

Gender-based Differences in Coping, Emotional Status, Quality of Life, and Social Support in Individuals with Cancer Receiving Outpatient Chemotherapy

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Introduction

Outpatient chemotherapy is a recent trend in cancer treatment. Patients with cancer typically experience high levels of distress that can provoke negative psychological symptoms even when receiving outpatient chemotherapy instead of admission. Cancer coping strategies such as seeking support are associated with better adaption, well-being and quality of life. However, there are differences in emotional behavior and willingness to seek support according to gender. The objective of this study was to determine that the differences in levels of self-efficacy for cancer coping behavior according to gender, including emotional status, quality of life, social support, and to identify the priority factor by gender for providing individual supportive care for patients receiving outpatient chemotherapy.

Method

This study was conducted in the oncology outpatient chemotherapy units of a medical center. A total of 106 patients (males: 46, female: 60) were included. Patients completed the Personal Information Form, Hospital Anxiety and Depression Scale (HADS), Cancer Behavior Inventory (CBI), Medical Outcomes Study Social Support Survey (MOS-SSS) and Short Form-12 (SF-12).

Results

Among the 106 participants included in the study, gender was significantly associated with cancer coping behavior. Males exhibited lower self-efficacy for cancer coping behavior, lower capacity to manage emotions and seeking support, and lower ability to participate in therapy (**Table 1**). Anxiety and depression were the significant factors that were negatively correlated with self-efficacy for coping with cancer (**Table 2**). However, higher anxiety, depression, physical pain, and lower quality of life were also found among males (**Table 3**).

Conclusions

Attention should be paid to patients receiving outpatient chemotherapy who show characteristics correlated with anxiety, depression, cancer coping behavior, and quality of life. Additionally, strategies focused on periodic screening of male patients’ emotional status, cancer coping behavior, and pain-related factors are important for improving their quality of life after receiving outpatient chemotherapy and to increase the quality of outpatient supportive care.

Table 1 Univariate analysis of four constructs with different demographic.													**(P value<0.05)
Variable	Category	Compassion HADS			Compassion CBI			Compassion MOS-SSS			Compassion SF-12		
	-	Mean (SD)	t/F	p	Mean (SD)	t/F	p	Mean (SD)	t/F	p	Mean (SD)	t/F	p
Gender	-	-	4.5	0.036		4.071	<u>0.046**</u>		2.006	0.868	-	3.106	0.081
	Male	11.86 (7.2)	-	-	98.14 (22.44)	-	-	75.27 (13.79)	-	-	36.81 (4.39)	-	-
	Female	8.03 (7.5)	-	-	109.13 (22.82)	-	-	75.98 (18.46)	-	-	38.54 (3.92)	-	-
Education	-	-	0.621	0.603	-	0.039	0.99	-	0.27	0.847	-	0.266	0.85
Work	-	-	0.07	0.93	-	0.34	0.713	-	3.057	0.051	-	1.803	0.17
Marriage	-	-	0.69	0.601	-	0.601	0.663	-	1.255	0.293	-	1.443	0.225
Economic	-	-	0.479	0.751	-	1.088	0.367	-	0.577	0.68	-	0.87	0.485
Living with someone	-	-	0.528	0.786	-	1.032	0.41	-	0.337	0.916	-	0.696	0.054
Religion	-	-	2.157	0.098	-	1.074	0.363	-	0.616	0.606	-	3.04	<u>0.032**</u>

Table 2. Subdomain of Self-Efficacy for Coping ** (P value<0.05)			
Subdomain	P value	Gender	Mean (SD)
Domain 1 Belief positive attitude and sense of humor	0.23	Male	21.23 (5.91)
	-	Female	22.89 (5.72)
Domain 2 Belief in their ability to participate in medical care and coping management	<u>0.019**</u>	Male	29.27 (6.47)
	-	Female	32.83 (6.18)
Domain 3 Belief in maintaining independence and activity	0.121	Male	21.32 (5.44)
	-	Female	23.33 (5.37)
Domain 4 Capacity to manage their emotions and seeking social support	<u>0.016**</u>	Male	11.32 (4.32)
	-	Female	13.94 (4.52)

Table 3 Univariate analysis of eight constructs included in SF-12 with gender. ** (P value<0.05)																	
Variable	Category	Physical Functioning		Role-Physical		Bodily Pain		General Health		Vitality		Social Functioning		Role-Emotional		Mental Health	
	-	Mean (SD)	p	Mean (SD)	p	Mean (SD)	p	Mean (SD)	p	Mean (SD)	p	Mean (SD)	p	Mean (SD)	p	Mean (SD)	p
Gender	-	-	0.224	-	0.057	-	<u>0.015**</u>	-	0.96	-	0.2	-	0.192	-	<u>0.014**</u>	-	0.9
	Male	4.77 (1.13)	-	5.69 (2.57)	-	2.5 (1.14)	-	3.09 (0.89)	-	3 (1.31)	-	3.63 (0.95)	-	7.13 (2)	-	6.6 (1.23)	-
	Female	5.04 (0.9)	-	7.52 (1.99)	-	1.87 (1.04)	-	3.08 (1.02)	-	2.68 (0.97)	-	3.99 (1.16)	-	8.22 (1.78)	-	7.61 (0.88)	-