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Articles

**Assessment of anxiety and depression in patients with advanced gynaecological cancer**

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**Abstract**

Background: Anxiety and depression disorders are common in palliative care. The impact of these disorders on quality of life and on existential concerns is strong. This research was performed to assess the prevalence of anxiety and depression in patients with advanced gynecological cancer.

Materials and Methods: We conducted a prospective study over a period of 2 years in 98 patients with advanced gynecological cancer. The 98 patients included in the study were divided into two categories by age (under 55 years and over 56 years). The patients were evaluated at first admission (Basic visit) and after 3 months (Follow up visit), by means of 1 questionnaire: Hospital Anxiety and Depression Scale – HADS.

Results: The percentage of women who experience abnormal level of anxiety is: 13,73% for the first category of age (under 55years) and 12,77% for the second category of age (over 56 years) at Basic visit, while, at Follow up visit, the percentage is 15,69% for the first category of age and 19,15% for the second category of age. The percentage of women who do experience abnormal level of depression at Basic visit is 11,76% for the first category of age and 12,77% for the second category of age, while, at Follow up visit, the percentage is 9,50% for the first category of age and 25,53% for the second category of age. There is a statistical difference between Basic visit and Follow up visit in patients from the second category of age, the percentage of women who experience abnormal level of depression is increasing from 12,77% to 25,53%.

Discussions and Conclusions: Anxiety and depression are reported to impact significantly on quality of life of palliative care patients with advanced gynaecological cancer. In conclusion, continuous screening for anxiety and depression is recommended as a necessary approach for patients with advanced gynaecological cancer.

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**1. Introduction**

Cervical cancer is the third most prevalent cancer (9%) worldwide, and the fourth cause of cancer mortalities (8%) in women (Small et al., 2017). This cancer is a risk factor for developing

depression in women, having a negative impact to their quality of life or to their compliance with the treatments. Ovarian cancer is the eighth most commonly occurring cancer in women.

Women with advanced ovarian cancer are at persistent risk of anxiety and reactive depression due to poor prognosis and risk of burdensome symptoms (Mielcarek et al., 2016).

In a study evaluating psychological distress in patients with ovarian cancer, Bodurka et al. identified that depression and anxiety rates were 21% and 29% (Bodurka-Bevers et al., 2000).

Depression affects up to 20%, and anxiety 10% of patients with cancer (Pitman et al., 2018). These two symptoms are often assessed together (Brintzenhofe-Szoc et al., 2009). Anxiety often precedes depression. Anxiety and depression disorders are common in palliative care. The impact of these disorders on quality of life and on existential concerns is strong (Settineri et al., 2012; Martino et al., 2018a, 2018b; Catalano et al., 2018).

Different medical conditions are characterized by experiences and psychological aspects whose relevance affects the general dynamics of self-adaptation and representation (Marchini et al., 2018). This emerges as a sense of relevant loss, which is central to the psychological and psychopathological consideration of patients.

There is an association between anxiety and depression and physical symptoms (pain, fatigue, weight loss) (Mazilu et al., 2019; Ciocirlan et al., 2017; Ciuhu et al., 2017). Also, these disorders can make the management of physical symptoms (Wilson et al., 2007; Rahnea et al., 2016; Settineri et al., 2018) and adherence to therapies more difficult (Settineri et al., 2019).

Anxiety and depression are under detected and undertreated in palliative care patients with advanced cancer;

this symptoms create unnecessary suffering (Nitipir et al., 2018). About 15% of palliative care patients meet criteria for major depressive disorder and many more experience depressive symptoms (Hotopf et al., 2002).

Anxiety disorders have been studied less extensively than depression and is not only associated in the oncology pathology, but is also common in other pathologies such as diabetes or post-gastric-sleeve (Timofte et al., 2018a; Timofte et al., 2018b; Zugravu et al., 2012; Stark et al., 2002).

This research was performed to assess the prevalence of the anxiety and depression in patients with advanced gynecological cancer.

## 2. Materials and Methods

We conducted a prospective study in patients with advanced gynecological cancer admitted to “Prof. Dr. Alexandru Trestioreanu” Oncological Institute and “Saint Luca” Hospital of chronic diseases – Oncology – Palliative Care Department.

