

# ASSESSING THE EFFECTIVENESS OF THE HEALTHCARE PLAN AND ITS KEY ROLE IN IMPROVING THE QUALITY OF LIFE OF BREAST CANCER PATIENTS

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## INTRODUCTION

Breast cancer in Romania, according to Globocan sources, is the third cancer that affects the population regardless of sex and the first cancer that affects the female population [1].

Breast cancer is a complex and traumatic oncological pathology, with significant influences on the physical and mental condition and implicitly on the patient's quality of life. The diagnosis of breast cancer, modern treatment regimens [2], healthcare problems at each stage of the therapeutic process cause major stress [3] on the patient that can manifest itself through emotional instability, asthenia, adynamism, decreased exercise tolerance, therapeutic compliance low.

The holistic approach considers the global approach of the patient, as a unitary bio-psycho-social whole, in the context of personal, socio-cultural values and beliefs [4]. Women with breast cancer face the risk of temporary and permanent physical impairment, disability and inability to perform daily activities, as well as psychological and social problems [5].

The post-surgical problems of the patient with breast cancer are of overwhelming importance, with implications on the patient's physical condition, impaired functionality, lymphedema, difficulty mobilizing, pain [6], with psychological implications, fatigue and sleep disorders, affecting the image of self, with problems of socio-professional reintegration. All these problems as well as the uncertainty created regarding the evolution of the disease, in the context of the COVID-19 pandemic, led to the increase of psychological distress, negatively affecting the patient's quality of life.

The COVID-19 pandemic, through the aggressiveness and rapid spread of the new coronavirus, seriously tests the medical condition of breast cancer patients, due to limited access to care services, the rules imposed by regulations specific to this period, but also due to the recommendations on patient management [7,8].

It can be estimated that cancer patients are currently at life risk due to both the underlying condition and the threat of COVID-19 infection ("double danger") [9].

At the same time, the medical staff had to face the demands imposed by the healthcare of the patients, but also

*This paper aims to evaluate the improvement of the quality of life of the breast cancer patient through holistic care, in the context of the COVID-19 pandemic, in a general surgery department.*

*We carried out a prospective, descriptive study, carried out within the doctoral research, in which we included 24 patients with histopathologically confirmed breast cancer, hospitalized in the Surgery Clinic 2, Oradea County Emergency Clinical Hospital in 2020.*

*We used the healthcare plan as a tool to assess the quality of life, through a holistic approach to the patient, we assessed the level of dependence on the 14 basic needs, on the conceptual model of Virginia Henderson, and we made a correlation with the 4 health-related dimensions of quality of life, both in the preoperative period and in the postoperative period.*

*The holistic approach of the patient allows the evaluation of the quality of life and through the healthcare provided, on the identified problems, on each of the 14 fundamental needs, it allows its improvement.*

*Keywords: breast cancer, healthcare plan, needs, holistic care, preoperative, postoperative, quality of life, pandemics*

by the rules that must be observed in the context of the COVID-19 pandemic.

## OBJECTIVES

Evaluation of the care plan developed and implemented at the hospital level, following the conceptual model of Virginia Henderson [10], as a tool for assessing patients' quality of life. Establishing the correlation between the quality of life assessment scale and the holistic approach of the patient, physical well-being (circulation, breathing, nourish, mobilization, hygiene), mental well-being (safety, achievement, beliefs, values), social well-being (communication, recreation, socio-reintegration), professional) and independence in performing daily tasks.

Assessment of the level of dependence and identification of preoperative and postoperative healthcare problems, on the 14 fundamental needs, as well as of the care problems created by the COVID-19 pandemic. Evaluating the improvement of the quality of life by ensuring a holistic healthcare addressed to the affected needs.

## MATERIAL AND METHODS

We conducted a descriptive, prospective study in which we included 24 patients, women diagnosed with breast cancer, hospitalized in the Surgery Clinic 2 of the Oradea County Emergency Clinical Hospital, in the period 01.01.2020-31.12.2020.

The inclusion criteria in the study are represented by:

- age 18-79 years,
- patients from rural and urban areas
- patients with breast cancer who have undergone surgery for diagnosis
- patients who have undergone curative surgery, conservative surgery or radical surgery → 7

**Table 1. Quality of life assessment scale**

<b>Mood</b>
Normal 0 1 2 3 4 5 6 7 8 9 10 Absent
<b>Ability to move</b>
Normal 0 1 2 3 4 5 6 7 8 9 10 Absent
<b>Work (domestic and outside the home)</b>
Normal 0 1 2 3 4 5 6 7 8 9 10 Absent
<b>Interhuman relationships</b>
Normal 0 1 2 3 4 5 6 7 8 9 10 Absent
<b>Sleep</b>
Normal 0 1 2 3 4 5 6 7 8 9 10 Absent
<b>Availability for social activities</b>
Normal 0 1 2 3 4 5 6 7 8 9 10 Absent
<i>Each domain is rated from 0 to 10 points, and the quality of life index is obtained from the sum of the 6 domains.</i>

**Table 2. Scale for assessing dependency score / level by assessing the 14 basic needs**

Determining the dependency level of patients / Dependency score		
The basic need	Preoperative	Postoperative
To breathe, good circulation		
To eat and drink		
To eliminate		
To move, posture		
To sleep, rest		
To dress, to undress		
Temperature		
Intact skin and mucosae		
To avoid dangers		
To communicate		
Beliefs, values, religion		
To be accomplished		
To recreate		
To stay healthy		
Average dependency score		
Dependency level		
<i>Each need is evaluated with a score from 1 to 4, depending on the level of impairment, 1 – independent, 2 – mild impairment, 3 – medium impairment, 4 – severe impairment. Add up the score on the 14 assessed needs and obtain the addition score.</i>		
<i>The dependency score is transformed into a degree / level of dependence.</i>		
<i>1 (independent and autonomous) – independent person with a score of 14 points;</i>		
<i>2 (moderate dependence) – moderate dependence with a score between 15 and 28 points;</i>		
<i>3 (major dependence) – major dependence with a score between 29 and 42 points;</i>		
<i>4 (total dependence) – total dependence with a score between 43 and 56 points.</i>		

