Journal of Nursing
Revista de Enfermagem
UFPE On Line
ISSN: 1981-8963

ORIGINAL ARTICLE

CLASSIFICATION OF THE DEGREE OF DEPENDENCE OF NURSING CARE IN PATIENTS SUBMITTED TO BREAST SURGERY

CLASSIFICAÇÃO DO GRAU DE DEPENDÊNCIA DOS CUIDADOS DE ENFERMAGEM EM PACIENTES SUBMETIDAS À CIRURGIA MAMÁRIA

CLASIFICACIÓN DEL GRADO DE DEPENDENCIA DE LOS CUIDADOS DE ENFERMERÍA EN PACIENTES SOMETIDOS A CIRUGÍA MAMARIA

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ABSTRACT

***Objective*:** to classify the degree of dependence on nursing care in the immediate postoperative period in patients who underwent breast surgery. ***Methodology*:** cross-sectional cohort study, carried out in 2012, with 49 patients. Two instruments were applied, one for sociodemographic and clinical data, and the Perroca's Patient Classification System (1996). Data were processed and analyzed using SPSS program version 11.5. ***Results*:** 57.1% of patients were diagnosed with breast cancer and 20.4% with fibroadenoma. 100% (n = 49) of patients had standard minimal care. The overall score was 15.8 ± 0.44. ***Conclusion*:** The study allowed knowing the care profile of patients treated in this hospital to plan a nursing care focused on the patients' needs. ***Descriptors*:** Nursing; Surgery; Breast; Determination of Health Care Needs.

RESUMO

***Objetivo*:** classificar o grau de dependência dos cuidados de enfermagem no pós-operatório imediato de pacientes submetidas à cirurgia mamária. ***Metodologia*:** estudo de coorte transversal, realizado em 2012, com participação de 49 pacientes. Foram aplicados dois instrumentos, um referente aos dados sociodemográficos e clínicos, e o Sistema de Classificação de Pacientes de Perroca (1996). Os dados foram processados e analisados no programa SPSS versão 11.5. ***Resultados*:** 57,1% das pacientes foram diagnosticadas com câncer de mama e 20,4% com fibroadenoma. 100% (n=49) das pacientes apresentaram padrão de cuidados mínimos. A pontuação geral dos escores foi de 15,8 ± 0,44. ***Conclusão*:** o estudo possibilitou conhecer o perfil de cuidado das pacientes atendidas nesse hospital para planejar uma assistência de enfermagem voltada às necessidades das pacientes. ***Descritores*:** Enfermagem; Cirurgia; Mama; Determinação de Necessidades de Cuidados de Saúde.

RESUMEN

***Objetivo*:** clasificar el grado de dependencia de los cuidados de enfermería en el post-operatorio inmediato de pacientes sometidas a la cirugía mamaria. ***Metodología*:** estudio de cohorte transversal, realizado en 2012, con participación de 49 pacientes. Fueron aplicados dos instrumentos, un referente a los datos sociodemográficos y clínicos, y el Sistema de Clasificación de Pacientes de Perroca (1996). Los datos fueron procesados y analizados en el programa SPSS versión 11.5. ***Resultados*:** 57,1% de las pacientes fueron diagnosticadas con cáncer de mama y 20,4% con fibroadenoma. 100% (n=49) de las pacientes presentaron padrón de cuidados mínimos. La puntuación general fue de 15,8 ± 0,44. ***Conclusión*:** el estudio posibilitó conocer el perfil de cuidado de las pacientes atendidas en ese hospital para planear una asistencia de enfermería dirigida a las necesidades de las pacientes. ***Descriptores*:** Enfermería; Cirugía; Mama; Determinación de Necesidades de Cuidados de Salud.

