# 62 - SISTEMATIZATION OF NURSING ACTIONS ON THE RESOLUTION OF PRE- AND POST- CHOLECYSTECTOMY SURGICAL PROBLEMS: A COMPARATIVE STUDY

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#### INTRODUCTION

Our time's technical and scientific advancements have brought many benefits to the population as a whole, but it's in the health field that we feel this advancement more clearly. Health professionals, however, seem to grow apart from the patient and his/her relatives, thus decreasing the quality of care. In face of this situation faced by nursing, some measures are being taken so as to minimize the un-care, which can be a facet of the profession.

Waldow (2006) describes care as a dynamic action, resulting from a thoughtful process performed with great dedication. According to the same author, care must be restated in face of the aggressive, inhumane and brutalized reality we live in, finding its place along with cutting-edge technology and oftentimes adding to it, ameliorating suffering and guaranteeing good quality, ethical and moral assistance to the human being.

Because we practice our activities in the Surgical Center (SC), we know the reality experienced by patients admitted in this sector, most of which presenting a high degree of anxiety, manifested through crying, tremors, dyspnea, fear of death, among other signs and symptoms that might indicate a lack of preparation for the procedure they are about to go through.

In order to lessen this type of problem, professional exercise law # 7,498/86, published on Diário Oficial on june, 26, 1986, on its regulation, on articles 4° and 11°, paragraph I, item j, privately determines to the nurses the task of prescribing nursing assistance. This increases the responsibility and commitment the nursing graduation courses have in the sense of forming professionals capable of planning and implementing nursing assistance (BRASIL, 1986).

In this context, the American Association for Operating Room Nurses, concerned with the peri-operative stage made effective some recommendations considered executable, with adaptations, according to the clinic's situation and the practicing nursing team. Such orientations are employed with the use of a nursing process, ensuring continuity of patient care and allowing a comparison between obtained and expected results in the execution of this assistance (AORN, 2002; COFEN, 2002; CNS, 1997).

With that in mind, some studies have been developed in this area, seeking to present the importance of Nursing Assistance Systematization (NAS) in the various areas of care (MOREIRA; MIGUÉIS, 2002).

Based on this data we have performed this study on patients who would be subject to cholycestectomy and constructed the following hypothesis: the patients who will be subtimed to cholycestectomy and assisted with the systematized assistance methodology, based on the identification of basic human needs affected in the pre-operation stage, will have a faster and less complicated evolution in post-operation than those assisted without nursing assistance systematization.

With this hypothesis, we constructed the following objective: to identify the problems affecting two groups of patients undergoing cholycestectomy; to analyze the possible differences, having nursing assistance systematization as a parameter.

We expect this study's results to make nurses and hospital administrators aware and execute this assistance practice with which we believe all will be benefited, as we consider quality assistance as fundamentally important.

#### MATERIAL AND METHOD

Quasi-experimental study, with quantitative approach, developed in a hospital of the Natal metropolitan region, in the period of March to September 2003. The population consisted of 60 patients interned in order to undergo cholecystectomy operations, in the period established for research, 30 of which belonging to the experimental group and 30 to the control group, selected according to the surgical problem and inclusion criteria.

Data collection was performed after the project's approval by the university's ethics committee, as exposed in the 22/03 protocol, according to the ethical and legal principles that regulate ethical and scientific research on human beings, as stated on resolution CNS #196/1996 (BRASIL, 2000).

For the data collection we followed some steps that comprised the signing of a free and clear consent (TCLE) and an interview with the patient followed by the filling of a nursing history report, physical and evolution exam, identifying what the patient knew on the pathology and the surgical procedure to which we would be subjected and what they would like to have information on, using language in accordance to each patient's comprehension possibilities.

During post-operation recovery, we made two daily visits, by morning and in the afternoon, seeking to evolve, maintain or prescribe new nursing actions, as well as to check the problems map, which was filled or changed in the afternoon visit. As for the other researched group, we made indirect observations of the performed actions and a reading of nursing annotations and medical evolution. As with the experimental group, we also filled the problem listing map on order to evaluate its evolution. During all of the studied period, the researcher performed direct and indirect supervision of the care given.

