

A significant issue faced by Cancer Patients: Unemployment Concern

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ABSTRACT

Background: As the cancer prevalence rate increases, physical, psychological, and socio-economic problems caused by cancer increase, and the patients' quality of life is negatively affected. **Objective:** This study was conducted to determine unemployment concerns faced by cancer patients and the reasons for these concerns. **Methods:** This was a descriptive study conducted in a tertiary care hospital between March 2016 and May 2017. The study population included all the patients receiving outpatient chemotherapy at a chemotherapy unit in a research hospital at Erzurum. The sample consisted of 405 patients who met the inclusion criteria. A form that was prepared by the researcher based on the literature was used to collect data. The data was analyzed using SPSS 16 and a $p < 0.05$ was considered to be significant. **Results:** Of the participants, 56% were concerned about losing their jobs. The reasons for this concern were introversion and a decrease in self-confidence during the illness, health insurance not meeting treatment expenses, concerns that the salaries and income level will change during the treatment period, changes in a retirement plan, and facing situations hindering the return to work during the post-treatment period. **Conclusion:** This study clearly indicates the fear and concern of cancer patients regarding job loss. Occupational organizations and healthcare staff should cooperate to improve the care service.

Key words: Cancer, Cancer treatment, Patient, Unemployment

Cancer is a disease that arises from the uncontrolled cell multiplication in different organs. The treatment, clinical picture, and approaches to this disease differ [1]. Cancer is the second leading cause of death after cardiac diseases in the world [1, 2]. In 2008, 12.7 million people were diagnosed with cancer; 7.6 million people lost their lives from cancer in the same year [1- 3]. The cancer prevalence rate is increasing in Turkey, and 160,000 Turkish people are diagnosed with cancer every year. As the cancer prevalence rate increases, physical, psychological, and socio-economic problems caused by cancer increases affecting the the patients' quality of life negatively [1, 2]. Various treatment options are recommended to patients following a cancer diagnosis; realistic and achievable targets are based on the cancer

type. The aim is to increase survival time, to control the accompanying symptoms, and to prevent the metastasis.

The main treatment methods for cancer are chemotherapy, radiotherapy, and surgery; using more than one treatment method for cancer treatment is common [1]. However, these complicated treatment methods may cause severe side effects in patients. Patients experience physical and psychosocial problems during and after treatment. In addition to undergoing complicated treatments, recurrence-related concerns exist for one year and sometimes longer, following treatment; this uncertainty causes anxiety [4-6]. Also, many survivors face health problems such as fatigue, pain, cognitive function disorders, and disabilities, and try to cope with them [7,8]. Not only do the side-effects of

cancer treatment have an impact on the ability to work during treatment, but the late effects can also have a long-term effect on employment. The impact cancer has on the workability might also be influenced by other somatic and psychiatric diseases as depression and musculoskeletal diseases factors that also play a pivotal role for working market participation amongst persons not affected by a cancer disease [9]. Studies have indicated that more than 40% of patients face chronic fatigue for many years following cancer treatment, and this weakens patients as much as did cancer [10, 11]. This fatigue causes significant changes in patients' lifestyles.

Patients experience severe economic problems, and their roles and responsibilities demand significant and important changes. The fatigue and weakness patients experience following the treatment period affect their lives and their careers. Thus, some patients became unemployed and retire early after they were diagnosed with cancer. Other cancer patients were not successful in their careers because they stayed away from their jobs for too long. Also, they experienced physical and psychological problems after returning to work post-treatment. In addition, these patients stated that their productivity decreased because of the long-term post-treatment physical and cognitive side effects they experienced [1, 4, 8]. Nurses play a key role during the treatment and post-treatment period because they are qualified to ameliorate the problems cancer patients' experience. The present study was planned to increase awareness about unemployment in cancer patients and the reasons for this problem, and to contribute to improve nursing practices in these situations.

METHODS

This was a descriptive study, conducted at the outpatient chemotherapy unit in a tertiary care hospital, between March 2016 and May 2017. This hospital was selected because it is regional and serves all patients regardless of their socio-economic status. Before initiating the study, written permission was obtained from the hospital where the study was conducted, and approval was obtained from the Directorate of the Ethical Committee of Atatürk University Faculty of Health Sciences. Participants were provided explanations about the aim, how the study will be conducted, and what results will be obtained before asking their verbal approval. The Declaration of Helsinki on Human Rights was observed because the personal rights

should be preserved.