A number of 98 female patients were included in the study. The 98 patients included in the study were divided into two categories, by age (under 55 years and over 56 years).

The patients were evaluated at first admission (Basic visit) and after 3 months (Follow up visit), by means of 1 questionnaire: Hospital Anxiety and Depression Scale – HADS (Appendix 1) (Zigmond & Snaith, 1983).

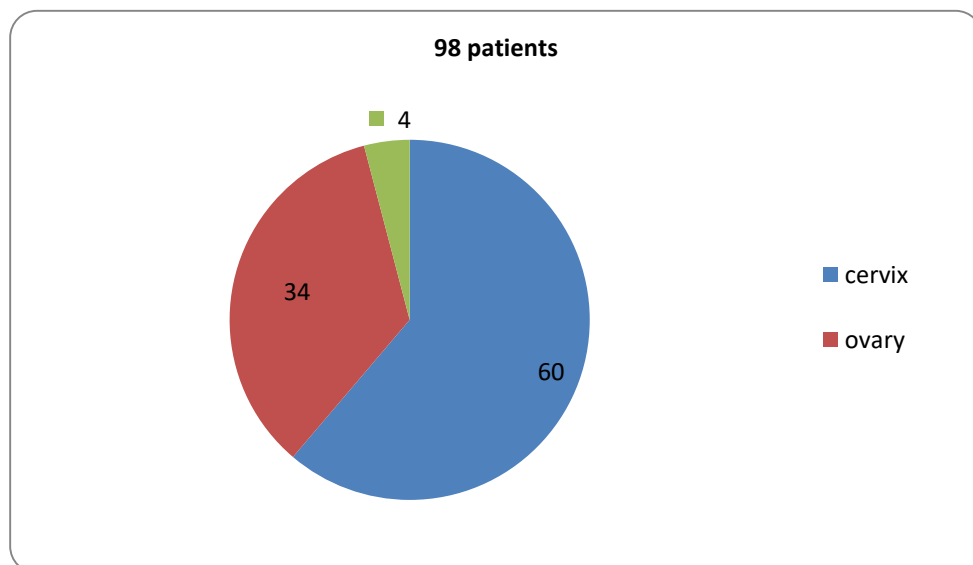
HADS is free and available online. It is a self-report measurement tool designed for assessment depression and anxiety. Responses provided separate scores for anxiety and depression (each of anxiety or depression scale has a score range of 0-21. Total score is: 0-7 = Normal, 8-10 = Borderline, 11-21 = Abnormal).

The questionnaire was completed by the patients during their admission in the hospital or by telephone interview.

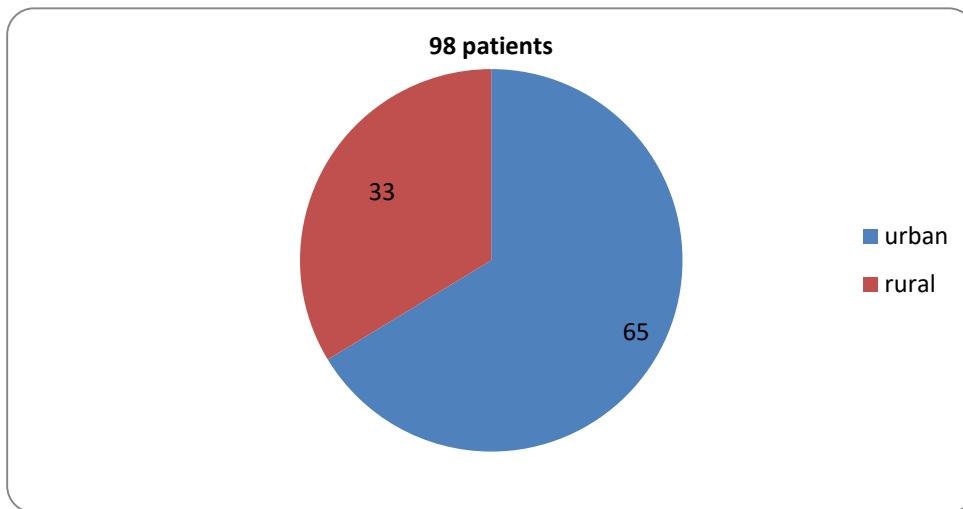
The approval from the Ethical Commission has been previously obtained. The patients were explained about the purpose and importance of the study and they freely agreed to participate in the study by signing the informed consent.