Regarding statistical treatment, we use Martins's "t" test in order to verify the significance of equality among population averages and the descriptive analysis presented in tables and column graphs.

### **RESULTS AND DISCUSSION**

In both groups, the female gender was predominant (75.00%) and when analyzed separately, in the experimental group women totaled 86.70% and in the control group 63.30%; aged 45 to 50 (30.00%).

Mendonça (2001), among others, stresses this fact occurs more frequently on women due to internal and external hormone factors.

In regard to the age group, Pimentel (1995) and Mendonça (2001) found data similar to ours and add that cholelityasis can happen on childhood adolescence, but is predominant throughout the fifth life decade, that is from 45 to 55 years of age.

Regarding religion, in the experimental group, Catholic faith was predominant (36.60%) followed by those who professed Catholicism (23.30%). In the control group, catholic religion and agnostic were most frequent with 30.00% each, followed by those who profess themselves Catholic (23.30%). Smeltzer; Bare (2005) state religious beliefs play an essential role,

possibly helping therapy, since faith is a standing stone and must thus be respected.

Regarding the level of instruction, middle-level was predominant on both groups, totaling 46.70% of the patients in the experimental group and 26.70% of the control group. Similar data were found by Ramos (2008) in a research performed in an emergency hospital, with traffic accident victims.

As for problems presented pre- and post-operative, we detected the control group had 790 psycho-social and psycho-spiritual problems, and the experimental had 369 occurrences.

Disinformation on the disease, surgery and post-release had a greater incidence on both groups' post-operative stage, with 126 simultaneous occurrences, 59 remaining post-operative, totaling 555 occurrences on both stages for the control group and 190 for the experimental group, the latest being in pre-operative.

The experimental group showed 40 episodes of anxiety (10.84%) due to lack of knowledge on the pathology itself, on treatment and due to absence from family living. In the control group, this problem was present on 106 occasions (13.42%).

In the experimental group we registered 43 episodes (11.65%) of fear of death due to fear of the surgery, of anesthetics, of the unknown and of the treatment. In the control group this problem showed up 64 times (8.10%) pre-operative and 03 times (1.58%) post-operative. This feeling is linked to physical, mental and spiritual suffering, and Pessini; Bertachini, (2006) describe suffering as a more subjective connotation linked to personal, social, cultural and spiritual values.

Sleep disturbs occurred 29 times (7.03%) in the pre-operation stage and 02 (15.38%) post-operative in the control group. In the experimental group 21 (7.53%) cases happened, and only pre-operative.

In the pre-operative stage, crying was observed on both groups, with 27 episodes (7.32%) in the experimental group and 22 (2.78%) in the control group. Severo; Girardon-Perline (2005) stress that hospital internment leaves the subject emotionally overloaded due to disease, and consequently, due to severing of affective and social relationships, and when alone and insecure, the patient might present feelings of anguish, anxiety, fear, distrust, and other similar feelings.

In regard to Psycho-biological problems in the pre- and post-operative periods for both groups, they totaled 402 occurrences with 165 (41.05%) in the gastric-intestinal system, 128 (31.85%) in the muscular-skeletal system. In pre-operative the control group suffered 55 (60.44%) gastric-intestinal problems, with a greater incidence of nausea with 12 episodes (13.19%), jaundice, constipation and abdominal distention with 11 (12.09%) and in post-operative 48 (30.19%) occurrences, prevailing nausea, vomit and jaundice with 11 (6.92%) events respectively.

In contrast with the control group, patients from the experimental group presented in pre-operative a total of 30 occurrences, 18.75% of which of nausea, followed by constipation and abdominal distention with 06.25% simultaneously. From 32 occurrences (44.44%) in post-operation, the most frequent were nausea and vomit with 13 occurrences (13.06%), simultaneous. Smeltzer; Bare (2005) stress that distention happens due to accumulation of gases in the intestinal tract and nausea is more common in women, in the obese and patients subjected to long surgical procedures.

