry skin and skin burns were the most common forms of discomfort after radiotherapy (10% and 9.4% respectively) (Table 3.2).

Table 3.2 The five most common forms of discomfort after radiotherapy

	Number	(%)
Dry skin	490	(10.0)
Skin burns	461	(9.4)
Pain	209	(4.3)
Fatigue	129	(2.6)
Skin ulceration	74	(1.5)

3.1.3 Physical discomfort after chemotherapy

56.1% of patients reported severe discomfort after chemotherapy. 26.3% of patients reported moderate discomfort (Figure 3.5).

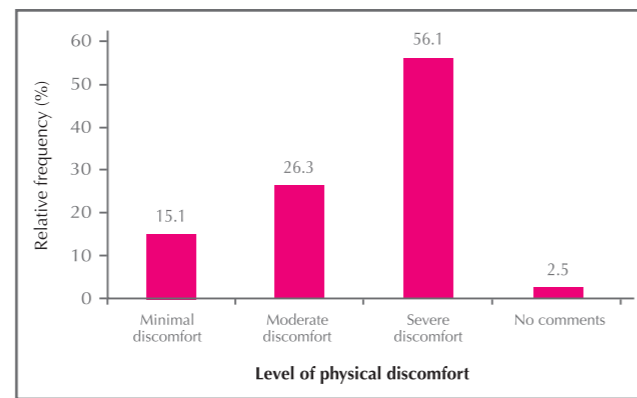


Figure 3.5 Level of physical discomfort after chemotherapy (N=5,057)

Vomiting, loss of appetite and hair loss were the most common forms of discomfort after chemotherapy (17.9-27.8%) (Table 3.3).

Table 3.3 The five most common forms of discomfort after chemotherapy

	Number	(%)
Vomiting	1,404	(27.8)
Loss of appetite	1,040	(20.6)
Hair loss	905	(17.9)
Weakness	528	(10.4)
Nausea	518	(10.2)

3.1.4 Physical discomfort after endocrine therapy

48% of patients reported minimal discomfort after endocrine therapy, and 13.8% of patients reported moderate discomfort (Figure 3.6).

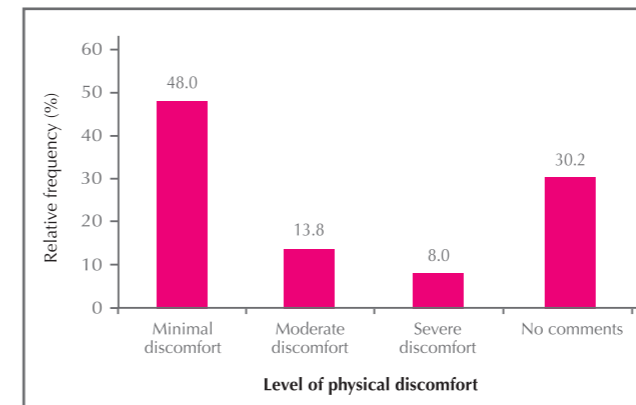


Figure 3.6 Level of physical discomfort after endocrine therapy (N=5,079)

Hot flushes (11.6%) was the most common form of discomfort after endocrine therapy (Table 3.4).

Table 3.4 The five most common forms of discomfort after endocrine therapy

	Number	(%)
Hot flushes	588	(11.6)
Bone pain	237	(4.7)
Menstrual disorder	118	(2.3)
Weight gain	105	(2.1)
Tiredness	104	(2.0)

3.1.5 Physical discomfort after targeted therapy

39.6% of patients reported minimal discomfort after targeted therapy, and 14.3% of patients reported moderate discomfort (Figure 3.7).

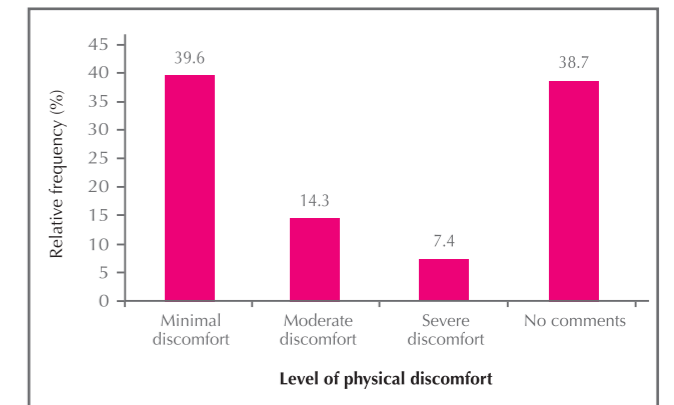


Figure 3.7 Level of physical discomfort after targeted therapy (N=530)

Fatigue (4.5%) was the most common form of discomfort after targeted therapy (Table 3.5).