## 3. Results

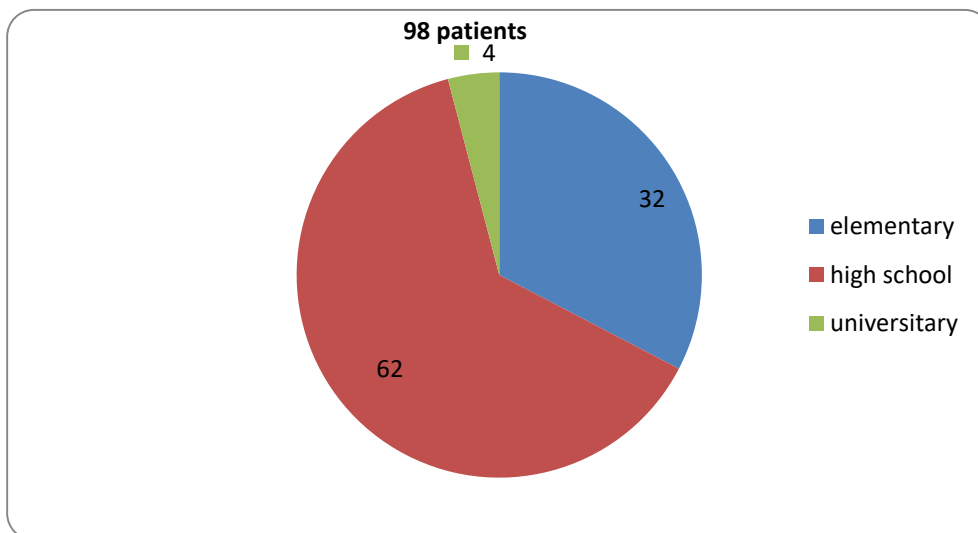
**Fig 1.** Patients distribution according to the diagnostic (cervical, ovarian, endometrial)



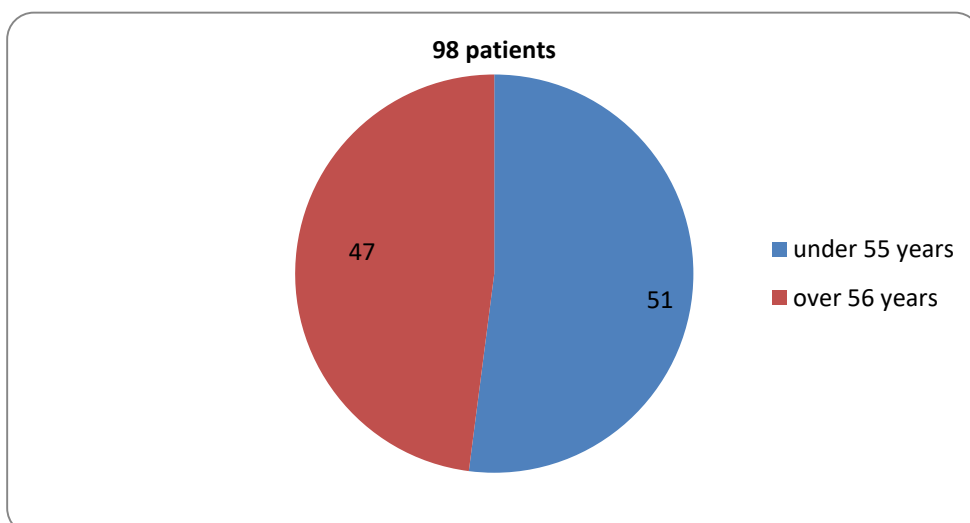
**Fig 2.** Patients distribution according to the life environment (urban, rural)