In the muscular-skeletal system, we detected 128 alterations (31.85%, 18 (19.78%) of which in the control group preoperation due to abdominal pain; and 20 (25.00%) in the experimental group. In the post-operation phase, we recorded 56 (35.22%) for the control group and 34 (47.22%) for the experimental group. In the experimental group we had 26 reports (36.11%). The control group presented 47 occurrences (29.56%), with a recorded use of analgesics. Incisive pain is a consequence of the wound and manipulation of the operation area, causing discomfort to patients, and its intensity depends on the patient's physiological and psychological and profile, the surgery's type and location and pain threshold (SMELTZER; BARE, 2005).

In the urinary system, we detected 08 (10.00%) episodes of choluria in pre-operative on the experimental group, and in post-operative this event was not detected; in the control group 36 problems were reported (16.36%) in post-operation related to urine retention and 01 case for the experimental group (1.39%). Smeltzer; Bare (2005) consider this happens due to spasms in the bladder sphincter.

As for pre-operative hygiene, all patients from both groups performed aspersion bathing, since it is a routine in the institution in order to move them to the surgical center. We did not find reports on infection of the surgical site neither in the control nor in the experimental group.

The statistical test employed in order to verify significance of difference among averages was the "t" test, one-tailed, for non-correlated populations with supposedly different variances, that is, we tested, on each area, the hypothesis of nullity. The tests were performed at a 5% significance level.

TABLE 01 NUMBER AND AVERAGE DAYS PROBLEMS BY DETECTED PROBLEMS ON EXPERIMENTAL AND CONTROL GROUPS, IN THE PSYCHO-SOCIAL, SPIRITUAL AND PSYCHO-BIOLOGIC AREAS, ON CHOLECYSTECTOMY PRE-OPERATIVE, HUOL NATAL/RN, 2003.

	Grupos				
Pre-operation	Psicossocial e espiritual		Psicobiologico		
	С	е	с	е	
Total number of problem days	790	369	91	80	
Number of detected problems	13	13	9	12	
Number of problems considered for testing	13		14		
Average days per problem	60,77	28,38	6,50	5,71	
Standard deviation (days)	45,27	10,12	4,59	5,33	
Freedom degrees	13		25		
P-value	0,0128		0,3624		
Conclusion	Control group average is significantly higher than the experimental group's		Mÿdia do grupo controle nÿo ÿ significativamente maior que a do grupo experimental		

On Table 01, we notice there is a significant difference in the average detected problems on patients, at a 5% significance level, in the psycho-social and spiritual areas.

TABLE 02 - NUMBER AND AVERAGE DAYS PROBLEMS BY DETECTED PROBLEMS IN THE EXPERIMENTAL AND CONTROL GROUPS, IN THE PSYCHO-SOCIAL, SPIRITUAL AND PSYCHO-BIOLOGIC AREAS, ON CHOLECYSTECTOMY POST-OPERATIVE, HUIL NATAL/RN, 2003.

Post-operation	Area				
	Psycho-social / spiritual		Psycho-biological		
	С	е	С	е	
total number of day problems	190	0	159	72	
number of detected problems	7	0	19	12	
number of problems considered for testing	7		20		
average days per problem	27,14	0	7,95	3,60	
standard deviation (days)	29,81	0	10,10	7,68	
degrees of freedom	6		35		
P-value	0,0263		0,0569		
Conclusion	Control group average is significantly higher than the experimental group's		Control group average is not significantly higher than the experimental group's		

Analyzing Table 02, we observe there is a significant difference in the there is a significant difference in the average of detected problems on patients, at a 5% significance level, in the psycho-social and spiritual areas.

#### CONCLUSION

We conclude that the group of patients assisted with systematization of nursing actions presented a greater number of problems solved more quickly, consequently presenting less problems than the group assisted without systematization, especially in regard to psycho-social and spiritual problems.

