

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

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In this chapter we evaluate how breast cancer affects patients by collecting and analysing data on the physical discomfort patients reported after treatment, psychological

impact of the diagnosis and treatment as well as their psychosocial adjustments.

Key findings

► Patients were asked to evaluate discomfort resulting from different treatments. The rates of patients reporting severe discomfort and the most common forms of distress are shown below:

Treatment	% of patients	Common forms of discomfort
Chemotherapy	55.5	Vomiting
Radiotherapy	10.0	Dry skin, skin burns
Surgery	9.9	Wound pain
Targeted Therapy	7.9	Pain
Endocrine Therapy	7.0	Hot flushes

► Apart from treatment discomfort, psychological impact of breast cancer on patients was studied.

- Results showed that at the time of diagnosis 33.4% of patients felt depressed, and 18.2% of patients were in disbelief. 11.8% worried about recurrence all the time.
- After treatment, 52.8% of patients felt that cancer changed their value system.
- Older patients were less likely to have positive changes in the outlook of life after breast cancer diagnosis, with the exception of patients aged over 80.
- 78.5% of patients reported lifestyle modifications after breast cancer diagnosis. The most common change was change in diet (71.2%), followed by increase in exercise (59.2%).
- The most common way of managing negative emotions reported by the patients was direct verbal expression (52.7%).

3.1 Physical discomfort after treatment

This part of the study is based on a cohort of 5,592 patients.

3.1.1 Physical discomfort after surgery

Of the patients who had received surgery, only 9.9% experienced severe discomfort (Figure 3.1).

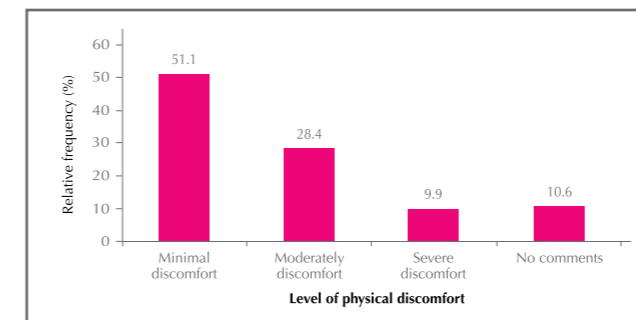


Figure 3.1 Level of physical discomfort after surgical operations (N=5,476)

More patients who underwent mastectomy experienced severe discomfort (11.4%) than patients who underwent breast conserving surgery did (6.5%). More patients who underwent mastectomy and reconstruction experienced moderate (42.7%) and severe discomfort (15.4%) than those who underwent mastectomy only (25.1% and 11.4% respectively), or those who underwent breast conserving surgery (29.7% and 6.5% respectively) (Figure 3.2).

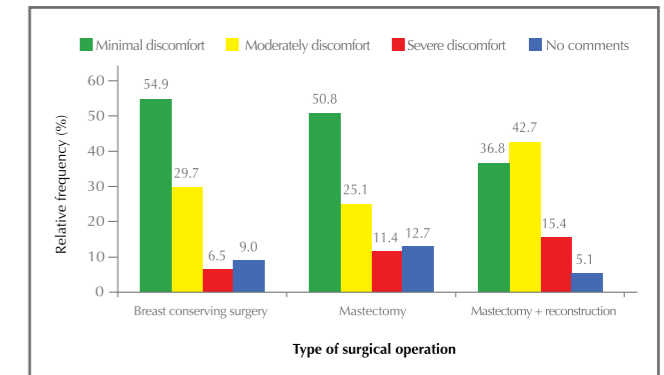


Figure 3.2 Level of physical discomfort by type of surgery (N=5,460)

The most common discomfort reported by patients who underwent surgery are listed in Table 3.1; wound pain (15.5%) was on the top.

Table 3.1 The five most common forms of discomfort after surgery

	Number	(%)
Wound pain	848	(15.5)
Difficulty in arm movement	257	(4.7)
Wound problems (infection / inflammation / tightness / poor wound healing)	143	(2.6)
Numbness	120	(2.2)
Weakness (generalised or limb)	109	(2.0)

3.1.2 Physical discomfort after radiotherapy

Among the patients who underwent radiotherapy, 10% reported severe discomfort after treatment (Figure 3.3).

The most common forms of discomfort after radiotherapy were dry skin (12.5%) and skin burns (11.7%) (Table 3.2).