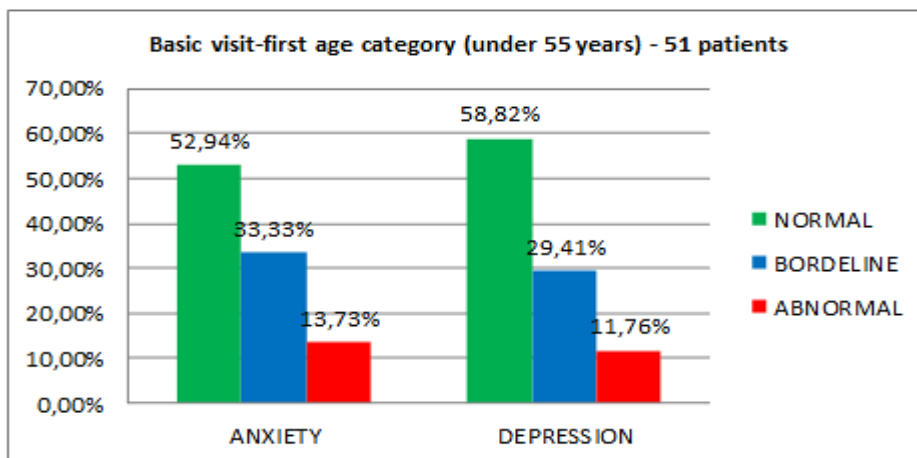
**Fig 3.** Patient's distribution according to the studies (elementary, high school, university)



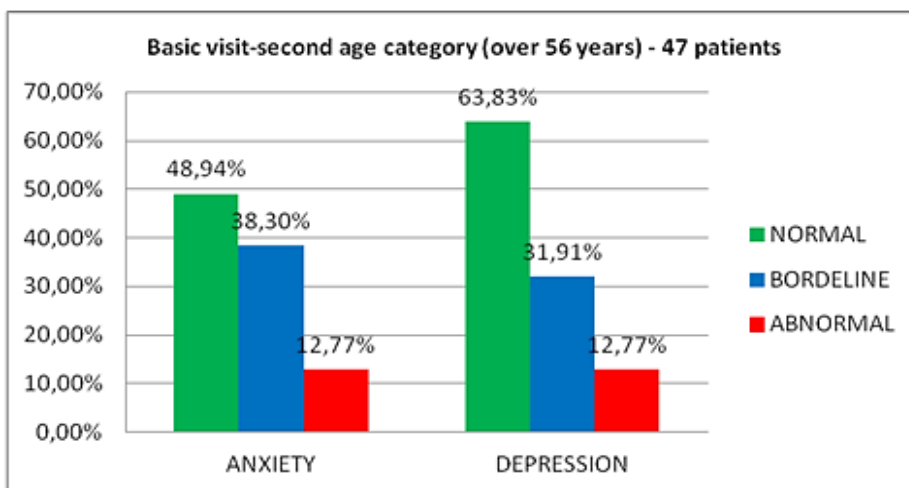
**Fig 4.** Patient's distribution according to the age category (under 55 years, over 56 years)



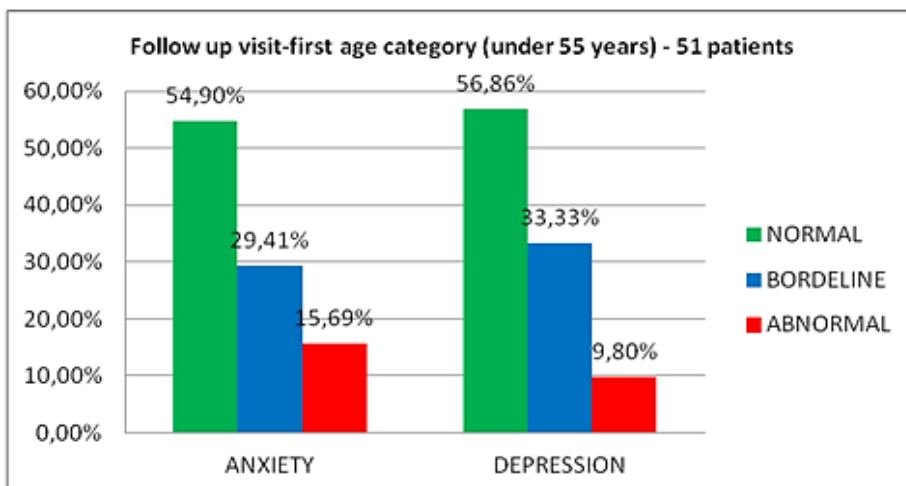
**Fig 5.** HADS- Basic visit-first age category (under 55 years) (anxiety: normal, borderline, abnormal; depression: normal, borderline, abnormal)