- patients with breast cancer confirmed by histopathological examination
- patients with or without comorbidities

The exclusion criteria consisted of: age over 79 years and under 18 years, breast cancer patients who did not have surgery, patients with suspected breast cancer in whom histopathological examination did not confirm the diagnosis of breast cancer.

The analysis of the study group followed: identification of the group, demographic data, age, studies, environment, identification of clinical and paraclinical data, location, comorbidities, staging, surgery, histopathological

examination, type of cancer, healthcare problems, level of addiction, interventions.

The following were used as tools: the quality of life assessment scale, the healthcare plan for assessing healthcare problems and the level of dependence on the 14 basic needs, the numerical scale and the analog visual pain assessment scale. (Table 1, table 2)

We obtained an internal validation for the quality of life assessment scale and the dependency score / level assessment scale by assessing the 14 fundamental needs.

The numerical scale (SN) is expressed by a grade from 1 to 10 that the patient chooses to characterize the intensity of the pain, where 0 represents painless and 10 represents extreme pain.

We considered the records from the FOCC and the healthcare file.

In order to identify the healthcare problems, we considered the holistic approach of the patients, we evaluated and compared the level of dependence, by calculating the dependency score obtained by evaluating the 14 fundamental needs preoperatively and postoperatively.

We followed the 4 dimensions of health-related quality of life, physical, mental, social well-being and independence in performing daily tasks.

Through holistic care provided preoperatively and postoperatively, we aimed to recover the patient's autonomy in self-care, to increase the level of independence in accomplishing the 14 basic needs, to recover its physical and mental functionality and improve the patient's quality of life.

## RESULTS

**Distribution of patients by age groups and origin environment (Figure 1)**  
Most patients came from rural areas (63.64%), the rural / urban ratio being 1.8:1. (Figure 2)

### Localisation of breast cancer

Most cases were diagnosed with CSE superoexternal quadrant breast cancer (40.91%), followed by CC central quadrant breast cancer (36.36%). (Figure 3)

### Secondary diagnoses

The most common secondary diagnoses were hypertension (63.64%) and axillary lymphadenopathy (54.54%), followed by anxiety disorders and obesity (31.82%). Malignant tumors with other locations were recorded in 4 patients (18.18%). (Figure 4)

The most common TNM staging was T2N00 (27.27%). In terms of tumor size, most cases were between 2 and 5 cm (45.45% – T2) and > 5 cm (31.82% – T3).



