



The Influence of Social Support on the Quality of Life of Gynaecology Cancer Patients

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Keywords

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Abstract

Aim: Survival from most forms of cancer is increasing. With advances in early cancer diagnosis and treatment, cancer is often no longer a death sentence, but a chronic disease. Gynecological cancers, including cancers of the cervix, ovaries, and uterus, are among the ten most common cancers in women. The aim of the study was to examine the level of quality of life of women with gynecological cancer, the level of social support received, and the correlation between social support and the quality of life of their life. **Subjects and methods:** The study involved 99 women with female genital cancer, average age 62.54 years, average duration of treatment 27.67 months. **Results:** According to the obtained results, the quality of life of patients with gynecological cancer decreases with age, does not depend on the length of treatment and increases with greater social support from family, loved ones and friends. **Conclusion:** Long-term living with stressful situations related to living with a cancer diagnosis can significantly affect patients and their loved ones. That is why the quality of life of cancer patients has become a priority issue. It has been established that cancer can significantly worsen the quality of life.

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Introduction

Gynaecologic cancers include cancer that originates in a woman's reproductive system: cervical, ovarian, uterine, vaginal, vulvar, and fallopian tube cancer. Cervical cancer, ovarian cancer, and uterine cancer are among ten most common cancers in females worldwide [1]. Cervical cancer is the fourth most common cancer among women. The prevalence of endometrial cancer has significantly and consistently been increasing and represents the most common gynaecologic malignant tumour in resource-abundant countries and the second most common in resource-limited countries (after cervical cancer) [2]. Official data from the Croatian Cancer Registry in 2015 show that endometrial cancer is the most common cancer of the genital organs in women, and the fourth most common cancer in women, after breast, colon, and respiratory cancers. Ovarian cancer ranks fifth in cancer deaths among women, accounting for more deaths than any other cancer of the female reproductive system [1].

Although an increase in the incidence of some gynaecological cancers was observed, the same cancer mortality significantly declined [3]. With progress in earlier diagnosis and treatment of cancer, cancer is often no longer a death sentence, but rather a chronic disease.

Prolonged life with stressful situations related to living with cancer diagnosis can significantly affect the patient and those close to her. Cancer can deteriorate patients' quality of life (QOL), affecting all aspects of their lives such as personal, social, and work life over extended periods of time [4]. That's why the quality of life (QOL) and mental health of patients has become a priority issue. The World Health Organization defines QOL as an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad-ranging concept affected in a complex way by the person's physical health, psychological state, personal beliefs, social relationships and relationship to salient features of their environment [5]. Decrease in life quality in patients with carcinoma has been observed in every type of cancer during the time of treatment, as well in a follow up period due to the fear of possible recurrence [6]. Patients' quality of life is affected by many factors such as the specific treatment, the effects and side effects from each treatment pain, fatigue, disability. Sociodemographic factors may affect QOL as well [7]. Female sex is usually associated with worse QOL. Females are more sensitive to physical changes and body image during the cancer treatment that make them less attractive, and may feel distress caused by infertility, sexual dysfunction and functional impairments. Resilience and optimism positively correlate with QOL. Social support relates with higher quality of life in cancer patients. Social support implies emotions (feeling loved and to be needed by someone), information and material safety. Social support is often provided by husband or partner, family, friends [8]. The community, health professionals, other cancer survival may be considerable source of social support as well in everyday life situations and in times of crisis. Patients consider social support as essential for their life to cope with the diagnosis and treatment. Patients' needs for social support vary throughout the course of the disease.

The aims of this study are: to examine the level of the quality of life of women with malignant gynaecological diseases, to examine the level of perceived social support of women with gynaecological diseases and to examine correlations between levels of the quality of life and perceived social support of women with gynaecological diseases.

Subjects and Methods

Subjects

The study was designed as a cross-sectional study conducted in the Department of Gynaecology and Obstetrics, Sestre milorodne University Hospital Center, Zagreb. Participants were women with malignant gynaecological diseases. A total of 99 women participated in this study. The study was approved by the Hospital Board of Ethics, according to the Declaration of Helsinki Ethical Principles for Medical Research Involving Human Subjects.

Instruments

Participants filled out: The World Health Organization Quality of Life Brief Version (WHOQOL-BREF) is a shortened version of WHOQOL-100 questionnaire. Participants have to evaluate their quality of life in the last two weeks on a 5-point Likert scale. It consists of 24 items within four domains (physical health, psychological health, social relationships and environment) and two additional items (question about an individual's overall perception of quality of life and question about an individual's overall perception of their health). The WHOQOL-BREF produces a quality-of-life profile. Mean scores from each domain are transformed to a 0-100 scale, and total of quality of life is a sum of all 26 items (max 130) [9]. Multidimensional Scale of Perceived Social Support (MPSS) (10) is a scale for measure perceived social support from family, friends and significant other, as well as overall social support. The scale consists of 12-item and there are no established population norms. The norms can vary depending on culture, age, sex. Authors recommend looking at how social support differ between different groups, or how social support is related with some other variables. Using the scale in such a way, mean scale score ranging from 1 to 2.9 could be considered low support; a score of 3 to 5 could be considered moderate support and from 5.1 to 7 as high support. General data questionnaire Information about age, marital status, education, working, income assessment, residential area, length of treatment and the site of carcinoma were collected with a general data questionnaire.

