



## **Assessment of Pain, Acceptance of the Disease, Adaptation to Life and Strategies for Coping with the Disease among Patients with Ovarian Cancer**

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### **Dear Editor-in-Chief**

Ovarian cancer is the fifth cancer in terms of incidence and the fourth in terms of mortality among women in Poland and constitutes 4.6% of all cancers. Since the vast majority of ovarian cancer cases are diagnosed at an advanced clinical stage, the intensive therapy may cause numerous side effects which significantly affects the patients' quality of life.

The objective of the study was to evaluate the strategy of coping with pain and its control, acceptance of the disease and adaptation to life with cancer in patients with ovarian cancer. The analysis also included the impact of socio-economic factors (education, professional status, income, place of residence) and chemotherapeutic treatment on the above-mentioned issues.

The study was conducted among 177 patients diagnosed with ovarian serum cancer under outpatient control at the Oncology Center– Maria Skłodowska-Curie Institute in Warsaw, Poland in 2018. Patients gave informed consent before the study.

The questionnaire interview included metric questions (socio-economic variables) and four psychometric tests: 1) The Beliefs about Pain Control Questionnaire; 2) The Pain Coping Strategies Questionnaire; 3) The Approval Illness Scale; and 4) The Mental Adjustment to Cancer (Mini-MAC).

Women diagnosed with ovarian cancer are characterized by increased feelings of anxiety or suffering, which is a consequence of stress associated with the disease, which may result from a sense of loss of control over their lives. Over 20% of women with ovarian cancer have symptoms of clinical depression (1). Moreover, younger women experience greater negative feelings associated with the disease, which may be related to fear of infertility. In this study we found that for patients with ovarian cancer, among the socio-economic variables, age, education, place of residence, income and professional status were key to controlling pain. Age differentiated the average value attributed to random events ( $r=0.172$ ). Older patients attributed greater importance to this area in controlling pain. Among the socio-economic variables, age of the respondents was the most important in explaining the differences between the obtained results. There were statistically significant positive correlations between age of the respondents and ignoring sensations ( $r=0.254$ ), praying/hoping ( $r=0.323$ ), declaring coping ( $r=0.248$ ) and increased behavioural activity ( $r=0.231$ ). The size of the place of residence, the professional status and the fact of treatment with chemotherapy over the last year proved to be irrelevant for the pain management strategy. The Iranian study of



pain coping strategies among patients with different types of cancer confirmed that the majority of cancer patients (63.3%) are characterized by a praying/hoping strategy ( $M=25.82$ ,  $SD=7.86$ ) and declaring coping ( $M=22.13$ ,  $SD=10.34$ ) (2).

Analysis of the level of acceptance of the disease by oncological and non-oncological patients hospitalized in the Department of Surgical Gynaecology and Gynaecological Oncology showed statistically significant ( $P < 0.000$ ) differences between them. Oncological patients obtained lower results ( $M=20.68$ ) in this range than non-oncological patients ( $M=32.22$ ). Oncological patients were characterized by a higher level of anxiety (3). The level of acceptance of the disease among patients with ovarian cancer was  $M=26.73$  ( $SD=7.28$ ) and it was higher in people with higher income and patients who had not undergone chemotherapy.

Patients with ovarian cancer are characterized mainly by active psychological adaptation to the disease – the highest-ranked strategy in the MiniMAC test were fighting spirit ( $M=22.34$ ,  $SD=3.95$ ) and positive revaluation ( $M=21.91$ ,  $SD=3.32$ ), while the lowest was helplessness-hopelessness ( $M=13.06$ ,  $SD=4.55$ ). According to many studies, with age, patients obtained higher average results of the MiniMAC test (4). The education of patients affected the area of anxiety ( $P=0.034$ ). Significant differences were obtained between patients with primary/vocational education ( $M=17.78$ ,  $SD=3.59$ ) and patients with secondary education ( $M=15.77$ ,  $SD=4.35$ ). Patients with higher education achieved a similar value of anxiety as people with primary/vocational education ( $M=17.17$ ,  $SD=4.27$ ). Chemotherapy did not affect the manner of mental adjustment to the disease among patients with ovarian cancer ( $P>0.05$ ). In the case of patients with ovarian cancer in our study, income conditioned the results of patients obtained in the area of helplessness/hopelessness. Lower income per household member was associated with an increase in the value of the helplessness/hopelessness area ( $P=0.021$ ) in patients. Persons with lower income achieved a higher result in this area ( $M=13.94$ ,  $SD=4.53$ ) compared to people with higher income ( $M=12.45$ ;  $SD=4.49$ ). The results of the study also indicated that patients who responded to the dis-

ease with a sense of helplessness, hopelessness and anxiety, showed a higher degree of side effects of chemotherapy.

In conclusion, considering the location of pain control, patients with ovarian cancer attributed the greatest role to internal factors and the influence of physicians, and the smallest to random events. Moreover the location of pain control seems to be conditioned by socio-economic variables. The level of acceptance of the disease depends on the income of patients with ovarian cancer. The higher the income, the higher the acceptance of the disease. Actions of medical personnel in the case of patients with ovarian cancer should include not only treatment and nursing services, but also a systematic assessment of the achievement of established therapeutic goals, and also educational activities based on the area of psychology, such as shaping patients' acceptance of the disease, responsibility for their health or dissemination of knowledge about how to improve the quality of patients' life.

## Conflict of interest

The authors declare that there is no conflict of interest.

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