Figure 1. Distribution of cases by age

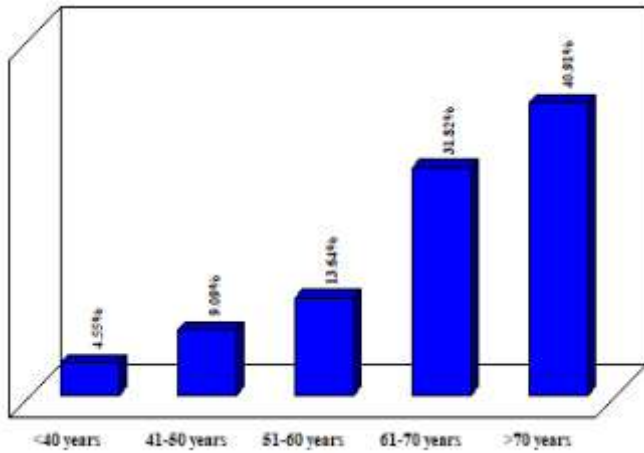


Figure 4. Distribution of cases according to secondary diagnoses

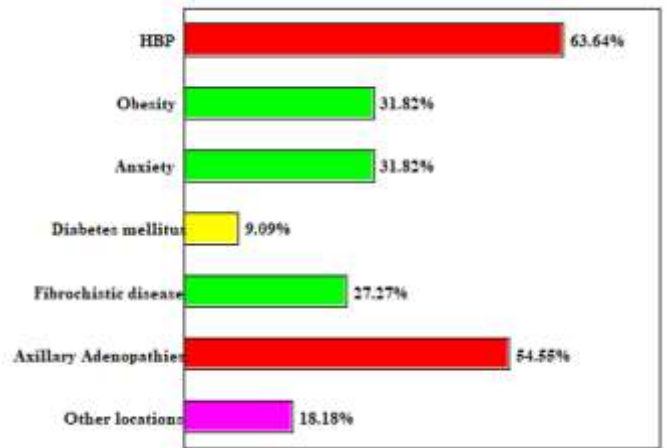


Figure 2. Distribution of cases according to the origin environment

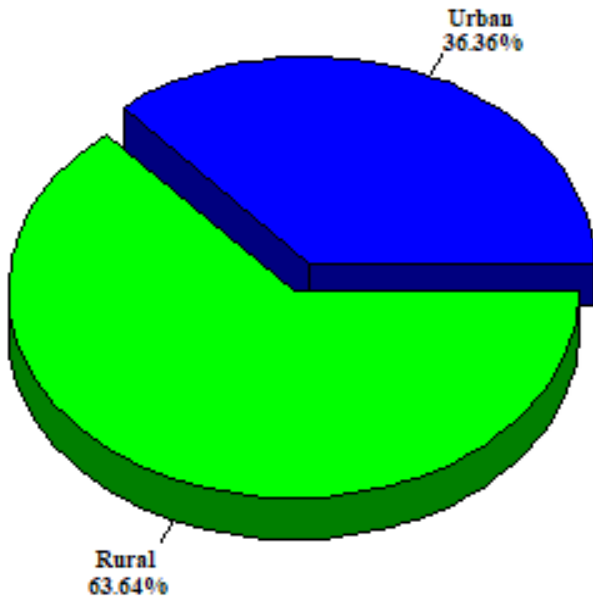


Figure 5. Distribution of cases according to TNM staging

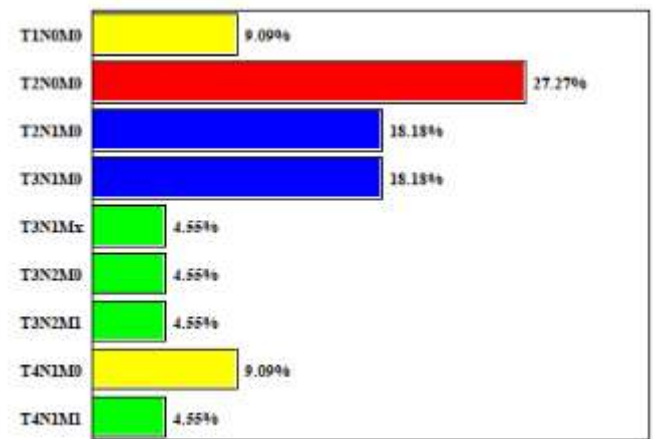


Figure 3. Distribution of cases according to the diagnosis

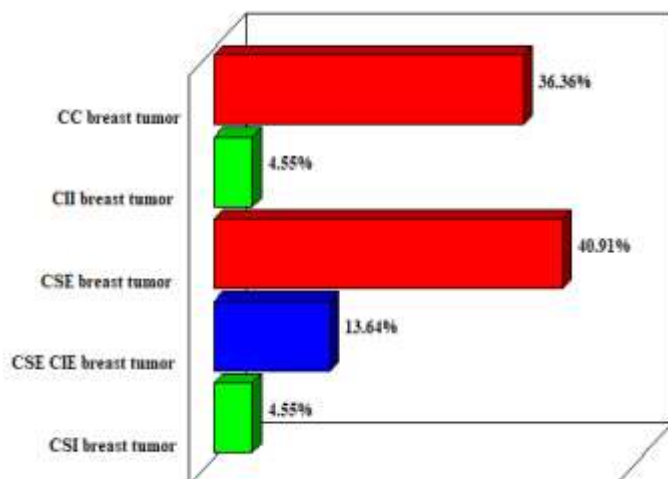
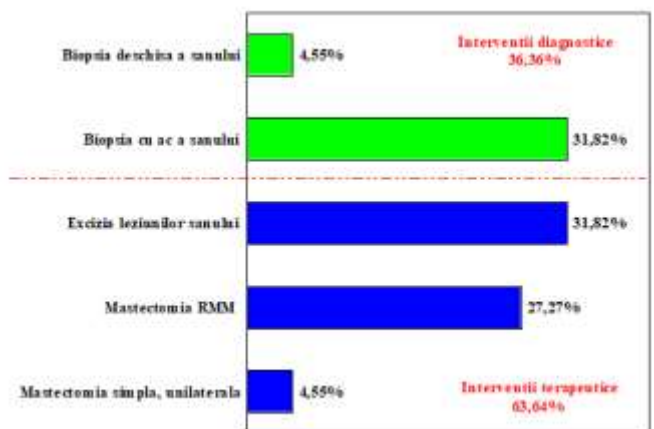


Figure 6. Distribution of cases according to the type of surgery



The absence of metastases in the regional lymph nodes (NO) was recorded in 36.36% of cases, and metastases in the mobile homolateral axillary lymph nodes (N1) were determined in 54.55% of the cases.

In over 85% of cases, no distant metastases (M0) were detected (86.36%). (Figure 5)