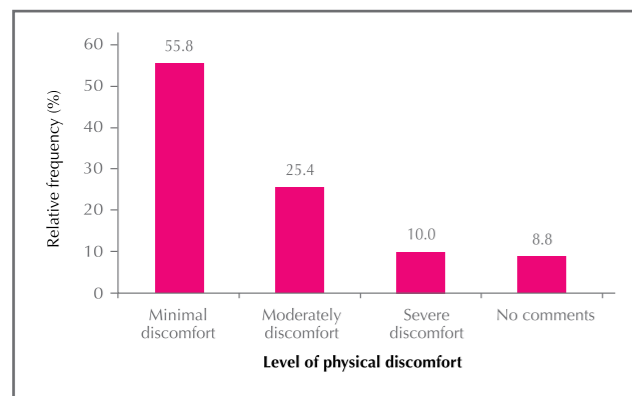


Figure 3.3 Level of physical discomfort after radiotherapy (N=3,355)

Table 3.2 The five most common forms of discomfort after radiotherapy

	Number	(%)
Dry skin	420	(12.5)
Skin burns	393	(11.7)
Pain	174	(5.2)
Fatigue	92	(2.7)
Skin ulceration	70	(2.1)

3.1.3 Physical discomfort after chemotherapy

Of the patients who underwent chemotherapy, 55.5% experienced severe discomfort (Figure 3.4).

The most common form of discomfort was vomiting (32.8%); other forms of discomfort after chemotherapy are listed in Table 3.3.

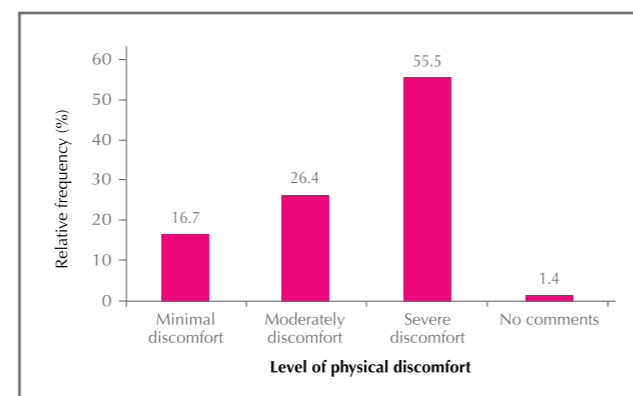


Figure 3.4 Level of physical discomfort after chemotherapy (N=3,555)

Table 3.3 The five most common forms of discomfort after chemotherapy

	Number	(%)
Vomiting	1,167	(32.8)
Loss of appetite	784	(22.1)
Hair loss	731	(20.6)
Nausea	439	(12.3)
Weakness	417	(11.7)

3.1.4 Physical discomfort after endocrine therapy

Of the patients who were treated with endocrine therapy, 7% reported severe discomfort (Figure 3.5).

The five most common forms of discomfort reported by patients who underwent endocrine therapy are listed in Table 3.4, with hot flushes on the top (10.3%).

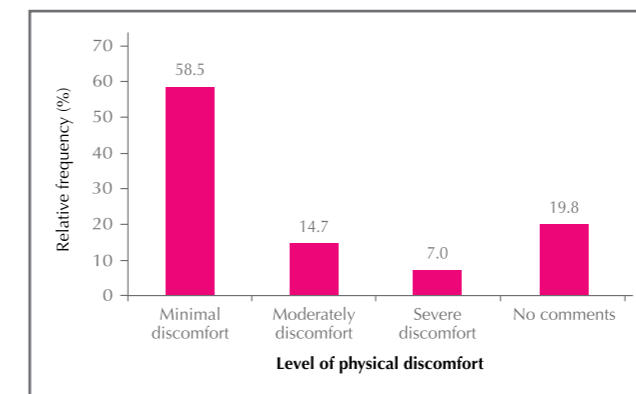


Figure 3.5 Level of physical discomfort after endocrine therapy (N=3,396)

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

	Number	(%)
Hot flushes	349	(10.3)
Bone pain	145	(4.3)
Weight gain	92	(2.7)
Tiredness	70	(2.1)
Insomnia	64	(1.9)

3.1.5 Physical discomfort after targeted therapy

Of the patients who were treated with targeted therapy, 7.9% experienced severe discomfort.

The most common form of discomfort after targeted therapy was pain (2.9%) (Table 3.5).