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INTRODUCTION

Breast cancer is the third type of malignant neoplasm of highest incidence in Brazil. The estimated new cases for the year 2014 in Brazil is 576 000 patients and 57.12 million estimated cases of female breast cancer. The prognosis is relatively good when diagnosed and treated early. In Brazil, there are high mortality rates for the disease, since patients are diagnosed when already in advanced stages.[1]

The Patient Classification System (PCS) is a method that is based on identifying the needs of individualized care of patients. In Brazil, this concept was discussed for the first time in 1972 as a way of organizing care towards the needs of each patient, according to the acquired disease.[2]

The PCS provides information for the decision-making process regarding the allocation and organization of human and material resources, monitors productivity and the cost of nursing care, and organizes services and promotes the planning of nursing care. So, it is a key element in the administrative practice.[3]

The theoretical framework adopted in this study is based on PCS, which it is an instrument for patient classification that uses critical indicators of care based on individual needs of patients. It operates in the biopsychosocial sphere, encompassing communication, behavior and health education. This instrument, when validated in 1996, was proposed to be implemented with hospitalized adult patients.[4]

The model classifies care in: (1) Minimum care, which is the care to patients physically self-sufficient regarding basic human needs and who are stable from a clinical and nursing point of view; (2) Intermediate care, directed at patients with partial dependence on nursing actions to meet the basic human needs; (3) Semi-intensive care, which are offered to chronic patients, with complete dependence on nursing actions; and (4) Intensive care, which are directed to critical patients, subject to unstable vital signs and in need of permanent nursing and medical care.[5]

The role of nursing in caring for surgical patients should be started even in the preoperative period, when actions are designed to ensure effective performance of the surgery, and to evaluate the possible risks of postoperative complications, guiding the patient and family regarding the procedure to be performed and previously preparing a care plan for the patient.[6]

Thus, this study is delineated in order to classify the degree of dependence on nursing care in the immediate postoperative period in patients undergoing breast surgery.

METHOD

This is a cross-sectional descriptive study, of quantitative type, conducted at the Assis Chateaubriand Maternity School (MEAC) of the Federal University of Ceara, in Fortaleza-Ceara. The study sample consisted of 49 female patients, aged eighteen years or older, who had undergone breast surgery and who were in the immediate postoperative period.

Data were collected during the period from January to April 2012. Two instruments were used: (1) sociodemographic characteristics (age, marital status and education) and clinical data (medical diagnosis and type of surgery) of the patient from the analysis of the medical records and (2) the application of the Patient Classification System / Perroca's model, an instrument that uses 13 critical domains / indicators of care: mental state and level of consciousness, oxygenation, vital signs, nutrition and hydration, mobility, locomotion, body care, eliminations, treatment, health education, behavior, communication and skin integrity.

The sum of points of each of the 13 domains classifies the patient in a certain category of care: minimum care (13-26 points), intermediate care (27-39 points), semi-intensive care (40-52 points) and intensive care (53a 65 points). Each domain has gradation, that is, score (1-5) points, corresponding to the lowest score as of less dependence on care and the highest score as a greater dependence on nursing care.

Data were entered and analyzed using the Statistical Package for the Social Sciences (SPSS) version 11.5. The results of categorical and continuous variables of sociodemographic and clinical data and the prevalence of nursing care classification categories underwent descriptive analysis, presented as absolute frequencies, arithmetic mean of scores and standard error in all studied domains of Perroca's Care Classification instrument.

The study was approved by the Research Ethics Committee of the Assis Chateaubriand Maternity School-MEAC with the protocol no. 114/11, REC / MEAC number 187/11, according to the regulations governing research with human beings (Resolution No. 466 / 12). All participants were informed about the purpose of the research and signed the Informed Consent Form.

RESULTS

The study population consisted of a sample of 49 (N = 49) patients who underwent breast surgery and who were hospitalized in Post-Surgical Units of the Assis Chateaubriand Maternity School (MEAC). The average age of patients was 48.6 ± 1.7 years old. There is a table belaw that corresponds to the demographic data of the study population and their clinical features (Table 1).

Table 1. Distribution of sociodemographic and clinical variables of the patients interviewed (N=49). Fortaleza, CE, Brazil, 2012.