Figure 7. Distribution of cases according to the histopathological diagnosis

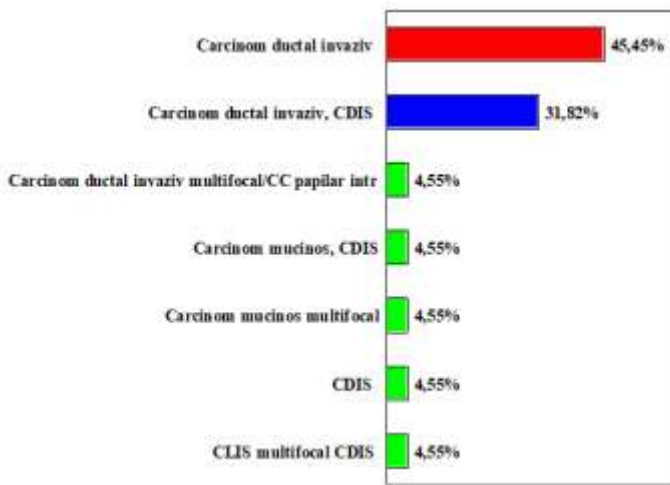


Figure 8. Hormone receptors

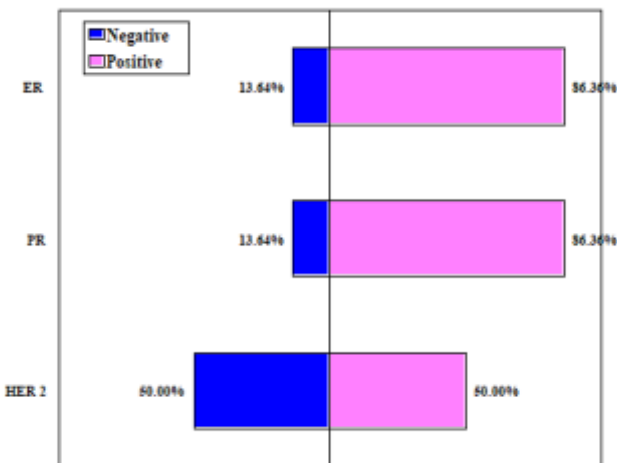


Figure 9. Distribution of cases according to pTNM staging

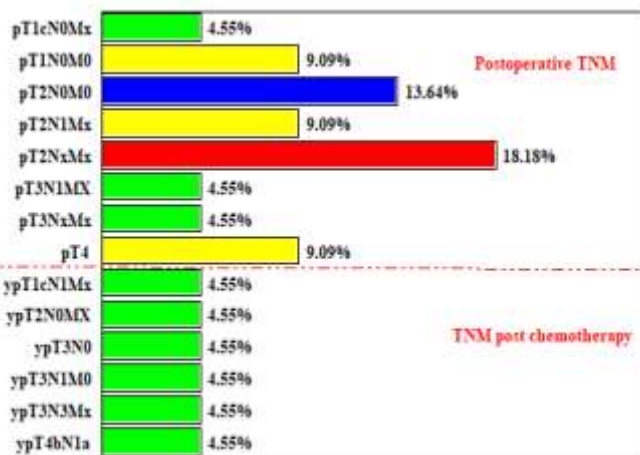
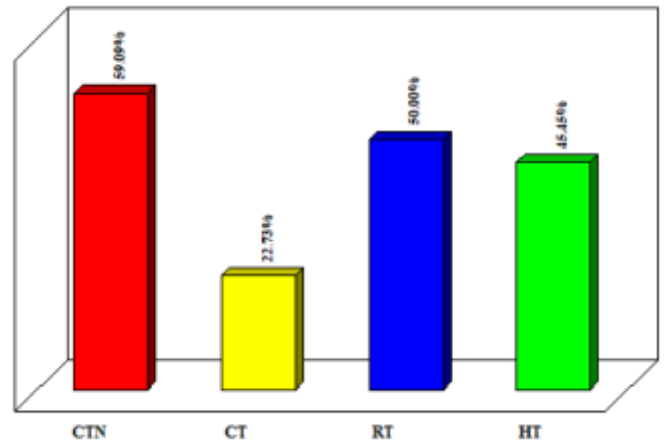


Figure 10. Oncological treatment



### Surgery interventions

Diagnostic interventions were performed in 36.36% of cases, especially biopsy with Tru-Cut needle (31.82%), and therapeutic interventions were performed in 63.64% of cases, the most common being excision of the breast lesions (31.82%) and Madden modified radical mastectomy (MRM) (27.27%). The ratio between conservative surgery and radical surgery is 1:1. (Figure 6)

Axillary lymphadenectomy was performed in 13 patients (59.09%).

### Histopathological examination

Most cases had as histopathological diagnosis invasive ductal breast carcinoma (45.45%) and invasive ductal breast carcinoma with CDIS component (31.82%). (Figure 7)

There were 2 triple negative cases, ER -, PR -, HER 2 -, with a distribution of 9% of the total cases, the stage of the disease being an advanced one. (Figure 8)

The most common pTNM staging was pT2NxMx (23.08%). (Figure 9)

### Oncological treatment

Neoadjuvant chemotherapy was performed in 59.09% of patients, radiotherapy in 50.00%, and hormone therapy in 45.45% of cases. The most common oncological treatment regimen was neoadjuvant chemotherapy + radiotherapy + hormone therapy (27.27%). (Figure 10)

Admissions were performed for diagnosis by biopsy and histopathological examination, by appointment, after evaluation in the outpatient clinic, for surgical treatment with curative or palliative intent. Some cases were sent by the oncologist, for surgical treatment, patients being in the surgical therapeutic sequence after performing neoadjuvant chemotherapy.

### Healthcare issues, dependency level in the preoperative period (Table 3, Figure 11)

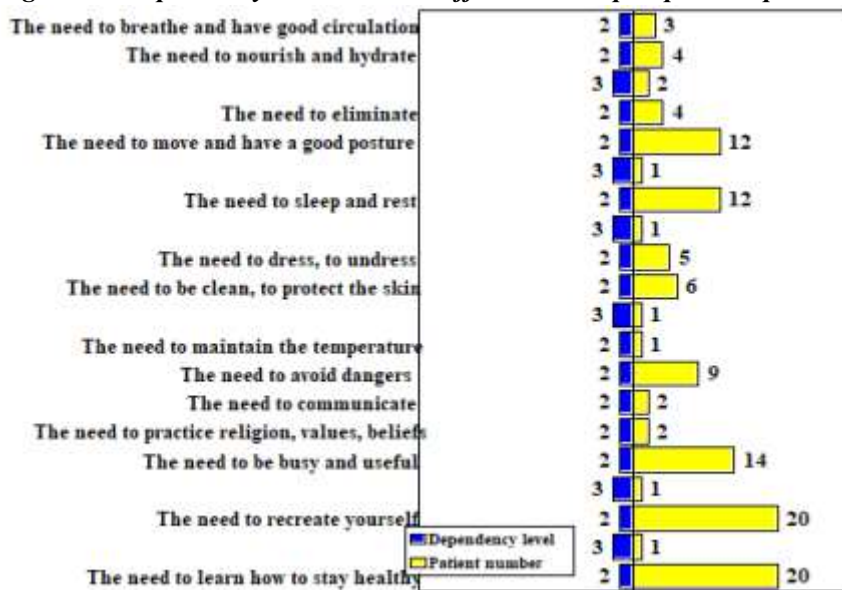
Due to the cardiovascular pathology associated with the age over 70 years, 3 patients presented problems related →