The population included all patients receiving outpatient chemotherapy at a chemotherapy unit during the study period. The sample consisted of 382 patients who met the inclusion criteria. Seven patients who were not able to continue were excluded in the data collection stage. Patients whose ages ranged from 18 to 65, who received outpatient chemotherapy, who were conscious, who volunteered to communicate and cooperate; and did not have any problems that might prevent communication were included. Patients who left the study at any stage, experienced complications while receiving chemotherapy, and lost their lives during the treatment were excluded from the analysis. The form prepared by the researcher based on the literature [5, 6, 12] was used to collect data. It included questions about the following: age, gender, marital status; children and number of children; educational status; diagnosis, age at diagnosis, treatments; existence of health insurance; income level, income earners, working type before, during, and after the treatment; situations that may have caused concerns related to unemployment; and certain situations and changes that may develop during the treatment period, pre- and post-treatment periods.

The data were collected using face-to-face interviews with the patients receiving outpatient chemotherapy in the chemotherapy unit. Each interview lasted 10 to 15 minutes on average. The data were assessed using the Statistical Package for Social Sciences (SPSS) 16 package program. Frequency distribution and mean value were used to evaluate the data. The findings were assessed at the $p < 0.05$ significance level.

RESULTS

The age of most patients (81.6%) was between 41 and 64 years. Of them, 71.7% were male, 93.9% were married; 60% were primary/secondary education graduates; 93.1% had children; 95.2% had health insurance; 72.8% had an income equal to their expenses; 56.5% had a job; 58.1% were the sole income earners. Of them, 23.5% had gastrointestinal cancer; 33.1% received surgical treatment and chemotherapy; 65.1% worked full time before the treatment; 40.3% were on sick leave during the treatment, and 22.7% were self-employed following the treatment (Table 1).

Table 1: Distribution of Patients' Introductory Characteristics

Introductory Characteristics	N (%)
Age	
18-25	5 (1.3)
26-40	47 (12.6)
41-64	306 (81.6)
65 and older	17 (4.5)
Gender	
Female	106 (28.3)
Male	269 (71.7)
Marital Status	
Married	352 (93.9)
Single	23 (6.1)
Educational Status	
Illiterate	10 (2.7)
Literate	31 (8.3)
Primary/secondary education	225 (60)
Bachelor degree	103 (27.5)
Postgraduate degree	6 (1.5)
Children	
Yes	349 (93.1)
No	26 (6.9)
Number of children (mean ± SD)	2.83±1.50 (Range=1-9)
Social Insurance	
Yes	357 (95.2)
No	18 (4.8)
Income Status	
Income is lower than the expense	58 (15.5)
Income is equal to the expense	273 (72.8)
Income is higher than the expense	44 (11.7)
Working Status	
Yes	212 (56.5)
No	163 (43.5)
Income Earners	
The patients	218 (58.1)
The patients and their wife/husband	54 (14.4)
The patients and patients' children	19 (5)
Children	28 (7.5)
Their Partners	32 (8.5)
Their Fathers	9 (2.4)
Their Siblings	4 (1.1)
Receive welfare	11 (3)
Age at diagnosis [mean ± SD]	49.66±10.34 (Range=19-78)
Diagnosis–cancer type:	
Gastrointestinal	88 (23.5)
Breast	40 (10.7)
Female genital	19 (5.1)
Male genital	53 (14.1)
Hematological	58 (15.5)
Lung	44 (11.7)
Brain	65 (17.3)
Thyroid	8 (2.1)

Treatments Received	
Surgical	111 (29.6)
Chemotherapy	75 (20)
Chemotherapy and radiotherapy	19 (5)
Surgical and Chemotherapy	124 (33.1)
Radiotherapy, chemotherapy	16 (4.3)
Surgical, chemotherapy, radiotherapy	30 (8)
Profession and Working Life before Treatment	
Full-time	244 (65.1)
Part-time/Partial	17 (4.5)
Self-employed	97 (25.9)
Sick leave	4 (1.1)
Unemployed	3 (0.8)
Retired	7 (1.8)
Unable to work	0 (0)
Other	3 (0.8)
Profession and Working Life during Treatment	
Full-time	1 (0.3)
Part-time/Partial	12 (3.2)
Self-employed	66 (17.6)
Sick leave	151 (40.3)
Unemployed	44 (11.7)
Retired	41 (10.9)
Unable to work	57 (15.2)
Other	3 (0.8)
Profession and Working Life after Treatment	
Full-time	34 (9.1)
Part-time/Partial	63 (16.8)
Self-employed	85 (22.7)
Sick leave	29 (7.7)
Unemployed	46 (12.3)
Retired	70 (18.7)
Unable to work	42 (11.2)
Other	6 (1.5)

The most frequent reasons for the unemployment concerns among the study patients were introversion, decrease in self-trust, concerns that adequate income will not be earned, salaries and other income will change or probably job loss (Table 2). Table 3 describes the problems faced by the patients during the diagnosis period, treatment period, and post treatment period.

