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# RELATIONSHIP BETWEEN COGNITIVE AND AFFECTIVE DISORDERS IN OVARIAN CANCER PATIENTS

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Thesis for the degree of Doctor of Philosophy in the Psychological Sciences
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This is a major study investigating the prevalences of and relationships among cognitive and affective disorders among ovarian cancer patients, carried out in St. Petersburg, Russia. In addition, it explored several additional factors that could affect the patients' quality of life. The study has already resulted in thirteen peer reviewed publications.

### A list of some notable results:

- Patients with ovarian cancer have impaired cognitive functioning in several domains, particularly motor speed and information processing speed. There is less impairment for executive functioning.
- There is a high level of depression among patients, though both depression and anxiety manifestations can be masked by somatic complaints.
- Advanced stages of the disease and anxiety and depression are associated with higher risk of cognitive impairment. Younger women are more vulnerable to anxiety and depression than older women.
- Affective disorders are associated with all aspects of life for these patients, and they in turn are related to problems with cognitive functioning. This is shown to be particularly the case for hostility and aggression.
- Quality of life is negatively related to anxiety and depression, and with cognitive dysfunction.
- A battery of tests has been shown to be usable in the hospital with seriously ill cancer patients.
- A factor structure of cognitive disorders has three factors: memory and semantic plasticity; planning; and coordinated mental activity.
- Subjective self evaluation of cognitive functioning does not reflect objective cognitive disorders.

- There is no significant relationship between chemotherapy courses or regimens and cognitive disorders.
- Depression with organic background is related to memory disorders.
- There are significant relationships between attitude to disease and cognitive functioning a relationship (one among several) not previously analyzed.

## Some of the important conclusions:

- The prevalence of cognitive disorders is high.
- Causes of cognitive disorders are multiple and heterogeneous.
- The level of anxiety is not elevated, but that of depression is elevated.
- Affective disorders are associated with somatic symptoms.
- There is impaired quality of life.
- Both affective and cognitive disorders are associated with lower quality of life, and severity of hostility and aggression.

## Two points of practical relevance seem particularly important:

- There are four major risk groups: young women, advanced stages, metastatic type, disease complications.
- Somatic complaints can mask anxiety and depression.

This is a well conceived, well implemented, substantial study with important results (as evidenced by, among other points, the publications already produced). I strongly recommend it as satisfying the requirements for a Ph.D. dissertation.

Sincerely yours,

Mark H. Bickhard