Table 3. Dependency level on needs affected in the preoperative period

No	Affected needs	Number of patients	Dependency level
1.	The need to breathe and have good circulation	3	2
2.	The need to nourish and hydrate	4	2
		2	3
3.	The need to eliminate	4	2
4.	The need to move and have a good posture	12	2
		1	3
5.	The need to sleep and rest	12	2
		1	3
6.	The need to dress, to undress	5	2
7.	The need to be clean, to protect the skin	6	2
		1	3
8.	The need to maintain the temperature	1	2
9.	The need to avoid dangers	9	2
10.	The need to communicate	2	2
11.	The need to practice religion, values, beliefs	2	2
12.	The need to be busy and useful	14	2
		1	3
13.	The need to recreate yourself	20	2
		1	3
14.	The need to learn how to stay healthy	20	2

Figure 11. Dependency level on needs affected in the preoperative period



to circulation and respiration. There were another 10 patients diagnosed with hypertension, drug-controlled, mild forms of the disease.

2 patients had level 2 of dependence related to nutrition and hydration, showing loss of appetite, 4 – obesity.

Due to advanced age and sphincteric incontinence, 4 patients presented with alteration and discomfort related to elimination, level 2 of dependence.

Due to age, comorbidities, 12 patients had slight difficulties in mobilization, level 2 of dependence, one level 3 of dependence with secondary bone determinations.

On the need to rest, there were 12 patients who had difficulty resting level 2 of addiction, one – level 3, using sedatives,

and 4 patients using anxiolytics and antidepressants.

2 patients had mild lymphedema on the arm of the affected breast at admission, showing a level 2 dependence on dressing/undressing.

1 patient with exulcerated tumor had a level 3 impaired skin integrity.

7 patients had level 2 of dependence related to safety and dangers. 8 patients presented level 2 of dependence on communication, due to the affective component, and 2 – due to age-related disabilities.

The need to practice religion and act according to one's own values was affected in 1 patient due to the uncertainty related to the disease, with a level 2 of dependence.

14 patients had achievement problems, level 2 of dependence, and one patient in stage IV disease, level 3 of dependence.

20 patients could not satisfy their need to recreate, having level 2 of dependence, and 2 patients having level 3 of dependence.

Regarding the need to learn, all patients wanted to know, asked questions about the disease, the evolution of the disease, treatment, hospitalization, further evolution, control and subsequent treatment, fear of cancer being the main problem, followed by fear of COVID-19 infection.

By assessing the 14 preoperative dependence needs, a dependency score between 17 and 22 was obtained, with an average of 20, and an average level of dependence of 2.

The pain has a low score, with an average of 2 on the numerical scale of pain assessment, a patient with score 4, 2 patients with score 3, patients who had an advanced stage of the disease and mild lymphedema of the arm.

The problems identified in a larger number of patients are: fatigue, insomnia, difficulty in assuming social roles, decreased interest in family and social activities, sadness, mild anxiety, helplessness, devaluation, decreased self-esteem, distress, diminished interest in recreational activities, lack of knowledge

about the stages of the therapeutic process, fear of not being able to continue cancer treatment, fear of SARS-CoV-2 infection.

From this analysis, an impairment of the quality of life related to the emotional component and to the mental impairment given by the oncological diagnosis and the fear of infection with the SARS-CoV-2 virus is observed.

The autonomous interventions that were applied were those related to reducing anxiety, ensuring a safe environment, empathizing with the patient, providing emotional support, ensuring effective communication with the patient and family of the healthcare team, preventing the onset of mental suffering that may have unfavorable influences on

**Table 4. Dependency level on needs affected in the postoperative period**

No.	Affected needs	Number of patients	Dependency level
1.	The need to breathe and have good circulation	7	2
2.	The need to nourish and hydrate	8	2
3.	The need to eliminate	7	2
4.	The need to move and have a good posture	20	2
		1	3
5.	The need to sleep and rest	20	2
		2	3
6.	The need to dress, to undress	18	2
7.	The need to be clean, to protect the skin	15	2
8.	The need to maintain the temperature	1	2
9.	The need to avoid dangers	22	2
		2	3
10.	The need to communicate	6	2
11.	The need to practice religion, values, beliefs	7	2
12.	The need to be busy and useful	22	2
		2	3
13.	The need to recreate yourself	22	2
		2	3
14.	The need to learn how to stay healthy	23	2
		1	3

cian, the evaluation of the documentation and the preparation for the surgery.

**Healthcare issues, level of dependency level in the postoperative period (Table 4, Figure 12)**

When assessing the need to have good circulation and respiration, 7 patients who underwent mastectomy under general anesthesia had a level 2 of dependence, due to general anesthesia and extensive surgery, age and associated comorbidities.