KEYWORDS: Nursing Care, Preoperative Care, Postoperative Care.

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#### SISTEMATIZATION OF NURSING ACTIONS ON THE RESOLUTION OF PRE- AND POST-CHOLECYSTECTOMY SURGICAL PROBLEMS: A COMPARATIVE STUDY ABSTRACT

**INTRODUCTION:** the importance we attribute to the nursing process based on Wanda de Aguiar Horta's Theory, as a methodology to systematize the assistance on several areas of activity led us to develop this research. **OBJECTIVES:** to identify the problems which affected two groups of patients subjected to cholecystectomy; to analyze the possible differences, having nursing assistance systematization as a parameter. **METHODOLOGY:** quasi-experimental study, with quantitative approach, performed in Hospital Universitário Onofre Lopes, in the city of Natal. The population consisted of 60 patients, 30 of which in the experimental group (EG) and 30 in the control group (CG). **RESULTS:** in the EG, 80 psycho-biological problems were detected in the pre-operative stage, and in the post-operative this number decreased to 72, and from the 369 psycho-social and spiritual problems observed pre-operative, after having been worked upon, none was detected post-operation. As for the CG, the psychobiological problems totaled 91 manifestations, growing to 159 in the post-operative period, while the psychosocial and spiritual problems totaled 790 manifestations, lowered to 190 in the post-operative. **CONCLUSION:** the group of

patients assisted with systematization of nursing actions presented a greater number of problems solved more quickly, consequently presenting less problems than the group assisted without systematization, especially in regard to psycho-social and spiritual problems.

KEYWORDS: Nursing Care, Preoperative Care, Postoperative Care.

#### SYSTÉMATISATION DES SOINS INFIRMIERS LORS DE LA RÉSOLUTION DE PROBLÈMES PRÉOPÉRATOIRES ET POSTOPÉRATOIRES DE LA COLECYSTECTOMIE: UNE ÉTUDE COMPARATIVE RÉSUMÉ

**INTRODUCTION:** i'importance que l'on attribue aux soins infirmiers, fondés sur la Théorie de Wanda de Aguiar Horta en tant que méthodologie pour la systématisation de l'assistance au niveau des domaines divers d'intervention, nous mena à développer cette recherche. **OBJECTIFS:** identifier les problèmes survenus parmi deux groupes de patients soumis à colecystectomie; analyser les différences possibles, avec la systématisation des soins infirmiers comme paramètre. **MÉTHODOLOGIE:** il s'agit d'une étude quasi expérimentale, à l'approche quantitative, menée à l'Hôpital Universitaire Onofre Lopes de la ville de Natal. La population compta 60 patients, dont 30 appartenaient au groupe expérimental (GE) et 30 au groupe de controle (GC). **RÉSULTATS:** au sein du GE, 80 problèmes psychobiologiques furent détectés au cours de la phase préopératoire et lors de la période postopératoire ce nombre tomba à 72; sur les 369 d'origine psychosociale et spirituelle observés lors de la phase préopératoire, aucun ne fut détecté pendant la période postopératoire après leur traitement. Quant au GC, on compta 91 problèmes d'origine psychobiologique en phase préopératoire, qui s'élevèrent à 159 au cours de la période postopératoire; on compta 790 problèmes psychosociaux et spirituels au cours de la période préopératoire et ce nombre tomba à 190 en phase postopératoire. **CONCLUSION:** le groupe de patients assistés avec systématisation des soins infirmiers présenta un plus grand nombre de problèmes, mais de résolution plus rapide; en conséquence, ce groupe présenta moins de problèmes que le groupe assisté sans systématisation, particulièrement en ce qui concerne les problèmes d'origine psychosociale et spirituelle.

