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# NEGATIVE EMOTIONAL STATES OF PATIENTS WITH ONCOLOGICAL DISEASE AND SOCIAL SUPPORT

**Abstract:** For many people diagnosed cancer and the treatment process is connected with emergence and long-term existence of many negative emotions such as: depression, anxiety and stress. The aim of this study was to evaluate the intensity of negative emotional states of people diagnosed with cancer and the need for social support, as well as, exploration of the interdependence between these variables. Statistical analysis showed a significant correlation between the occurrence of disorders and border states, of both anxiety and depressive character and high level of stress in the test.

Key words: stress, anxiety, depression, support, oncological disease.

### INTRODUCTION

For many people diagnosed cancer and the treatment process involve emergence of long-term existence of many negative emotions responsible for inducing stress, which, within a group of young adults, can further jeopardize the attainment of important tasks and life plans. Negative emotions, in particular depressive disorders, are characterized by depressed mood, slower psychomotor drive and the possibility of occurrence of suicidal thoughts and even psychotic symptoms, or may take the form of "masks" under the somatic symptoms [1–3]. In turn, anxiety disorders can occur independently of the present phase of the disease, and appear on emotional, behavioural and somatic levels [4], thus determining patient's quality of life and even therapeutic success. In coping with stress, which undoubtedly is connected with cancer, social support for patients may gain relevance.

Social support is regarded as an important element in coping with stress, and shapes the overall attitude of the individual towards difficult situations [5]. Social support can be defined as a social interaction, which is undertaken by one or both parties in a difficult situation; in the course of which there is an exchange of emotions, material goods, action instruments and messages. The aim of support should be creating the atmosphere of belonging and security, as well as, providing assistance in overcoming problems and reducing the level of

stress [6]. There are several divisions of support in functional terms: informational support (information to better understand the situation), emotional support (showing care and positive attitude), instrumental support (transfer of specific behaviours to better cope with situation), material support (financial resources) and spiritual support [5–7].

Social support can be viewed in structural terms, i.e. existing social networks which play a helpful role in relation to individuals who found themselves in a difficult situation. It has been shown, that one of the most important features of this approach to support is its availability. Another dimension is the source of social support, which depend on whom one sees as a person or a group on which one can count on in a difficult situation. Division of support also includes perceived support (the conviction of the presence of people who can help) and received support (actually delivered kind of support). The final dimension of support is the existence of need for support and its mobilization. High need for support is associated with openness to others and trustfulness, and low need for support is combined with strong need for independence and autonomy. Mobilization of support is the ability to create and sustain a network of mutual support [5, 8].

Oncological disease, meaning a loss of control over the situation, dependence on the therapeutic team and a sense of helplessness, implies that patients undoubtedly need special support provided by the therapeutic team and, in particular, by those team members who accompany the patient for the longest period of time in the fight against disease i.e. nursing personnel [5, 7, 9, 10]. This part of the therapeutic team should in a professional way (at the level of pre-screening examination) identify those patients whose emotional state is of concern, and who should be taken care of by a psychologist or a psychiatrist in the first place.

Support for a patient with cancer is an area of research that still needs to be further expanded. Empirical knowledge of the relationship between social support and emotional states of patients with cancer, may allow the identification of negative emotions, sources of support and the possibility of its acquisition. Increasing the possibility of obtaining support for patients may result in a decrease in anxiety, depression and stress. Thus, it seems reasonable to evaluate the intensity of negative emotional states of people diagnosed with cancer and the need for social support, and exploration of interdependence between these variables, while also assessing the suitability of the tools used to measure emotional states.

#### AIM

The aim of this study was to evaluate the intensity of negative emotional states of people diagnosed with cancer and the need for social support, as well as, exploration of the interdependence between these variables.

#### MATERIALS AND METHODS

The study was anonymous, based on freely expressed consent. It included 40 people — 19 women and 21 men with cancer at the age of 20 to 44 years (young adults), who were patients from Malopolska and Podkarpacie regions. Urban areas were inhabited by 52.5% (N = 21) while rural areas were inhabited by 47.5% (N = 19) of patients. Most of the patients in the study — 77.5% (N = 31) were undergoing chemotherapy treatment, 12.5% (N = 5) were during radiation therapy, and the remaining 10% (N = 4) of respondents were subjected to both chemotherapy and radiotherapy. Among those participating in the survey — 47.5% (N = 19) were not previously hospitalized in connection with the course of cancer, as opposed to 52.5% (N = 21) of patients for whom stay in a hospital ward was not a new experience. The duration of the disease ranged from 6 months to over a year.