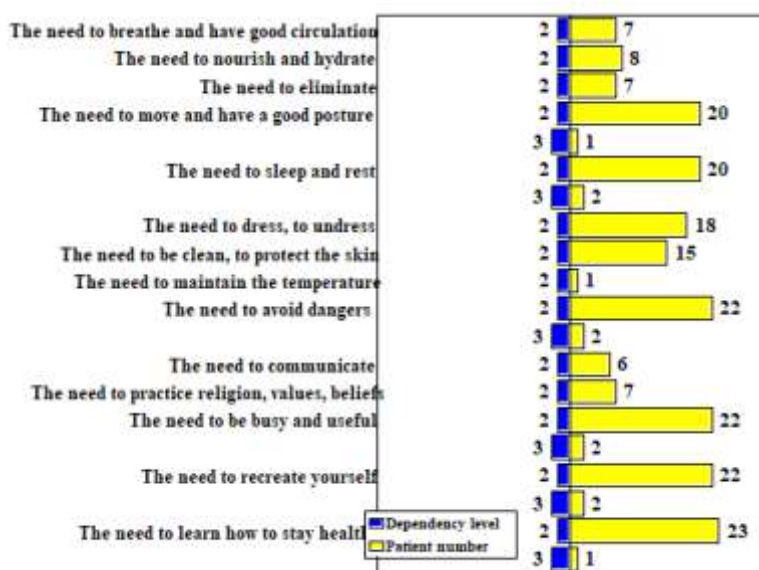
On the need to nourish and hydrate, 5 patients had postoperative level 2 of dependence with nausea and loss of appetite.

In 7 patients there was a problem related to the imbalance of fluid volumes with level 2 of dependence.

In the postoperative period, 18 patients presented slight mobilization difficulties, level 2 of dependence, one – level 3 of dependence, with secondary bone determinations.

On the need to sleep and rest, 19 patients had difficulty resting, with a level 2 of dependence.

**Figure 12. Dependency level on needs affected in the postoperative period**



**Table 5. Dependency score/Dependency level**

Number of patients	Dependency score	Dependency level
Preoperative	20	2
Postoperative	27	2
Discharge	22	2

the postoperative evolution. We ensured the facilitation of communication between the patient and the family, by phone, messages.

The delegated interventions considered the evaluation of the patient, the performance of the blood collections and investigations recommended by the attending physi-

The 13 patients who underwent axillary lymphadenectomy had difficulty sanitizing and dressing, undressing, with a level of dependence of 2.

On the need to avoid dangers, the level of dependence was 2 to 20 patients and we had a level 3 to 2 patients with comorbidities and associated risks, all patients undergoing surgery had a risk of bleeding, the 13 patients who underwent radical and conservative surgery with axillary lymphadenectomy have a risk of lymphedema.

Only 5 patients presented with a problem related to spiritual distress, with a level of dependence of 2, 17 expressed their beliefs and used religion as a support in this existential stage.

On the need to achieve, to be useful and to recreate, an increase in the level of dependence was observed due to surgical and anesthetic stress, 20 patients had level 2 of dependence and 2 patients had level 3 of dependence. In patients who underwent a mastectomy, the feeling of helplessness and the decrease of self-esteem were accentuated due to the modification of the body scheme, the decrease of the interest towards family and social activities, the alteration of the functionality and implicitly the decrease of the quality of life.

Problems related to the postoperative evolution, insufficient knowledge related to the stages of the therapeutic process, treatment, controls and postoperative rehabilitation were present in all patients.

In the postoperative period, the dependence score was between 22 and 32, with an average of 28, with an average

Figure 13. Dependency score/Dependency level

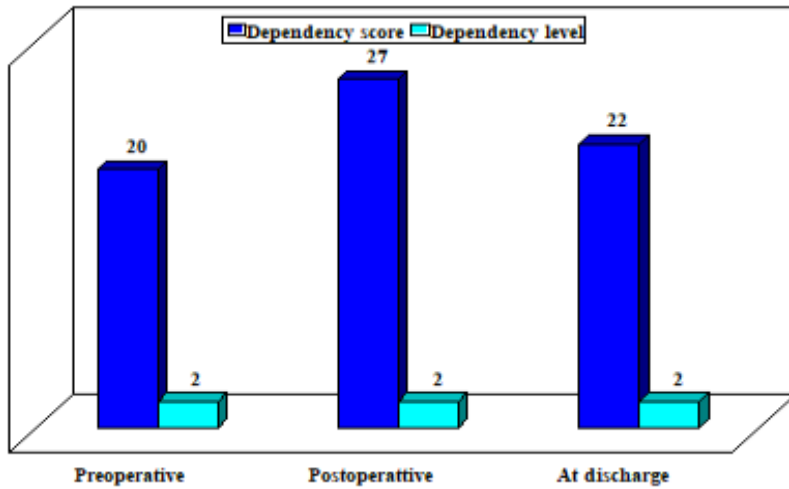
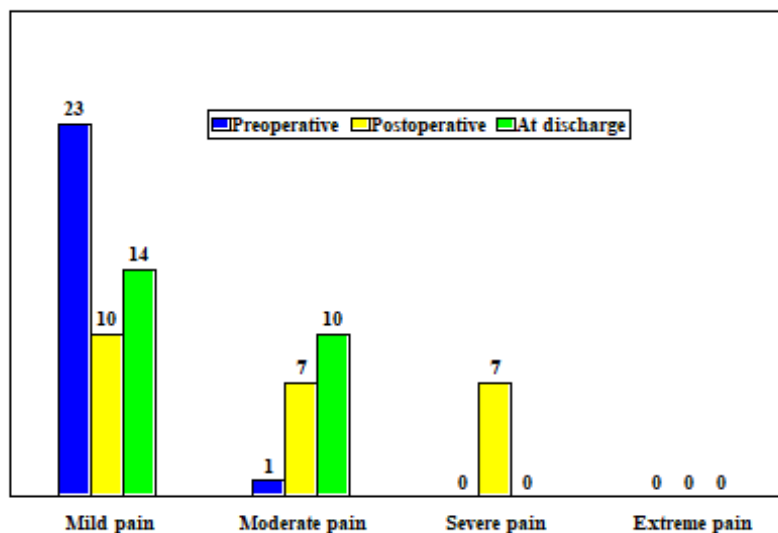