DISCUSSION

Cancer patients face significant changes in their lives. Most of the patients were diagnosed with this disease while they were employed, and they were concerned about losing their jobs in the diagnosis, treatment, and post-treatment periods. Of the studied patients, 77.1% explained that they became introvert. In addition, 76.3% mentioned that their self-confidence decreased; 72.5% were concerned that they would not have adequate income; 69.1% feared that their salaries and income level would

change, and 56% were concerned about losing their jobs.

Table 2 - Patients' Occupational Concerns during the Illness Period

STATEMENTS	Yes		No	
	n	%	n	%
Have you ever worried that you would lose your job?	210	56.0	165	44.0
Are you concerned that you will not earn enough to get by?	272	72.5	103	27.5
Do you believe that you will find a job no matter how hard it is to do so?	150	40.0	225	60.0
Would you perform temporary and irrelevant jobs to meet your expenses?	138	36.8	237	63.2
Did your self-confidence decrease?	286	76.3	89	23.7
Did you become introverted in this period?	289	77.1	86	22.9
Are you concerned that your salary and other income will change?	259	69.1	116	30.9
Are you concerned that you will face situations that will prevent you from returning to work?	180	48.0	195	52.0
Are you concerned that attitudes of your colleagues will change?	74	19.7	301	80.3
Are you concerned that your employer will change?	80	21.3	295	78.7
Are you concerned that your job will change?	84	22.4	291	77.6
Are you concerned that your occupational roles and skills will change?	125	33.1	251	66.9
Are you concerned that your productivity will change?	149	39.7	226	60.3
Are you concerned that your roles and position will change?	110	29.3	265	70.7

Table 3: Problems Patients Faced in the Diagnosis Period

Statements	Problems faced by the patients					
	Diagnosis Period		Treatment Period		Post-treatment period	
	Yes n (%)	No n (%)	Yes n (%)	No n (%)	Yes n (%)	No n (%)
Did your salary and other income change?	53 (14.1)	322 (85.9)	313 (83.5)	62 (16.5)	267 (71.2)	108 (28.8)
Did your partner's income change (if he/she works)?	5 (1.3)	370 (98.7)	27 (7.2)	348 (92.8)	24 (6.4)	351 (93.6)
Did you face any situations promoting or hindering your return to work?	140 (37.3)	235(62.7)	291 (77.6)	84 (22.4)	288 (76.8)	87 (23.2)
Does your health insurance meet your treatment expenses?	354 (94.4)	21 (5.6)	347 (92.5)	28 (7.5)	309 (82.4)	66 (17.6)
Did your retirement plan change?	264 (70.4)	111 (29.6)	298 (79.5)	77 (20.5)	193 (51.5)	182 (48.5)
Did you think about changing your job after the cancer diagnosis?	115 (30.7)	260 (69.3)	170 (45.3)	205 (54.7)	241 (64.3)	134 (35.7)
Did your occupational satisfaction change?	117 (31.2)	258 (68.8)	202 (53.9)	173 (46.1)	198 (52.8)	177 (47.2)
Did your occupational role and position change?	66 (17.6)	309 (82.4)	160 (42.7)	215 (57.3)	152 (40.5)	223 (59.5)
Did your employer change?	34 (9.1)	341 (90.9)	116 (30.9)	259 (69.1)	172 (45.9)	203 (54.1)
Did the type of your occupation change?	41 (10.9)	334 (89.1)	136 (36.3)	239 (63.7)	269 (71.7)	106 (28.3)
Did your productivity change?	146 (38.9)	229 (61.1)	285 (76)	90 (24)	241 (64.3)	134 (35.7)
Did your occupational duty or skill change?	117 (31.2)	258 (68.8)	229 (61.1)	146 (38.9)	183 (48.8)	192 (51.2)
Did your colleagues' attitudes change?	104 (27.7)	271 (72.3)	188 (50.1)	187 (49.9)	204 (54.4)	171 (45.6)
Were any occupational changes/revisions made for your career?	132 (35.2)	243 (64.8)	225 (60)	150 (40)	267 (71.2)	108 (28.8)