Table 3.5 The five most common forms of discomfort after targeted therapy

Discomfort	Number	(%)
Fatigue	24	(4.5)
Pain	13	(2.5)
Numbness	10	(1.9)
Other organs affected	10	(1.9)
Bone Pain	8	(1.5)

3.1.6 Physical discomfort after complementary and alternative therapies

32.4% of patients reported minimal discomfort after complementary and alternative therapies and 3% reported moderate discomfort (Figure 3.8).

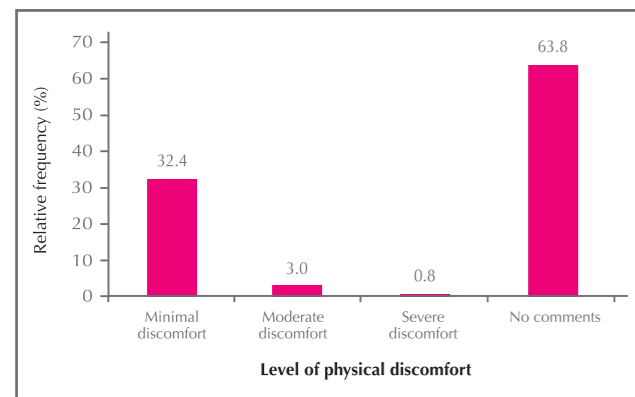


Figure 3.8 Level of physical discomfort after complementary and alternative therapies (N=3,498)

3.2 Psychosocial impacts and adjustments after diagnosis and treatment

3.2.1 Psychological impact of breast cancer

Diagnosis with breast cancer can have a heavy psychological and social toll on patients. At the time of diagnosis, one third of patients (34.1%) accepted their diagnosis with depression. 22.5% of patients were able to accept their diagnosis with a positive attitude while 19.9% of patients experienced denial (Table 3.6).

3.2.2 Feelings after breast cancer treatment

After breast cancer treatment, over half (53.3%) of patients felt life was not fair. After treatment, 60.5% changed their outlook of life, and 41.3% of patients had a positive change in self-image (Table 3.6).

3.2.3 Changes in outlook and self-image

Positive change in outlook of life after treatment was negatively correlated with increasing age, while no change in outlook was positively correlated with increasing age. Women of ages 50-79 had the highest frequency of negative change in outlook towards life (7-7.3%) (Figure 3.9).

Negative change in self-image was negatively correlated with increasing age. While no change in self-image was positively correlated with increasing age groups (Figure 3.10).

Table 3.6 Psychosocial impacts of breast cancer on patients

	Number	(%)
Feelings at time of breast cancer diagnosis (N=7,766)		
Acceptance and positive attitude to fight	1,747	(22.5)
Calm acceptance	1,628	(21.0)
Acceptance with depression	2,647	(34.1)
Lack of acceptance ("It cannot be true.")	1,548	(19.9)
Acceptance with anger ("Something must be wrong.")	196	(2.5)
Feelings after breast cancer treatments (N=6,358)		
Life was not fair	3,388	(53.3)
Cancer was an alarm that caught patient by surprise	2,121	(33.4)
Cancer took away something from patient	454	(7.1)
Cancer changed patient's value system	395	(6.2)
Change in outlook of life (N=7,851)		
Positive	4,266	(54.3)
Negative	484	(6.2)
Indifferent	3,101	(39.5)
Change in self-image (N=7,864)		
Positive	3,249	(41.3)
Negative	666	(8.5)
Indifferent	3,949	(50.2)