Results

A total of 99 women participated in this study, average age $M = 62.54$; $SD = 10.94$. Most of them have a high school education (47.5 %), followed by college education (30.3 %), elementary school (16.2 %), and unfinished elementary school (6.1 %). Of all respondents, 58.6 % were married, 5.1 % of them had partner but were not married, and 36.4 % were single. Employed were 37 women (37.4 %), 6 were (6.1 %) unemployed and 56 retired (56.6 %). Most of them, 66 women estimated their regular income and lifestyle as average (66.7 %). Thirteen of them (13.1 %) estimate it as little below average and

3 (3.0 %) significantly below average. Sixteen of them (16.2 %) estimate it as little above average and 1 of them (1.0 %) significantly above average. In a city with more than 100,000 inhabitants, 59 (59.6 %) women live. Sixteen (16.2 %) live in a city with up to 100000 people and 24 of them (24.2 %) live in the countryside. The average length of treatment is 27.67 months. Participant had an average 1.73 births. Only two women were members of some cancer association. Treated by surgery alone were 63.6 % of participants, 16.2 % by surgery and radiation therapy, 10.1 % by surgery and chemotherapy, 7.1 % by surgery, radiation therapy and chemotherapy, 2 % by radiation therapy and 1 % by radiation therapy and chemotherapy. Primary cancer site was endometrial in 69.7 %, ovary, fallopian tube, or peritoneum in 13.2 %, cervical cancer in 12.1 %, uterine sarcoma in 1 %, vulvar cancer in 2 %, and breast cancer in 2 %.

Mean values and standard deviations for quality of life and social support are in Table 1. According to the author's recommended cut-off scores for social support, it can be observed that total social support, as well as social support from all three sources are in range of high support. But, participants perceived social support from friends significantly lower than support from family ($p = 0.000$) and from significant other ($p = 0.000$). To examine correlations between age, length of treatment, total quality of life, physical health, psychological health, social relationships, environment, total social support, social support from family, social support from friends and social support from significant other Pearson's correlation coefficients were calculated (Table 2). Results showed that as the age of participants increases, their assessment of physical health, psychological health

Table 1. Means and standard deviations for investigated variables

	M	SD
Physical health	70.06	7.15
Psychological health	68.83	17.74
Social relationships	63.44	18.85
Environment	74.67	16.89
Total quality of life	98.89	15.23
Total social support	6.1	0.95
Social support from family	6.32	0.99
Social support from friends	5.54	1.68
Social support from significant other	6.38	0.95

and quality of life decreases. Length of treatment was not significantly correlated to any of investigated variables. Domains of quality of life were significantly correlated with total quality of life which was expected because since they are an integral part of the quality of life. The same applies to social support and its components (social support from family, social support from friends, social support from significant other), where significant correlations can also be observed. Total quality of life was significantly correlated with social support, social support from family, social support from friends and social support from significant other, as well as all four domains with social support and its components. In other words, participants who evaluated their quality of life,

Table 2. Pearson's correlation coefficients between investigated variables

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1. Age	1	0.104	-0.227*	-0.107	-0.214*	-0.075	-0.207*	-0.110	-0.082	-0.118	-0.112
2. Length of treat.		1	0.780	0.661	0.986	0.790	0.774	0.886	0.654	0.984	0.653
3. Physical health			1	0.590**	0.373**	0.545**	0.780**	0.437**	0.387**	0.373**	0.283**
4. Psych. helath				1	0.574**	0.740**	0.880**	0.494**	0.416**	0.443**	0.340**
5. Soc. realtionships					1	0.620**	0.683**	0.624**	0.408**	0.607**	0.397**
6. Environement						1	0.884**	0.484**	0.393**	0.435**	0.306**
7. Quality of life							1	0.563**	0.449**	0.508**	0.353**
8. Social support								1	0.797**	0.827**	0.797**
9. Support family									1	0.319**	0.718**
10. Support friends										1	0.370**
11. Support oth.											1

* correlation is significant at the 0.05 level

**correlation is significant at the 0.01 level

physical health, psychological health, social relationships and environment better, also report on better social support, as well as social support from family, friends and significant other.

Discussion

The diagnosis of a malignant disease itself can cause disorders in many aspects of life, all of which can affect the quality of life. Women may feel fear of pain, treatment, side effects of treatment, disability, progression of disease. Apart from physical difficulties patients may also have fear for their relationships because their body change (e.g., hair loss during chemotherapy), they often become physically and sexually weak, and they are dependent on other people's care. They are often unable to work, so worries about finances also arise. There are also thoughts about the organization of the health system, because the centers that can provide them with help are sometimes not close. The thoughts that sometimes occupy us all about the end and meaning of the life, in patients suffering from cancer come more and more often [11,12]. Women with cancer need to adapt to this life-threatening disease and to cope with many problems, and all that has a strong impact on the emotions and QOL. Being suddenly confronted with a life-threatening disease and the serious physiological side effects associated with cancer treatment may lead to deterioration of daily life and social activities. Our study shows that as the age of participants increases, their assessment of physical health, psychological health and quality of life decreases, but there are also different results in the literature who found no quality-of-life differences be-

tween older and younger patients, or that quality of life is better in older patients [13,14]. Length of treatment was not significantly correlated to any of investigated variables in our study, as well as in another studies [14]. Quality of life were significantly correlated with total quality of life, as expected. Social support is a powerful tool that can mediate the quality of life [15] as we showed in our investigation. Total social support, as well as social support from family, significant other and friends, although from friends significantly lower than support from family and from significant other. As is already known in the literature, women, unlike men, rely more on the family [16]. Many studies show a significant improvement in the quality of life of patients participating in cancer support groups [17,18].

Although cancer associations which provide psychological help to cancer patients and cancer support groups exist in Croatia only two patients accepted such help. As studies show that patients attending support groups had higher annual income and education levels, maybe work should be done on better educating patients on what they can get in such centers. Until then, family, partners and friends will remain the main support for our patients.

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Conflict of Interest

None to declare.

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