Variables	N	%
Gender		
Female	49	100
Age (years)		
18-29	03	6.1
30-49	23	46.9
50-69	22	44.8
70-89	01	2.0
Education		
Illiterate	03	6.1
Incomplete / complete elementary school	29	59.1
Incomplete / complete High school	17	34.6
Marital status		
Married / stable union	33	67.3
Single	10	20.4
Widow	05	10.2
Divorced	01	2.0
Medical diagnosis		
Breast câncer	28	57.1
Fibroadenoma	10	20.4
Suspicious mass - Breast cancer	09	18.3
Mammary tuberculosis	01	2.0
Phyllodes tumor	01	2.0
Type surgery		
Excision of nodules	23	46.9
Simple / radical mastectomy/axillary dissection / post CT	19	38.7
Quadrantectomy	02	4.0
Biopsy	02	4.0
Excision of microcalcifications	02	4.0
Phyllodes tumor excision	01	2.0

All patients (n = 49) were classified as presenting standard of minimal care, which corresponds to 13-26 points in the scores and is characterized as care for stable patients from a clinical and nursing point of view, physically self-sufficient as for the basic human needs. The overall score of the scores (13 domains) was 15.4 ± 0.59; the maximum score achieved was 22 and the minimum was 13 (Table 02).

Table 2. Distribution of domains and overall scores of the questionnaire Patient Classification System / Perroca's Model (1996) in patients interviewed (N=49). Fortaleza, CE, Brazil, 2012.

Domain	n=49 (100%)	Scores * (1-5)	Arithmetic mean of the scores	Standard error
Mental State and Level of Consciousness	49 (100%)	1	1.0	0.00
Oxygenation	49 (100%)	1	1.0	0.00
Vital signs	49 (100%)	1	1.0	0.00
Nutrition and Hydration	41 (81.6%) 08 (16.3%) 01 (02.1%)	1 2 3	1.2	0.06
Motility	42 (85.7%) 05 (10.2%) 02 (04.1%)	1 2 3	1.1	0.06
Locomotion	32 (65.3%) 17 (34.7%)	1 2	1.3	0.06
Body Care	28 (57.1%) 06 (12.2%) 14 (28.6%) 01 (02.0%)	1 2 3 4	1.7	0.13
Eliminations	48 (98.0%) 01 (02.0%)	1 2	1.0	0.02
Therapy	27 (55.1%) 06 (06.1%) 19 (38.8%)	1 2 3	1.8	0.13
Health Education	47 (95.9%) 02 (04.1%)	1 2	1.0	0.02
Behavior	35 (71.4%) 14 (28.6%)	1 2	1.2	0.06
Communication	49 (100%)	1	1.0	0.00
Skin integrity	40 (81.6%) 09 (18.4%)	1 2	1.1	0.05
Overall score	-	-	15.4	0.59

**Legend:*
Score 1: Self-sufficient;
Score 2: Encouragement of nursing / intermittent use of O2 / continuous IV medication / discolored skin / continuity solution;
Score 3: Guidance to companion caregiver / continuous use of O2 / intermittent IV medication / presence of continuity solution (CS) ;
Score 4: Aid of Nursing / O2 by tracheostomy and tracheal tube / blood transfusion / CS with purulent exudate;
Score 5: Effective Assistance of nursing / mechanic ventilation / vasoactive drugs / presence of necrotic areas.

The critical indicators of care that had lower scores, that is, a greater degree of independence, were: Mental State and Level of Consciousness, Oxygenation, Vital Signs, Eliminations, Health Education and Communication. Those with the highest score, that is, a higher degree of dependence on nursing care, were: Therapy and Body Care.

In the following domains studied, Mental State and Level of Consciousness, Oxygenation, Vital Signs and Communication, 49 (100%) of the patients had independence scores in relation to nursing care, presenting themselves awakened, voicing and with preservation of memory. They had proper respiratory pattern without requiring oxygen support, control of vital signs every six hours, and showed up communication, expressing ideas clearly and logically.

In the domain eliminations, 48 (98.0%) had score 01, demonstrating self-sufficiency in control of eliminations; while one (2.0%) had a care score 02, requiring supervision and control of nursing professionals on eliminations. The mean score was 1.0 ± 0.02. In the domain Health Education, 47 (95.9%) had care score 01, which identifies full acceptance of guidance received, and two (4.1%) had a care score 02, showing difficulty in understanding the instructions received. The mean score was 1.0 ± 0.02.

In the domain Body Care, 28 (57.1%) had a score of independence, demonstrating self-sufficiency before the realization of these activities; six (12.2%) had score 02, requiring supervision of nursing staff in making the body care and comfort; 14 (28.6%) required guidance and supervision of the nursing team to the companion caregiver to aid in oral hygiene, intimate hygiene, bathing and comfort measures, and one (2.0%) required assistance from nursing staff on body care and comfort measures. The mean score was 1.7 ± 0.1.