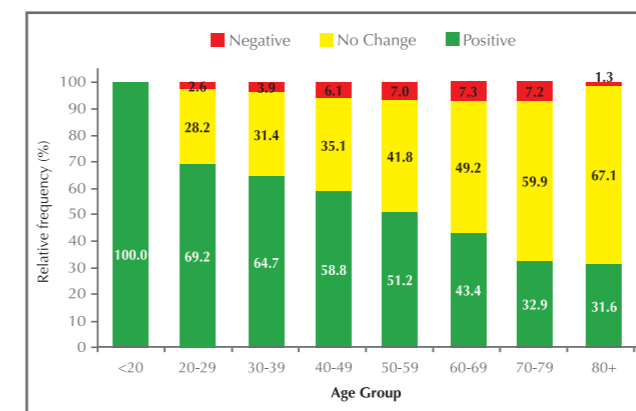


Figure 3.9 Change in outlook of life by age group (N=7,739)

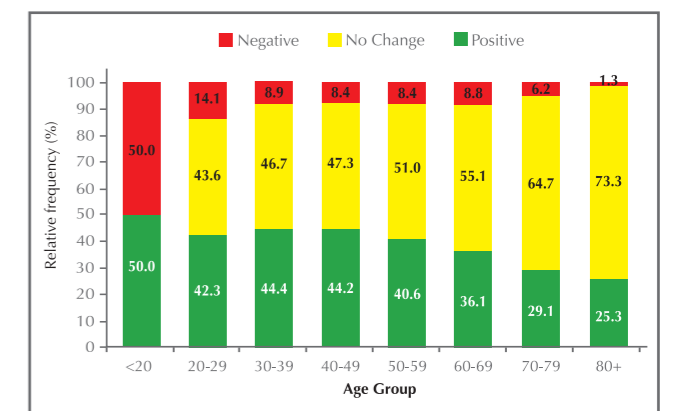


Figure 3.10 Change in self-image by age group (N=7,754)

3.2.4 Psychosocial adjustments and coping strategies

Of the 7,990 patients, 6,514 (81.5%) reported lifestyle modifications after breast cancer diagnosis and among them, 73.7% of patients changed their diet, while 61.6% of patients increased exercise. To cope with negative emotions, 54.1% of patients used direct verbal expression. 60.6% of patients sometimes or always worry about recurrence (Table 3.7).

3.2.5 Levels of worry about recurrence

The frequency of sometimes or always worrying about recurrence was negatively correlated with increasing age, while seldom or never worrying was positively correlated with increasing age (Figure 3.11).

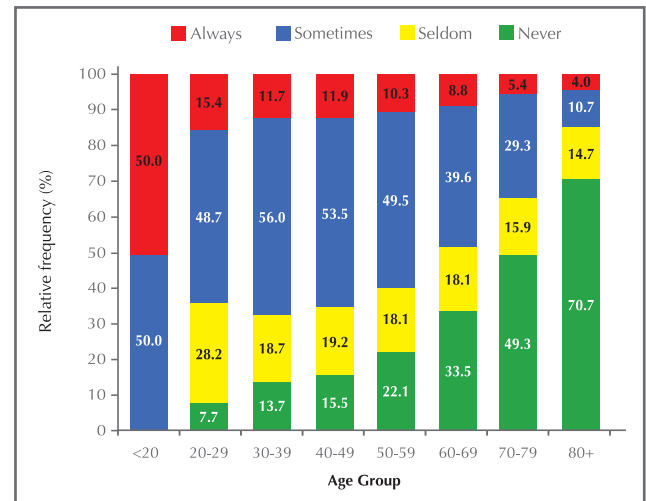


Figure 3.11 Level of worry about recurrence by age group (N=7,725)

Table 3.7 Psychosocial adjustments and coping strategies for survivorship

	Number	(%)
Types of lifestyle changes		
Changing diet	4,801	(73.7)
Doing more exercise	4,014	(61.6)
Taking health supplements	1,681	(25.8)
Reducing workload	1,363	(20.9)
Quitting job	785	(12.1)
Ways of managing negative emotions		
Direct verbal expression	4,321	(54.1)
Divert attention from them	2,660	(33.3)
Ignoring them	893	(11.2)
Feeling depressed	608	(7.6)
Others	462	(5.8)
Level of worry about recurrence		
Never	1,632	(20.8)
Seldom	1,456	(18.6)
Sometimes	3,903	(49.8)
Always	845	(10.8)