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## **Support received by women with breast cancer in the event of side effects of chemotherapy**

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Summary:

Admission.

Correct chemotherapy introduces many side effects. These effects, spread over time and in connection with a chronic disease such as breast cancer, put the patient in a crisis situation, which verifies the needs in terms of social support.

#### Goal:

Showing the type of social support expected and received by women treated with cytostatics for breast cancer.

#### Material and methods:

The study was conducted on a group of 110 women - patients of oncology departments of two Lublin hospitals diagnosed with breast cancer and during chemotherapy. The research tool was the author's questionnaire. The results from the obtained data were subjected to statistical analysis.

#### Results:

Patients expect information support about their illness and treatment from a doctor. In some respects, most of them receive such support. The respondents receive emotional support from their families, more than half of them received an offer of material support. There is a statistically significant relationship between education and the need for material assistance, and a relationship between the next cycle of chemotherapy and the demand for spiritual support.

#### Conclusions:

Patients treated with cytostatics, regardless of their level of education, expect information support from professionals. Such support cannot be provided by family or friends. They receive emotional support from loved ones, but during chemotherapy, the demand for spiritual and material support increases, regardless of education.

Key words: breast cancer, chemotherapy, social support, information support, emotional support, spiritual support, material support

#### Admission

Undoubtedly, we find out how important and necessary to a person social support is in crisis situations for the individual. The situation of hospital stay, cancer diagnosis and the need for chemical treatment is a crisis for each person, difficult and verifying the needs in terms of

generally understood support. Any properly conducted chemotherapy introduces many side effects.

The conviction about the beneficial and beneficial impact of social support on sick people is based on the assumption of a pathology of social isolation, which is the cause of pathological conditions in the mental and physical sphere of the individual. Another proven fact is that the impact of support, especially on people with poor physical or mental health, brings such satisfactory effects that it can improve the individual's health situation in a sufficiently strong way (1). In addition, researchers prove that the impact of support is valuable for people in stress and even the fact that its lack can be a source of stress.

Most often, social support is described as a resource ready to be used in crisis situations for health care. Cohen (2) identified two possibilities for the impact of social support on health:

- direct (reduces or eliminates stress reactions by modifying the perception of the threat of stressor, or changes physiological processes such as voltage reduction, heart rate)
- indirect (stimulates people's health-promoting behavior. In this work, social support is classified according to the classification of H. Şek, i.e. emotional support, including spiritual, informational, instrumental and material (3).

Purpose of research:

1. The purpose of this study was to show the type of social support expected and received by women treated with cytostatics for cancer due to breast cancer.

The main research problem is summarized in the following specific problems:

- 1- What side effects of chemotherapy occur in breast cancer patients?
- 2- Have patients received information support and from whom due to side effects?
- 3- Were patients awaiting emotional support due to chemotherapy side effects and did they receive it?
- 4- Did patients expect material support in connection with chemotherapy and did they receive it?

5- Is there a relationship between the education of the respondents and their need for support?

6- Is there a relationship between the number of chemotherapy cycles a patient undergoes and the need for support in women with breast cancer?

#### Material and methods

This study was conducted in 2013 using the diagnostic survey method, based on the interview technique. The research tool was the author's questionnaire.

The study involved 110 patients who were in the oncology departments of two Lublin hospitals. The selection of populations for research was non-random, occasional sample.

The results of the obtained tests were subjected to statistical analysis. The statistical analysis was used to verify statistical hypotheses based on non-parametric tests: Pearson's  $\chi^2$ , Fisher's Test. Statistical analyzes were performed based on the "STATISTICA 10.0" program, assuming a significance level of  $p < 0.05$ .

#### Results:

In the studied population, 17% of women had primary education, 22% vocational education, 34.5% secondary education and 26% had higher education. The average age of women was 54.3 and ranged from 33 to 77 years old. The majority of respondents 76.4% of the total were married. 40% of respondents live in the countryside and 60% in the city. He lives with the family of 79.1% of respondents. 56.4% work respondents. The most numerous group were patients during the second cycle of chemotherapy - 25% and the smallest group were patients in the fifth cycle - 9%, the remaining patients were in the first cycle - 18%, in the third cycle 20%, in the fourth cycle 15% and VI and more treatment cycles 12% of patients underwent chemotherapy.

During treatment, the women studied experienced many side effects of chemotherapy. The largest group of respondents complained of persistent fatigue 77%. Other common symptoms were: hair loss 76% women, lack of appetite 75%, taste disturbance 72%, nausea and vomiting 71% among all respondents. The least women complained about urination problems

- 18% of respondents. Another less common side effect of chemotherapy in the study group were constipation in 30% of the subjects and cardiovascular disorders in 33.6% of the women surveyed.