The study was conducted with the use of the Distress Thermometer defining subjective level of stress on a visual scale of 0 to 10, and the existence of problems in the field of psycho-physical and social conditions in the course of the disease, HAD scale study of anxiety and depression, and author's own questionnaire about the sources of support and availability of support from a medical team taking part in the treatment.

Statistical analysis was prepared with the use of statistical package Statistica (StatSoft). Chi-square test Yates' corrected was used. The result statistically significant was decided to be p < 0.05.

#### RESULTS

Analysis of the responses to the Distress Thermometer showed that 55.0% of respondents (N = 22) had low level of stress, while its high level occurred in 45.0% (n = 18) of them.

In connection with cancer 80% of patients (N = 32) frequently felt nervousness, 50% of respondents (N = 20) experienced sadness, and 75% of them (N = 30) were worried. Feeling of fatigue affected 65% of patients (N = 26), and for 42.5% (N = 17) the biggest problems were related to education/school and professional life.

The results obtained by analysis of HAD scale showed that anxiety disorder occurred in 37.5% (N = 15), and border state concerned 15.0% of patients (N = 6). Depressive disorders occurred in 17.5% of patients (N = 7) and close to depression disorders in 27.5% of them (N = 11).

Analysis of the author's questionnaire allowed to determine that 82.5% of patients (N = 33) felt strong need for support, in contrast to 17.5% of respondents (N = 7) who felt weak need for support .

The main source of support for 80.0% of respondents (N = 32) was a doctor, for 75.0% of respondents (N = 30) it was nursing staff, and a psychologist was

indicated by 15.0% of them (N = 6). Family and friends as a source of support were identified by 77.5% of patients (N = 31) — details in Table 1.

 $$\operatorname{Table}\ 1$$  Frequency of selecting particular sources of support among respondents — based on author's questionnaire.

Sources of support	People who chose a particular answer	
Doctors	80%	n = 32
Family and friends	77,5%	n = 31
Nurses	75%	n = 30
Psychologist	15%	n = 6
I prefer to overcome difficulties myself without involving others	7,5%	n = 3
Patients from hospital room	5%	n = 2
Support groups (associations, charity institutions, etc.)	2,5%	n = 1
Clergymen	2,5%	n = 1

Percentage results do not add up to 100% — respondents could select more than one source of support.

For 60.0% of respondents (N = 24) nurses definitely proved to be caring people, showing a positive attitude towards patients (perceived emotional support), and the information they sent for 65.0% of patients (N = 26) definitely allowed them to find themselves in the situation associated with the disease and better understand it (perceived informational support). For 65.0% of respondents (N = 26) instructions about the disease and treatment provided by a team of nurses were specific and clearly defined (perceived instrumental support). This position was adopted by 72.5% (N = 29) of patients in terms of getting help from the nurses when they needed it (perceived availability of support).

Statistically significant relationship between stress intensity and severity of anxiety was shown. The high level of stress was associated with a predominance of anxiety disorders and border states. Low level of stress was associated with a lack of anxiety disorders or their smaller intensity (Table 2).

Statistically significant relationship between the intensity of depression and intensity of stress in the group was also shown. High level of stress was associated with a predominance of depressive disorders and the occurrence of border states. Low level of stress was associated with the lack of depressive disorders or their lower intensity (Table 3).

 $$\operatorname{Table}\ 2$$  Correlation between the intensity of anxiety (HAD scale) and the level of stress (Distress Thermometer) among respondents.

Level of stress	No disorders	Border state disorders or anxiety present	Sum	
Low level of stress	15	7	22	Chi-square Yates'
Total percentage	37,500%	17,500%	55,000%	corrected 6.64 p = 0.0100
High level of stress	4	14	18	p = 0.0100
Total percentage	10,000%	35,000%	45,000%	
Total in column	19	21	40	
Total percentage	47,500%	52,500%		

Table 3

Correlation between the intensity of depression (HAD scale) and the level of stress

(Distress Thermometer) among respondents.

Stress intensity level	No depressive disorders	Border state or depression	Sum	
Low level of stress	18	4	22	
Total percentage	45,000%	10,000%	55,000%	Chi-square Yates'
High level of stress	4	14	18	p = 0.0006
Total percentage	10,000%	35,000%	45,000%	
Total in column	22	18	40	
Total percentage	55,000%	45,000%		

No statistically significant correlation between the severity of anxiety and the intensity of need for support (chi $_{\rm c}$  = 2.312708, p = 0.128) was indicated, similarly to the relationship between the intensity of depressive disorders and the intensity of need for support (p = 1.000). Also, analysis of the relationship between stress intensity and the intensity of need for support showed no statistically significant correlation (chi $_{\rm c}$  = 0.000, p = 0.769).