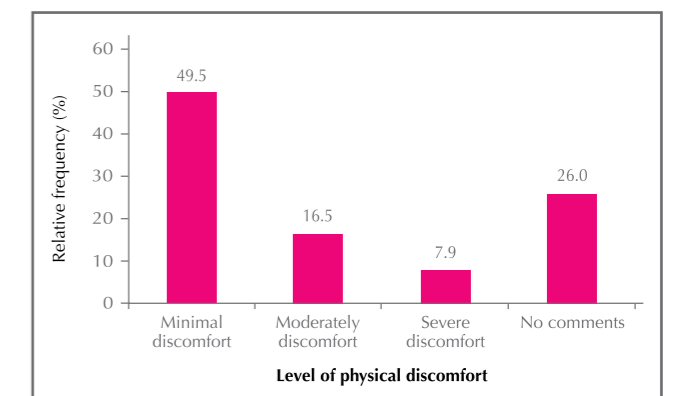


Figure 3.6 Level of physical discomfort after targeted therapy (N=315)

Table 3.5 The most common forms of discomfort after targeted therapy

	Number	(%)
Pain	9	(2.9)
Numbness	6	(1.9)
Fatigue	6	(1.9)
Fever	3	(1.0)
Dizziness	2	(0.6)
Allergy	2	(0.6)
Vomiting	2	(0.6)
Dry skin	1	(0.3)
Itching	1	(0.3)
Depression	1	(0.3)



3.1.6 Physical discomfort after complementary and alternative therapies

Of the patients who used complementary and alternative therapies, 0.9% had severe discomfort (Figure 3.7).

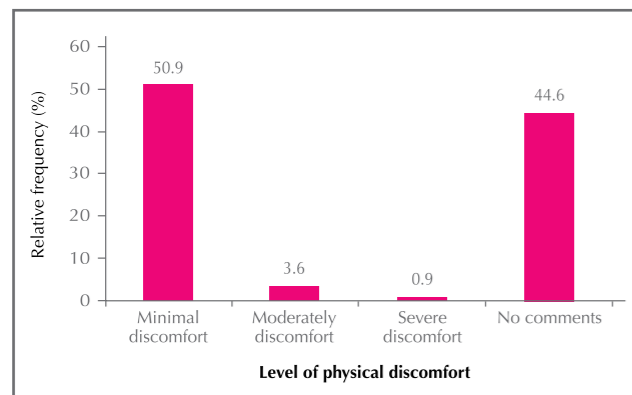


Figure 3.7 Level of physical discomfort after complementary and alternative therapies (N=2,178)

3.2 Psychosocial impact and adjustment after diagnosis and treatment

3.2.1 Psychological impact of breast cancer

The psychological impact of diagnosis and treatment on a patient is an important consideration, as it can have an impact on the acceptance and success of treatment. At the time of diagnosis, 33.4% of patients felt depressed, and 18.2% of patients were in disbelief.

3.2.2 Feelings after breast cancer treatment

After treatment, most patients felt that cancer changed their value system (52.8%) or that cancer was an alarm that caught them by surprise (33.4%).

Table 3.6 Psychosocial impacts of breast cancer on patients

	Number	(%)
Feelings at time of breast cancer diagnosis (N=5,399)		
Acceptance and positive attitude to fight	1,295	(24.0)
Calm acceptance	1,161	(21.5)
Acceptance with depression	1,804	(33.4)
Lack of acceptance ("It cannot be true.")	985	(18.2)
Acceptance with anger ("Something must be wrong.")	154	(2.9)
Feelings after breast cancer treatments (N=4,499)		
Life is not fair	296	(6.6)
Cancer was an alarm that caught patient by surprise	1,503	(33.4)
Cancer took away something from patient	325	(7.2)
Cancer changed patient's value system	2,375	(52.8)
Change in outlook of life (N=5,505)		
Positive	2,918	(53.0)
Negative	323	(5.9)
No change	2,264	(41.1)
Change in self-image (N=5,522)		
Positive	2,080	(37.7)
Negative	450	(8.1)
No change	2,992	(54.2)

3.2.3 Changes in outlook and self-image

Only 5.9% of patients had a negative change in their outlook of life, and only 8.1% reported a negative change in self-image (Table 3.6).