Table 6. Preoperative and postoperative pain assessment

Number of patients	Mild pain 1-3	Moderate pain 4-6	Severe 7-9	Extreme pain 10
Preoperative	23	1	0	0
Postoperative	10	7	7	0
Discharge	14	10	0	0

Figure 14. Preoperative and postoperative pain assessment



level of dependence 2 in 19 patients and level 3 in 3 patients, the level of dependence being higher, implicitly the need for care was higher.

**Interventions applied postoperatively depending on the problems identified**

To reduce the risk of infection and prevent complications, preoperative antibiophylaxis with cefuroxime was performed in patients with conservative surgery and cefuroxime with metronidazole in patients with mastectomy. The postoperative evolution was good with *per primam* healing of surgical wounds. In 1 case with exulcerated breast tumor, antibiotic therapy was practiced with good results postoperatively, with the cure of the local infection.

These patients were given nursing techniques related to wound care in conditions of asepsis, mobilization, sanitation, supplementing the affected needs.

In patients who underwent lymphadenectomy, active movements of the arm were initiated on the side of the affected breast to prevent the onset of lymphedema, the resumption of arm function and improved quality of life. In the first 4 weeks postoperatively, no cases of lymphedema were registered, the patients with mastectomy presenting paresthesias at the level of the arm, with progressive decrease in intensity. There were 3 cases with presentation in the advanced stage of disease evolution, in which mild lymphedema was installed preoperatively, without worsening in the next 4 weeks. Lymphorrhea was persistent 2-3 weeks in patients with axillary lymphadenectomy. Axillary drainage was maintained until the amount decreased below 20 ml. After the removal of the axillary drainage, evacuation points were performed with good evolution, no local or general infectious complications were registered.

To prevent thromboembolic disease, early postoperative mobilization was performed and low molecular weight heparin was administered to patients with mastectomy according to hospital protocol and associated comorbidities. No complications were registered, in a stent patient in whom the antiplatelet medication was resumed postoperatively, the presence of axillary drainage with serohemorrhagic aspect was observed for a period of 4 weeks, with a good subsequent evolution.

Wound dressing was performed under aseptic conditions, and at 48 hours postoperatively the surgical wounds were left without dressing. Patients were encouraged to look at their wound, to accept the modification of their body scheme and to take care of themselves. This approach is part of specific practice of the department in the care of this type of patients, with good results.

To reduce the risk of infection in the current epidemiological context of the COVID-19 pandemic, staff wore protective equipment and were periodically tested. All hospitalized patients were tested RT-PCR for SARS-CoV-2, isolation measures were applied to patients in buffer wards until the negative result. We did not have positive cases for SARS-CoV-2 in breast cancer patients.

In order to alleviate the mental suffering, minimal psychotherapy techniques were applied by a medical staff, we ensured an efficient communication with the patients, we encouraged the patients, we provided the necessary information to the patients, we explained the importance of involvement in their own therapeutic process, the necessary emotional support was provided, staff empathizing with patients in order to compensate for the lack of family support, given the restrictions imposed by the COVID-19 pandemic, and was maintained an active communication with the patient's family.



In order to be able to supervise patients in order to increase their confidence and safety, an extension of the hospitalization period was achieved in cases with radical surgery and we obtained a reduction in patients' anxiety, related to limited outpatient access to consultations / controls and to reduce the risk of discontinuity of healthcare.

Preoperative care problems are those related to mental impairment, anxiety, loss of existential meaning, fear of cancer, insufficient knowledge of the disease, fear of SARS-CoV-2 infection.

Postoperatively, physical impairment predominates, care problems are related to impaired physical function, pain, anxiety, mobilization difficulties, risk of hemorrhagic or infectious complications, difficulty in self-care, but also those related to impaired mental state, decreased self-esteem, due to changes in body pattern, insufficient knowledge about further evolution, fear of not being able to follow the therapeutic process, fear of SARS-CoV-2 infection, difficulty in resuming the family and social role.

There was an increase in the mean score of dependence in the postoperative period to 27 compared to 20 in the preoperative period, with an increase in level 3 of dependence in 3 patients, and 19 patients had a level 2 of dependence. The increase of the postoperative dependence score due to the impairment of the physical functionality is relevant for the increase of the necessary healthcare. (Table 4, Figure 13)

Until the moment of discharge, there is a gradual recovery of the patient's physical condition and the resumption of self-care, mobilization, feeding, hydration, a fact reflected in the decrease of the average dependence score from 27 to 22. It should be mentioned that with axillary lymphadenectomy the average duration of hospitalization was 5 days, in patients who underwent radical surgery, mastectomy with axillary lymphadenectomy, the average duration of hospitalization was 8 days; an extension of the hospitalization episode was considered to provide safety the patient in providing care and preventing complications.

The evaluated pain has an average of 5: 7 patients who underwent mastectomy with moderate to severe pain with grade 7, 6 patients with sector and axillary lymphadenectomy with grade 5, 8 patients with biopsy puncture and excision biopsy mild pain with grade 3, the painkillers administered being of stage I and II, with the decrease of the intensity in the dynamics.(Table 5, Figure 14)

In patients who have undergone mastectomy and axillary lymphadenectomy, there is pain, with difficulty mobilizing the arm, implicitly decreased functionality in self-care, complemented by mental impairment due to surgery, which is perceived as mutilating, which leads to a significant impairment of quality of life in the first days postoperatively, but with improvement until the time of discharge. At the time of discharge, the reduction of pain allows to obtain independence in achieving mobilization and self-care, the number of patients and the level of pain intensity being lower.