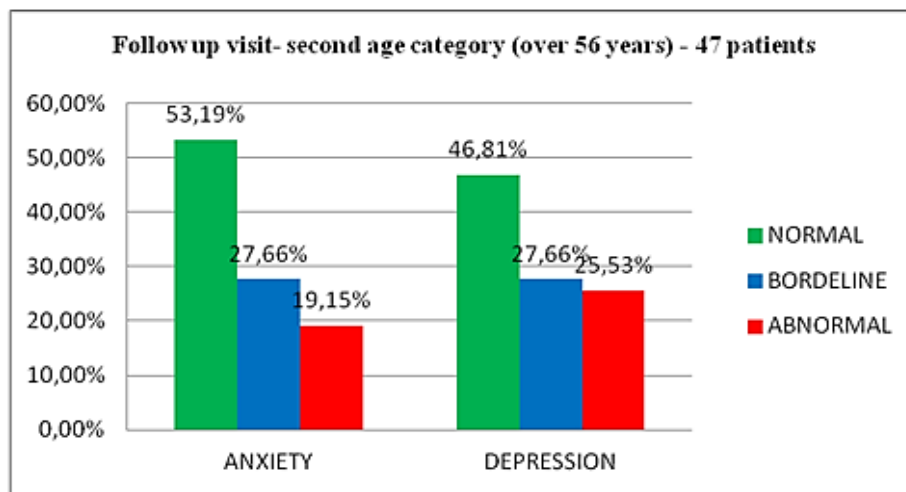
**Fig 6.** HADS Basic visit - second age category (over 56 years) (anxiety: normal, borderline, abnormal; depression: normal, borderline, abnormal)



**Fig 7.** HADS - Follow up visit - first age category (under 55 years) (anxiety: normal, borderline, abnormal; depression: normal, borderline, abnormal)



**Fig 8.** HADS Follow up visit - second age category (over 56 years) (anxiety: normal, borderline, abnormal; depression: normal, borderline, abnormal)



#### 4. Discussions

Anxiety and depression have physical and psychological symptoms (Settineri et al., 2019). They are associated with impaired physical, social, and family functioning (Jones, 2001). Patients with anxiety experience tension, insomnia, hyperactivity, breathlessness and numbness. The severity of symptoms can include generalized anxiety, panic disorder and social anxiety.

Patients with depression experience hopelessness, guilt and also, suicidal thoughts. Other symptoms of depression are fatigue and loss of energy, decreased ability to concentrate, difficulty making decisions and memory problems. Risk factors for anxiety and depression are: mental disorders, severe physical symptoms, poor relationships and communication between medical team and patient, history of mood disorder or alcohol or drugs abuse, personality disorders and social difficulties.

Depression and anxiety do not represent the understandable reactions to incurable illness. It is an error of approach them in this way because the lack of diagnostic of this symptoms can result in an undertreatment of a psychiatric disorder (Barracough, 1997). Cancer can cause uncertainty regarding diagnostic, prognostic, and also fears about dying and death. Physical symptoms such as pain and nausea, loss of functional capacity, loss of independence can influence negatively the life of the patient. Practical issues such as work, finance can appear.

In patients with gynaecological cancers, changes in body image, sexual dysfunction, infertility affect dramatically their quality of life (Hutter et al., 2013). Depression and anxiety frequently occur in oncology patients and have an important impact even regarding the disease outcome

(Jones, 2001). These two symptoms have to be regarded as indicators of quality of life rather than determinants (Hutter et al., 2013).