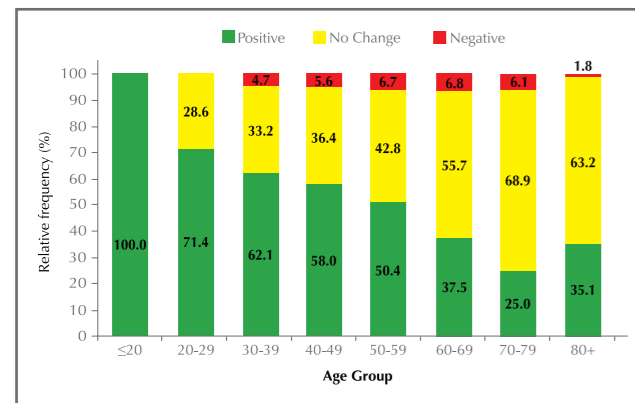


Figure 3.8 Change in outlook of life by age group (N=5,458)

Interestingly, the proportions of patients with positive changes in outlook of life after breast cancer diagnosis reduced with age, while the proportions of those with no change or negative changes increased with age. The highest proportion of patients with no change in outlook of life was found in the age group of 70-79 while the proportion of patients with negative changes in outlook was highest in the age group of 60-69. More patients had positive changes in outlook of life and fewer patients had negative outlook of life in the age 80 and above group than those patients in the age group of 70-79 (Figure 3.8).

Positive and negative changes in self-image generally reduced with age, although the proportion of patients reporting no change in self-image increased with age (Figure 3.9).

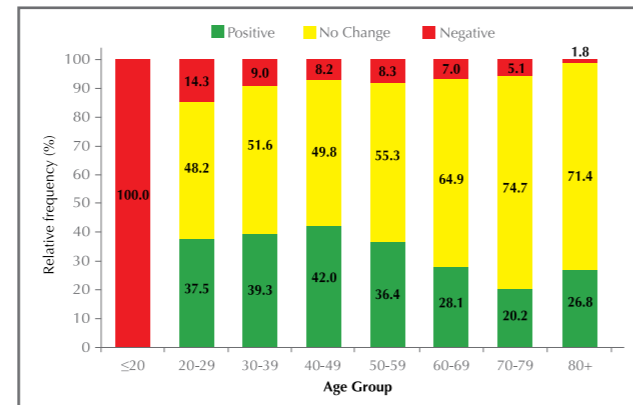


Figure 3.9 Change in self-image by age group (N=5,477)

3.2.4 Psychosocial adjustments and coping strategies

Of a cohort of 5,592 patients, 4,387 (78.5%) reported lifestyle modifications after breast cancer diagnosis. The most common change was change in diet (71.2%), followed by increase in exercise (59.2%). The most common way of managing negative emotions reported by the patients was direct verbal expression (52.7%), followed by diverting attention from them (30.9%) (Table 3.7).

Table 3.7 Psychosocial adjustments and coping strategies for survivorship

	Number	(%)
Types of lifestyle changes		
Changing diet	3,123	(71.2)
Doing more exercise	2,598	(59.2)
Taking health supplements	1,172	(26.7)
Reducing workload	915	(20.9)
Quitting job	525	(12.0)
Ways of managing negative emotions		
Direct verbal expression	2,945	(52.7)
Diverting attention from them	1,726	(30.9)
Ignoring them	699	(12.5)
Feeling depressed	439	(7.9)
Others	263	(4.7)
Level of worry about recurrence		
Never	1,045	(19.0)
Seldom	1,077	(19.6)
Sometimes	2,733	(49.7)
Always	648	(11.8)

3.2.5 Levels of worry about recurrence

Around half (49.7%) of the patients sometimes worried about recurrence, while 11.8% worried about recurrence all the time (Table 3.7).

The proportion of patients who sometimes or always worried about recurrence reduced with increasing age. The proportion of patients who always worried about recurrence were similar across 30-69 age groups (Figure 3.10).

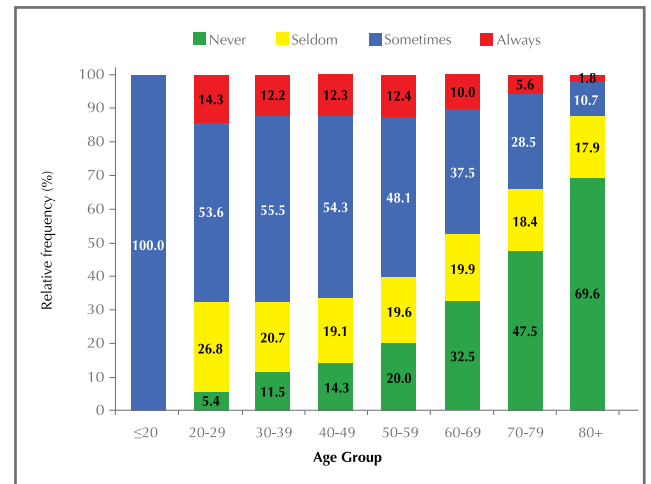


Figure 3.10 Level of worry about recurrence by age group (N=5,456)