Research shows that respondents before starting treatment with cytostatics did not know what it is 42.7%. Patients want to know more about 80% chemotherapy and expect information about the treatment they use from the attending physician 70.9% of the respondents, from the nurse 15% of the respondents, from family and friends 8.2%, and from the patients 0.9%. (They also obtained information on chemotherapy from the Internet 1.8% and from books - 2.7% of respondents.

For the respondents, the source of knowledge about specific side effects of cytostatics treatment was a doctor. He reported the possibility of: nausea and vomiting 75% of subjects, bleeding tendency 66.4% of subjects.

From nurses, patients learned about the possibility of: oral mucositis 25.5% of respondents, diarrhea 22.7%, constipation 20%, nausea and vomiting 20% and hair loss - 19%.

Most respondents say that 74% of respondents receive emotional support from their immediate family. , 11.8% of respondents from friends, 6.4% from clerics, 5% from other co-patients.

Almost every third (40%) of the respondents intended to use the help of a psychologist, but for various reasons did not do so and only every tenth of 11% of the respondents used the help of a psychologist.

Few women also use the Amazon support group. Belonging to this support group confirmed (15%) respondents.

During illness and chemotherapy, 63% of women surveyed feel more than ever before the need for contact with a priest.

In the opinion of 64.5% of respondents, contact with a clergyman helps to survive the time of illness and treatment. However, in the remaining 35% of women, contact with the clergy does not affect the survival of the disease and treatment.

When asked about material situations during oncological treatment, the respondents admitted that their situation worsened (63% of respondents), and did not change in 36% of respondents.

51% of women experience an increased need for material help during illness and chemotherapy.

In the group of women surveyed, 40% of respondents received financial help from their immediate family, 7% from friends, 5.5% from other people or institutions. 47.3% of respondents did not receive such a proposal from anyone.

There is no statistically significant relationship between the age of the respondents and the occurrence of chemotherapy side effects such as nausea and vomiting, diarrhea, constipation, stomatitis, menstrual disorders, hair loss, taste disturbance, lack of appetite, bleeding tendency, increased susceptibility to infection, urination disorders and constant tiredness.

In contrast, there is a statistically significant relationship between the age of the subjects and the occurrence of side effects of treatment such as fever ( $p = 0.08940$ ) and cardiovascular disorders ( $p = 0.00697$ ).

There is no statistically significant relationship between the education of the subjects and their need for information support regarding illness and chemotherapy ( $p = 0.20533$ ), and between education and the source of emotional support ( $p = 0.32600$ ).

Almost all women (94%) with primary education expressed their desire to broaden their knowledge of breast cancer and chemotherapy. The highest number of responses about the possession of sufficient knowledge by the respondents was given by women with higher education (27%).

There is no statistically significant relationship between the education of the respondents and the way of coping with the oncological treatment process ( $p = 0.32600$ ).

Most women (58%) with higher education said that they are patient and accept the situation. Almost half (44%) of women with secondary education surveyed said that they use the support of family and friends.

There is no statistically significant relationship between the education of the respondents and the demand for spiritual support ( $p = 0.14005$ ), while there is a statistically significant relationship between the education and their demand for material support ( $p = 0.00087$ ). More often, patients with basic vocational education (79%) and primary (68%) were waiting for material help.

There is no relationship between the chemotherapy cycle of the subjects and their need for information support regarding the treatment process ( $p = .24169$ ).

In each cycle of chemotherapy, patients mostly showed willingness to receive information about the disease and chemotherapy, including in the fifth cycle the need for information support was 100% of respondents.

There is no relationship between the next cycle of chemotherapy and the source of using emotional support such as family, friends or psychologist ( $p = .2423$ ).

There is a statistically significant relationship between the chemotherapy cycle and the need for spiritual support ( $p = .05218$ ).

All respondents (100.00%) who were in the fifth cycle of chemotherapy reported an increased demand for contact with a clergyman in comparison to the demand before the oncological treatment process. Similarly significant statistical relationships occurred in women in the 6th cycle of chemotherapy, where 77% showed the need for spiritual support. The lowest demand for spiritual support was observed during the first cycle of chemotherapy - 55%.

There is no statistically significant relationship between the chemotherapy cycle and the need for material support in the studied women ( $p = .19984$ ).

#### Discussion of research results and discussion:

The study showed some relationships conditioning the use of social support by patients treated with cytostatics for breast cancer.

The examined women were usually treated with six cycles of chemotherapy, of which the most women were in the second cycle of chemotherapy (25.4%), while the least was in the fifth cycle - 9%.