Diagnosis of depression and anxiety may be facilitated by using screening tools (Jones, 2001).

HADS focuses on non-physical symptoms, it is easy for use. The HADS questionnaire has been validated in many languages and countries. This measure was intended to be used by hospital staff to determine if patients (outpatients, inpatients) are experiencing psychological distress. The scale has fourteen items, seven of them measure depression and seven of them measure anxiety. Scores on the scale are intended to provide a method of determining patients' psychological distress in terms of these two common emotional disorders. HADS contribute to the selection of patients with psychologically distress.

It is important to recognize anxiety and depression, because poor recognition of these symptoms is associated with low quality of life and also, survival. Clinicians should assess and monitor patients for both anxiety and depression on a regular basis. Some patients with anxiety may require intervention and some may not. Addressing their concerns directly, and controlling symptoms is enough for some of them. For patients with depression it is important to determine whether to use pharmacotherapy for depressive symptoms or to explore the concerns of the patient. Patients with elevated level of these two symptoms may benefit from treatment and from more intensive monitoring. Management for gynecological cancer patients should include a screening questionnaire for psychological distress, and, for those whose screening indicates depressive and anxiety symptomatology, referral to a specialist for further evaluation. Coping strategies are very important in patients quality of life and their psychosocial adaptation to cancer. Psycho-oncology support programs are needed to help patients using coping strategies to improve overall quality of life (Tarik, 2014).

We analyzed the results obtained from the questionnaire Hospital Anxiety and Depression Scale.

Regarding anxiety: The percentage of women who experience abnormal level of anxiety is: at Basic visit- 13,73% for the first category of age and 12,77% for the second category of age, while, at Follow up visit, the percentages are 15,69% for the first category of age and 19,15% for the second category of age. Regarding the level borderline, at Basic visit, the percentages are: 33,33% of patients for the first category of age and 38,30% for the second category of age. At Follow up visit, the percentages are 29,41% for the first category of age and 27,66% for the second category of age. Regarding the level normal, the percentages of patients, at Basic visit are: 52,94% of patients for the first category of age and 48,94% for the second category of age. At Follow up visit, the percentages are 54,90% for the first category of age and 53,19% for the second category of age.

Regarding depression: The percentage of women who do experience abnormal level of depression at Basic visit - 11,76% for the first category of age and 12,77% for the second category of age, while, at Follow up visit, the percentage is 9,50% for the first category of age and 25,53% for the second category of age. There is a statistical difference between Basic visit and Follow up visit in patients from the second category of age, the percentage of women who experience abnormal level of depression is increasing from 12,77% to 25,53%.

Regarding the level borderline, the percentage of patients at Basic visit, is: 29,41% of patients for the first category of age and 31,91% for the second category of age. At Follow up visit, the percentage is 33,33% for the first category of age and 27,66% for the second category of age.

Regarding the level normal, the percentage of patients at Basic visit, is: 58,82% of patients for the first category of age and 63,83% for the second category of age. At Follow up visit, the percentage is 56,86% for the first category of age and 46,81% for the second category of age. There is a statistical difference between Basic visit and Follow up visit in patients from the second category of age, the level normal is decreasing from 63,83% to 46,81%.

## 5. Conclusions

Hospital anxiety and depression scale (HADS), developed by Zigmond and Snaith in 1983 is a useful instrument for detecting and screening depression and anxiety in clinical settings (Balescu et al., 2018; Nikbakhsh et al., 2014). In terms of Anxiety, the level of this symptom is high, both age category have abnormal and borderline anxiety, at Basic visit and at Follow up visit. In terms of Depression, the level of this symptom is, also, high. There is a statistical difference between Basic visit and Follow up visit in patients from the second category of age, the level abnormal is increasing from 12,77% to 25,53%. Anxiety and depression are reported to impact significantly on quality of life of palliative care patients with advanced gynecological cancer (Balescu et al., 2018). In conclusion, continuous screening for anxiety and depression is recommended as a necessary approach for patients with advanced gynecological cancer (Badiu et al., 2018; Paduraru et al., 2018).

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