MOTS-CLÉS: Soins infirmiers, Soins Préopératoires, Soins Postopératoires

## SISTEMATIZACIÓN DE LAS ACCIONES DE ENFERMERÍA. SOLUCIÓN DE PROBLEMA EN EL PRE Y POST OPERATORIO DE COLECISTECTOMIA: UM ESTUDIO COMPARATIVO

RESUMEN INTRODUCCIÓN:

**INTRODUCCIÓN:** la importancia que atribuimos al proceso de enfermería basada en la Teoría de Wanda de Aguiar Horta, como metodología para sistematizar la asistencia en las diversas áreas de actuación nos llevó a desarrollar esta investigación. **OBJETIVOS:** identificar los problemas ocurridos en dos grupos de pacientes sometidos a la asistencia de enfermería. **METODOLOGIA:** se trata de un estudio casi experimental, con abordaje cuantitativa, realizado en el Hospital Universitario Onofre Lopes, en el Municipio de Natal. La población consto de 60 pacientes, siendo 30 del grupo experimental (GE) y 30 del grupo Controle (GC). **RESULTADOS**: en el GE fueron detectados 80 problemas psicobiológicos en el preoperatorio y en el post-operatorio este número decreció para 72, y de los 369 de origen psicosociales y espirituales, observados en el pré-operatorio. después de haber sido trabajados, ninguno fue detectado en el post-operatorio. Cuanto al GC. los problemas de origen psicobiológica en el pré-operatorio. tuvieron un total de 91 manifestaciones, siendo que en el postoperatorio, este número creció para 159 y los psicosociales y espirituales en el pré-operatorio totalizaron 790 manifestaciones, habiendo disminuido para 190 en el post-operatorio. **CONCLUSIÓN:** el grupo de pacientes asistidos con la sistematización de las acciones de enfermería presentó un mayor número de problemas resueltos con mayor rapidez, y consecuentemente, presentó menos problemas que el grupo asistido sin la sistematización ,especialmente en lo que se refiere a los de origen psicosociales y espirituales.

PALABRAS CLAVE: Atención de Enfermería, Cuidados Preoperatorios, Cuidados Postoperatorios

#### SISTEMATIZAÇÃO DAS AÇÕES DE ENFERMAGEM NA RESOLUTIVIDADE DE PROBLEMAS NO PRÉ E PÓS-OPERATÓRIO DE COLECISTECTOMIA: UM ESTUDO COMPARATIVO RESUMO

**INTRODUÇÃO:** a importância que atribuímos ao processo de enfermagem baseado na Teoria de Wanda de Aguiar Horta, como metodologia para sistematizar a assistência nas diversas áreas de atuação, nos levou a desenvolver esta pesquisa. **OBJETIVOS:** identificar os problemas ocorridos em dois grupos de pacientes submetidos à colecistectomia; analisar as possíveis diferenças, tendo como parâmetro a sistematização da assistência de enfermagem **METODOLOGIA:** trata-se de um estudo quase experimental, com abordagem quantitativa, realizado no Hospital Universitário Onofre Lopes, no município de Natal. A população constou de 60 pacientes, sendo 30 do grupo experimental (GE) e 30 do grupo com trole (GC). **RESULTADOS:** no GE, foram detectados 80 problemas psicobiológicos no pré-operatório, e no pós-operatório este número decresceu para 72, e dos 369 de origem psicossociais e espirituais, observados no pré-operatório, após haverem sido trabalhados, nenhum foi detectado no pós-operatório. Quanto ao GC, os problemas de origem psicobiológica no pré-operatório tiveram um total de 91 manifestações, sendo que no pós-operatório este número cresceu para 159 e os psicossociais e espirituais no pré-operatório totalizaram 790 manifestações, tendo diminuído para 190 no pós-operatório. **CONCLUSÃO:** o grupo de pacientes assistidos com a sistematização das ações de enfermagem apresentou um maior número de problemas resolvidos com maior rapidez, conseqüentemente, apresentou menos problemas que o grupo assistido sem a sistematização, especialmente no que se refere aos de origem psicossociais e espirituais.

PALAVRAS-CHAVE: Cuidados de Enfermagem, Cuidados Pré-Operatórios, Cuidados Pós-Operatórios.