In the domain Therapy, 27 (55.1%) had score 01, requiring routine oral medication;

six (6.1%) had score 02, requiring continuous IV medication and / or through nasogastric tube or stoma; and 19 (38.8%) had score 03, requiring intermittent medication intravenously with maintenance of peripheral venous catheters. The mean score was 1.8 ± 0.1.

DISCUSSION

One of the risk factors for developing breast cancer is age, whose incidence prevails between 40-60 years old.[7] In this study, 57.1% of patients had breast cancer, and the mean age of patients was 48.6 ± 1.7.

In countries that have implemented effective screening programs with coverage of the target population, quality of examinations and treatment, mortality from breast cancer has decreased. The evidence of the impact of screening on mortality from this cancer justify its adoption as a public health policy, as recommended by the World Health Organization (WHO).[8] However, studies claim that the impact of mammographic screening in reducing mortality from breast cancer is still limited, reaching 25%.[9]

Breast cancer screening actions in Brazil involve both mammography and clinical breast examination (CBE), as screening methods that are part of health promotion policy, but also the information and mobilization of the population as active agent care of their health. In this study, 93.7% of patients were literate. However, only 34.6% reached high school. The education level of these women is essential, as it is directly proportional to the practice of early detection methods for breast cancer.[10]

Analyzing the classification of the type of surgery performed by patients, it was found that the most complex surgeries, that is, the simple and radical mastectomies, reached 38.7% of the total performed in this study, which shows, still, a significant prevalence of this neoplasia. It also shows that the breast cancer identified at an early stage has more favorable prognosis and high cure rate.[11]

Taking into account the prevalence of nodule excision in 46.9% of patients, it is justified the predominance of domains with a degree of independence and hence the prevalence of classification of minimal care, related to care for physically self-sufficient patients regarding basic human needs and who are stable from a clinical and nursing point of view. The same findings were found in another study that evaluated the degree of dependence on nursing care in medical and surgical clinical units of a public university hospital, which evaluated 18,386 patients; 70% were classified as minimal care.[5]

The domain Behavior, with score 01, is related to the exchange of information and guidance between patients and health professionals. The proposed guidelines are critical to the patients who are facing breast surgery due to uncertainties on the prognosis of the disease. Behavioral changes are observed in patients who are affected by breast cancer, and can be observed since the discovery of the diagnosis until the completion of the treatment and its consequences.[12]

For adherence to treatment, it is necessary a nursing orientation about other treatment options as well as the possibility of curing the disease, respecting the decision-making of patients. The loss of the breast usually generates feelings of grief. Thus, stimulating dialogue about their expectations and feelings is a nursing care that may be proposed.[13]

Regarding the domains Therapy and Body Care, we found a greater degree of dependence on nursing care. This is due to the fact that patients in the immediate postoperative period have specifics needs of nursing care, such as monitoring of vital signs every 15 minutes in the first hour; invasive hemodynamic monitoring; bed rest due to anesthetic awakening; medication administration; and hygiene and comfort procedures. These specificities give to the patient in an immediate postoperative a certain degree of dependence on the nursing team who, in addition to these activities, also perform close clinical observation for the management or prevention of hemodynamic instability. This requires continuous attention, as well as expertise and skills for quick and precise decision-making.[14]

A multidisciplinary quality care is necessary, by proposing a satisfactory rehabilitation of women through a range of information about the care that must be taken before the physical consequences that larger breast surgeries lead.[14] Care with the upper ipsilateral limb to the surgery and exercises that restore the functional capacity of the shoulder and arm, and immediate care related to type of surgery, management of the drain, dressing change and mobilization of the operated limb are extremely important to this recovery and can prevent further problems.[15]

CONCLUSION

The classification of the degree of dependence on nursing care of patients undergoing breast surgery in this study was characterized as need of minimal care.

Regarding the dependence on nursing care, therapy and body care are the domains that need more attention and care.

The displayed instrument is characterized as a tool that contributes to planning a better quality nursing care in hospital units or at one's own home.

Identifying the degree of dependence on nursing care helps in the adequacy of available resources and in solving problems by intervening as early as possible in order to readapt the woman to the social environment and improve their quality of life.

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Submission: 2015/09/20
Accepted: 2015/11/17
Publishing: 2015/12/15

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