Through the care provided, the following results were obtained: reduction of anxiety, *per primam* healing of the surgical wound, a good postoperative mobilization with early initiation of active movements and resumption of arm function on the affected breast, without local or general postoperative complications.

Patients have autonomy in meeting basic needs, nutrition, hydration, elimination, mobilization, hygiene. At the time of discharge, patients show therapeutic compliance, adherence to treatment and thus improving the quality of life. The problems that patients present at discharge are generally related to the emotional and psycho-social component, the fear of not being able to follow their therapeutic scheme in the current epidemiological context, the fear of oncological disease and COVID-19 infection, inability to carry out recreational activities, but with the desire to assume social roles. Patients with axillary lymphadenectomy and mastectomy are at risk of developing lymphedema.

The main purpose of the care provided to breast cancer patients in the preoperative and postoperative period, by addressing all affected needs, is to obtain the highest degree of patient autonomy in meeting the 14 basic needs and improving the quality of life by maintaining physical and mental well-being.

## DISCUSSION

The distribution by age groups shows a large number of cases in the age groups 61-70 years, 71-79 years, being in accordance with the statistics of breast cancer cases at international level recorded in the literature [11]. The localization of breast cancer at the level of the superoexternal quadrant and the central quadrant predominates [12].

Conservative surgery is in a 1:1 ratio with radical surgery. The Madden modified radical mastectomy remains an alternative appreciated by surgeons in the radical surgery of breast cancer, the results being similar to those of a study carried out at Sibiu Emergency Clinical Hospital [13].

The proportion of axillary lymphadenectomies is high due to the fact that sentinel node biopsy is not performed [14], which can negatively affect the quality of life in these patients, as it increases the risk of developing lymphedema in the upper limb over the affected breast [15]. Local treatment is complemented by locoregional irradiation. Systemic treatment is represented by adjuvant and neoadjuvant chemotherapy, but also hormone therapy for hormone-dependent cases.

From a histopathological point of view, cases of invasive ductal carcinoma predominate, the data being similar to those presented in a study conducted in the USA [16]. There was also a case of invasive ductal breast carcinoma in a patient undergoing treatment for liver carcinoma and in whom only surgical treatment was performed, conservative surgery with axillary lymphadenectomy, without performing any other adjuvant oncological treatment, with good evolution.

Of the patients who underwent a diagnostic surgical procedure, excisional biopsy and biopsy puncture with Tru-Cut needle, 6 patients were eligible for initiation of neoadjuvant chemotherapy [17]. Another 5 patients were elective cases for surgical treatment after performing neoadjuvant chemotherapy, being sent by the oncologist.

In patients hospitalized in 2020, given the influences due to the COVID-19 pandemic, the duration of hospitalization was 2 days in the case of diagnostic biopsy compared to 2019, when cases were performed in day hospitalization,



less than 12 hours in 2019, 6 days in case of conservative surgical treatment compared to 4 days in 2019 and 8 days in patients with radical intervention and axillary lymphadenectomy compared to 6 days in 2019, to increase safety and reduce anxiety of patients who were afraid of not being able to perform outpatient control and for the prevention of complications, in the conditions of this pandemic [18].

The provided healthcare measures improved the general condition of patients and the quality of life. The role of the nurses is essential, the interventions provided by nurses and the support provided can have a beneficial impact on the mood of cancer patients, as confirmed by a study on psychosocial interventions to improve quality of life and emotional well-being for recently diagnosed cancer patients [19].

The care to be provided in the context of the COVID-19 pandemic is complex, the staff has to deal with a double request, the request coming from the patient and the existing request in the current epidemiological context [20]. The management of cancer patients in the current epidemiological context is a challenge for health professionals, who must also take into account the recommendations of medical societies for the healthcare management and to enable patients survival and an acceptable quality of life.

## CONCLUSIONS

In breast cancer patients who have undergone surgery, there is a postoperative decrease in quality of life by affecting the four dimensions of health, physical well-being, emotional well-being, mental well-being, independence and interpersonal relationships.

The interventions provided by the medical team and the healthcare staff by ensuring empathy, ensuring mental comfort, creating a safe care environment, ensuring physical comfort, meeting the affected needs, ensuring effective communication with the patients and their families helped prevent postoperative complications, ensuring a good result in terms of therapeutic compliance and improving the quality of life.

The use of the healthcare plan through the holistic approach of the patient – physically, mentally and socially –, the evaluation of the level of dependence on the 14 fundamental needs, using Virginia Henderson conceptual model, the calculation of the dependency score and the identification of healthcare problems allow the assessment of the quality of life on the four dimensions related to health – physical well-being (circulation, respiration, food, mobilization, hygiene), mental well-being (safety, achievement, beliefs, values), independence in daily activity and social relations (communication, recreation, socio-professional reintegration) –, setting priorities for resource allocation, for the planning and development of holistic healthcare, i.e. a specialized healthcare, designed to improve the quality of life of breast cancer patients.

The holistic approach of patients allows the evaluation of the quality of life of the breast cancer patient in the surgical sequence of breast cancer treatment, both preoperatively and postoperatively, and holistic healthcare allows improving the quality of life, the main objective of healthcare being to recover patient functionality, increase independence in meeting basic needs.

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