#### DISCUSSION

Knowing and understanding the intensity of negative emotional states of patients with cancer and their expectations related to support they need, seems to be very significant and conditioning the effectiveness of undertaken treatment. Cancer is seen as a situation causing stress and aggravating the patient and his family. Stress is a very popular term, but from a scientific point of view, not entirely unambiguous. Experts describe this concept in several slightly different ways. Because of this, the results of attempts to assess stress are very subjective. It do not release from attempts to seek and verify the tools that may help in a relatively fast and accurate way, with a screening assessment of the emotional state of patients. Given the subjectivity of assessment of stress, Stewart-Knight [11] and the team questioned the validity of the routine use of the Distress Thermometer in oncological patients, although it is recognized and widely used tool (mainly the United Kingdom and the United States). According to Stewart-Knight team's publication, it is not entirely clear what exactly the Distress Thermometer measures. In this article it was mentioned, that most often when using this tool, the results are compared with the use of the Hospital Anxiety and Depression Scale.

In own study, an attempt was made to verify this relationship — between the results of the Distress Thermometer and indications from the HAD scale. The obtained results show, that there is a statistically significant relationship between the stress intensity and the intensity of anxiety and depression measured by the HAD scale. Therefore, it can be assumed, that the Distress Thermometer is useful to pre-determine the nature of anxiety and depression disorders in cancer patients. Although, the results must be verified in further proceedings with the patient, the great advantage of the Distress Thermometer is its unusual simplicity and speed of checking patients' feelings.

Analysis of own results showed, that the five most common problems of patients are: nervousness, worry, fatigue, sadness, work and school. It may indicate that emotional problems are prevalent among other problems of cancer patients. Therefore, they should not be underestimated in the process of treatment [12–14].

Psychological support, which should be given to a patient, is a moral duty of every member of the care team (not just a psychologist), through the use of basic standards for psychological support [15–17]. The results of own research in this group of patients demonstrated that the vast majority of respondents, regardless of the level of stress, intensity of anxiety or depression, had a strong need for support. It confirms the validity of the above statement. The fact that cancer patients expect support from the nursing team is worth mentioning. Patients highly appreciated emotional, informational, and instrumental support, as well as, availability of nursing staff. It may be related to the amount of time that nursing personnel spend with patients, their accessibility and reliance. This fact is even more significant in connection with the results of own research, as well

as those conducted by Grabińska [12], which showed that there was a group of cancer patients undergoing chemotherapy and not benefiting from the help of a psychologist, and for whom this professional group was not the main source of support. This may suggest the need for greater prevalence of psychological support for patients during oncological therapy, and the need to better prepare other members participating in the treatment, not only psychologists or psychiatrists. The role of patients' family and friends as well as other oncological patients should not be underestimated while dealing with cancer. Therefore, it can be assumed, that medical personnel should pay attention to the relations between patients; if possible mitigate conflicts and strengthen positive relationships that will indirectly assist in the treatment process.

Striking is the fact resulting from own research, that only one of the respondents marked support groups, associations or self-help organizations as a source of support. Analyzing the study results of Ussher *et al.* [18] regarding the uniqueness of support received in support groups in relation to support received from family, it may be noted that support groups provide a special, positive sense of belonging to a community of people with a similar problem, mobilize to acquire knowledge about the disease and its treatment, and relieve psychologically family members of the patient. These results may suggest that belonging to support groups should be popularized among patients, because it would be helpful for both: patients and their whole families, as well as, medical staff.

Since the group participating in the study was too small, the results should to be treated with caution, and regarded as preliminary reports inspiring to expand research in this direction.

#### **CONCLUSIONS**

- 1. Substantial number of patients had high level of stress with anxiety disorders associated with depression. Careful attention should also be paid to patients with anxiety and depressive disorders experienced as a border state according to HADS.
- 2. Statistically significant correlation between the occurrence of disorders and border states of both anxiety and depressive character and high level of stress was shown in the test.
- 3. The five most common problems among the respondents were: nervousness, worry, fatigue, sadness, work and school, which indicated that emotional problems were dominant. At the same time, patients showed a very strong need to receive support.
- 4. No statistically significant relationship between the intensity of anxiety, depression and level of stress, and need for support among the study group was shown.

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