Among the side effects that patients most often complained of was constant fatigue and it affected 77.9% of respondents. Similar results were obtained by H. Zielińska-Więczkowska stating that this symptom concerned 80% of cancer patients and 70% of those undergoing therapy. (4)

Other common side effects are: hair loss, nausea and vomiting, taste disturbances, or anorexia. A small group of women reported problems urinating in 18% of respondents. However, in the study of M. Krasucka et al. the majority of patients were nausea and vomiting, followed by diarrhea and tiredness. (31)

The information about the disease and side effects of treatment was usually obtained from the attending physician - information about nausea and vomiting was 74.5%, bleeding tendency was 66.3%. On the other hand, nurses usually informed women about the possibility of 25.4% oral mucositis and 23% diarrhea.

Women were not aware of the possibility of side effects of treatment, such as: urination disorders 40%, menstrual disorders 30% and the tendency to infection 28%.

The knowledge women had before starting treatment varied. The largest group of respondents were women who heard about such a method of treatment as chemotherapy but did not know what it is 42.7%, 34% of respondents declared great knowledge on this subject and they did not know anything about chemotherapy 22.7% of respondents.

Respondents who wanted to know more about chemotherapy expected this knowledge from a doctor 71% of patients and 15% from a nurse.

M. Makara-Studzińska (6) obtained similar results in her research, where among women diagnosed with breast cancer 93% of the respondents wanted to be informed about their health and prognosis, including over 90% of the respondents wanted to know the results of the tests and expected a doctor discussing them. Similar results were obtained by Lobb et al. (7)

The most common source of support for respondents is a family of 73.6%. Similar data were obtained by Zielińska-Więczkowska H., Bełakowski J. By examining the quality of life of women undergoing chemotherapy, they showed that over 42% of women indicated family as an important source of support. (8)

Women asked to talk to a psychologist usually answered that they wanted to use it but for various reasons they did not do 40.00%. Other results regarding the use of patients by psychologist received A. Nowicki, every third woman goes for such help. (9)

Most of the patients indicated the need for contact with a clergyman 63.6%, which helps them survive the treatment time of 64.5% of women.



The financial situation of the respondents deteriorated in 63.6% of respondents, none of the women reported improvement of their financial situation during the treatment process. In this situation, more than half of the respondents 50.91% need material help, while 47.27% of the respondents did not offer any help. Most women count on financial help from a family of 40% of respondents. H. Zielińska-Więczkowska proved in her research that the higher the financial resources of the respondents, the more support they received and the lower the resources, the lower the level of support received. (8)

Studies show that there is a statistically significant relationship between the age of subjects and the occurrence of symptoms such as fever and cardiovascular disorders. However, there is no statistically significant relationship between age and symptoms such as nausea and vomiting, diarrhea, constipation, stomatitis, menstrual disorders, hair loss, taste disturbance, lack of appetite, bleeding tendency, increased susceptibility to infections, disorders in urination and constant tiredness. H. Zielińska-Więczkowska also draws attention to the incidence of side effects of treatment, which progresses with age of patients. (8)

The obtained data shows that there is no statistically significant relationship between the level of education of the respondents and the demand for information support and the demand for spiritual support. Education had a statistically significant impact on the need for material assistance.

Research results show that there is no relationship between the chemotherapy cycle and the need for information and material support, while there is a statistically significant relationship between the chemotherapy cycle and the need for spiritual support.

Symptoms such as nausea and vomiting, diarrhea, stomatitis, menstrual disorders, hair loss, taste disturbance, lack of appetite, bleeding tendency, increased susceptibility to infections, urination disorders, fever, constant fatigue, side effects cardiovascular system depended on the cycle of chemotherapy.

#### CONCLUSIONS:

During chemotherapy, patients most often complained of gastrointestinal symptoms, and side effects of cardiovascular and genitourinary system were less frequent. The occurrence of chemotherapy side effects was influenced by another cycle of chemotherapy - there was a statistically significant relationship in this respect.

The most common side effects of chemotherapy were in women between 64 and 77 years of age. A statistically significant relationship was demonstrated between age and the occurrence of fever and cardiovascular disorders. This relationship has not been demonstrated for other adverse effects.

Most patients expected information from the attending physician. There is no relationship between the chemotherapy cycle and the need for information support regarding the treatment process.

Most respondents receive emotional support from their immediate family and friends. Almost half of the respondents wanted to use the help of a psychologist but did not, while few women needed contact with the Amazon support group.

Two out of three respondents feel a greater need for spiritual support than before their illness. There is a significant relationship between the next chemotherapy cycle and the need for spiritual support.

Most respondents indicate a worsening of their financial situation compared to the time before the oncological treatment was started. Almost half of the women surveyed did not receive any financial assistance from anyone, and 40% of respondents can count on their immediate family. There is a relationship between the education of the respondents and the need for material support, but no relationship was found between the next cycle of chemotherapy and the need for material support.

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