After being diagnosed with cancer, patients try to cope with physical problems while they are also concerned due to the uncertainty related to their future. The risk of developing a psychological disorder increases in this period. Physical and psychological symptoms that the patients face, affects the coping period negatively [1]. In a study conducted by Spelten et al. [12], fatigue and other cancer-related symptoms were found to affect patients

continuing their careers during the disease period. In a study conducted by Taskila et al. [13], patients' physical and mental working skills worsened after the cancer diagnosis. Hewitt et al. found that patients diagnosed with cancer had limitations in performing activities of daily living, felt functionally inadequate, and could not work because of their health status. These findings also indicate that social discrimination and stigmatization, physical and

psychological symptoms, decrease in occupational capacity, and anger due to self-insufficiency in a physical and functional sense along with their disease may cause fears related to losing jobs and concerns related to changes in salary and income level. Cancer patients generally suffer from many problems related to the illness period and side effects of the treatment for their cancer. They must cope with many problems during their treatment period. In addition to their expenses, economic losses also occur as the patient cannot work because of the ongoing therapy. If the person loses the job or simply plan to change it, they may face problem with their health insurance policy. [1,14] In the study conducted by Pryce et al., [15] only 30% of the patients continued to work during the treatment period. That study indicated that patients could not work because they had difficulty managing the treatment-based fatigue. Ahn et al. [16], suggested that fatigue is the most significant reason for patients' inability to work during the treatment period. Steiner et al. [17], found that energy loss, nausea or vomiting, and burnout-related depressive feelings experienced by the cancer patients during the treatment period negatively affected their occupational lives and reduced their number of working hours. Taskila et al. [18], stated that one of the most common sets of causes for loss of occupational skills relates to the treatment period and type of treatment. These outcomes suggest that the side effects arising from the treatment methods, psychological problems such as desperation, depression, and burnout, and spending too much time away from work because of the treatment may, cause concerns related to losing jobs. In addition, the after-effects of chemotherapy, radiotherapy, surgical treatment, and treatments related to a new target take a toll on individuals' physical, psychological, social, spiritual, and economic wellbeing and may cause unemployment-related concerns.

The present study indicated that the retirement plans of 82.4% of the participants changed following the treatment. Additionally, among study patients, 76.8% experienced situations that hindered their return; 71.4% had poorer productivity; the salaries and income level of 71.2% changed; the occupational duties and roles of 64.3% changed; occupational satisfaction of 64.3% changed; and the occupational role and position of 52.8% changed. The end of cancer treatment does not mean that the disease is completely terminated for the survivor. Cancer patients experience various problems from the day they are diagnosed to the end of their lives. Some of these problems

(hair loss, nausea/vomiting) may last for a short period of time, some (fatigue, memory-related problems) may last for weeks or months, and some (lymphedema, infertility) may be permanent [13, 19]. Pryce et al. suggested that cancer-related physical changes that occur following the end of cancer treatment; management of the stress during this period; and employers' attitudes affect patients' return to work. Choi et al. [20] found that 53% of 305 cancer patients lost their jobs following the treatment, and only 23% returned to work following the treatment. In addition, job changes were common among the patients. Those authors found these occupational returns to be related to the severity and type of the cancer. Carlsen et al. suggested that the early retirement risk is high for eight years following cancer diagnosis because of the comorbid physical and psychological disorders [9]. These findings indicate that issues such as no support from the employers; recurrence-related concerns; the occurrence of secondary cancers; long-term pre and posttreatment side effects in both the physical and cognitive domains; too much time spent away from work; and failure to adapt to the new life challenges cause concerns about losing jobs.

CONCLUSION

This study indicated that cancer patients are concerned about losing their jobs during the illness and treatment period and fear that they will become unemployed. Although occupational life and employment is important, few actions are taken to provide a solution to this problem. A care and treatment service for boosting survivors' quality of life and ensuring that they can adapt to their new life situation should be provided. Occupational organizations and healthcare staff should cooperate to improve the care service. Employers are recommended to be more sensitive and to develop policies for survivors' needs such as access to psychosocial services, health insurance, and employment security.

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