

# Nursing Care Systematization at the Intensive Care Unit (ICU) based on Wanda Horta's theory

SISTEMATIZAÇÃO DA ASSISTÊNCIA DE ENFERMAGEM EM UNIDADE DE TERAPIA INTENSIVA SUSTENTADA PELA TEORIA DE WANDA HORTA

SISTEMATIZACIÓN DE LA ASISTENCIA DE ENFERMERÍA EN UNA UNIDAD DE TERAPIA INTENSIVA BASADA EN LA TEORÍA DE WANDA HORTA

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## ABSTRACT

The purpose of this study was to implement the Nursing Care Systematization - *Sistematização da Assistência de Enfermagem (SAE)* - with Wanda Aguiar Horta's Theory of Basic Human Necessities and the North American Nursing Diagnosis Association's (NANDA) Nursing Diagnosis as its references. The starting point was the evaluation of the knowledge of the nursing team about the SAE, including their participation in this process. This is a qualitative study, performed in the Intensive Care Unit in a hospital in the city of Brusque, Santa Catarina, from October, 2006 to March, 2007. It was observed that the nursing professionals know little about SAE, but they are greatly interested in learning and developing it in their daily practice. In conclusion, it was possible to execute the healthcare systematization in an easy way, with the use of simple brochures that provided all the necessary information for the qualified development of nursing care.

## KEY WORDS

Intensive Care Units.  
Nursing process.  
Nursing care.

## RESUMO

O objetivo foi implementar a Sistematização da Assistência de Enfermagem (SAE), tendo como referencial a Teoria das Necessidades Humanas Básicas de Wanda de Aguiar Horta e o Diagnóstico de Enfermagem da *North American Nursing Diagnosis Association (NANDA)*, partindo da avaliação do conhecimento da equipe de enfermagem sobre a SAE e incluindo a sua participação nesse processo. É uma pesquisa-ação de cunho qualitativo, realizada na Unidade de Terapia Intensiva de um Hospital da cidade de Brusque, Santa Catarina, de outubro de 2006 a março de 2007. Pode-se perceber que os profissionais da enfermagem sabem pouco sobre a SAE, porém possuem grande interesse em aprender e desenvolvê-la em sua prática diária. Conclui-se que foi possível realizar uma sistematização de assistência de fácil aplicação, através da utilização de impressos simples que forneceram todas as informações necessárias para o desenvolvimento qualificado do cuidado de enfermagem.

## DESCRIPTORES

Unidades de Terapia Intensiva.  
Processos de enfermagem.  
Cuidados de enfermagem.

## RESUMEN

El objetivo fue implementar la Sistematización de la Asistencia de Enfermería (SAE) utilizando como marco teórico la Teoría de las Necesidades Humanas Básicas de Wanda de Aguiar Horta y el Diagnóstico de Enfermería de la *North American Nursing Diagnosis Association (NANDA)*, partiendo de la evaluación del conocimiento del equipo de enfermería sobre la SAE e incluyendo su participación en ese proceso. Se trata de una investigación de tipo cualitativo, realizada en la Unidad de Terapia Intensiva de un Hospital de la ciudad de Brusque, en el estado de Santa Catarina, en los meses de octubre de 2006 a marzo de 2007. Se puede percibir que los profesionales de enfermería saben poco sobre la SAE; sin embargo poseen un gran interés en aprenderla y desarrollarla en su práctica diaria. Se concluye que fue posible realizar una sistematización de la asistencia de fácil aplicación, a través de la utilización de folletos simples que ofrecen todas las informaciones necesarias para el desarrollo calificado del cuidado de enfermería.

## DESCRIPTORES

Unidades de Terapia Intensiva.  
Procesos de enfermería.  
Atención de enfermería.

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## INTRODUCTION

The purpose of the intensive care unit (ICU) is to treat patients in critical conditions, with its own infrastructure, specific material resources and specialized human resources who, through safe and continuous healthcare practices, seek to re-establish the vital functions of the body<sup>(1)</sup>. The nurse is the leader of the nursing team and, by using Nursing Healthcare Systematization (NHS), she assures adequate and individualized healthcare practices. Nursing diagnoses identify the health/disease situations, resulting in individual and integral care, supported on scientific knowledge.

It is understood that, in order to have adequate and individualized nursing care, it is necessary to apply the NHS based on specific theories that are known by all care professionals at the institution. Moreover, this should be adjusted according to the possibilities of each institution: number of employees, weekly work hours, among others. This becomes even more complex in an intensive care unit, where the patients have vital functions that demand more care, in addition to a considerable amount of technical procedures that are exclusive to nurses.

## OBJECTIVES

- **General objective:** To implement individualized and humanized Nursing Healthcare Systematization at the intensive care unit of a philanthropic hospital in Brusque – Santa Catarina, based on Wanda de Aguiar Horta's Theory of Basic Human Necessities and the nursing diagnoses of the *North American Nursing Diagnosis Association* (NANDA), proposed in one study.

- **Specific objective:** To evaluate the knowledge of the nursing team about NHS and include their participation in this process.

## LITERATURE REVIEW

### *The nursing theories and healthcare: history*

Nursing has always been based on principles, beliefs, values and norms that were traditionally accepted. However, the evolution of science brought the need for research in order to build knowledge. Therefore, in the 1950s, the nurses noticed the need to develop specific knowledge and concluded that this would only be possible by elaborating their own theories<sup>(2)</sup>. Advances in theoretical knowledge benefited decentralization from the biomedical healthcare model and favored nursing healthcare to focus on the human being instead of the disease. All published theories note the person as the focus, presented as a bio-psycho-socio-spiritual being. As such, both uniqueness and total-

ity should be preserved, so that care is adequate and reaches its objectives<sup>(2)</sup>.

The theoretical models have greatly contributed to nursing healthcare practice when used as a reference for nursing healthcare systematization. This provides means to organize patient information and data, to analyze and interpret these data, to oversee and evaluate the results of this care. It is believed that nursing science has been developing through the creation of its own theories, specific research and the systematization of its knowledge and the healthcare provided. With the advances in nursing theories, it was necessary to create a scientific, specific and systematic method for nurses' actions, developing the nursing process. When nurses practice the models of the nursing process, the patients receive quality care within a short time and with great efficiency.

### *The application of nursing healthcare systematization through the nursing process*

According to the resolution by COFEN<sup>(3)</sup>, the NHS, an exclusive activity of nurses, seeks to identify health/disease situations of individuals by using scientific methods and strategies that will support nursing actions, contributing to the promotion, prevention, recovery and rehabilitation of individual health. The nursing process is the systematic and dynamic manner of providing nursing care, focused on results and with low costs. In addition, it pushes nurses to constantly analyze what they are doing and study how they could do it better<sup>(4)</sup>. The NHS is essential for nurses to manage and develop organized, safe, dynamic and competent nursing care<sup>(5)</sup>.

The nursing process comprises five distinct but interconnected phases: investigation, diagnosis, planning, implementation and evaluation. This interconnection should occur, because inadequate data collection leads to an erroneous determination of the problems presented (nursing diagnoses), and consequently to inappropriate action plans. The utilization of the nursing process accrues several benefits, such as: reduction of the incidence and length of hospitalizations, as it speeds up the diagnosis and treatment of health problems; creation of a cost-efficiency plan; improved communication among team members, preventing mistakes and unnecessary repetitions; elaboration of care focused on the individual instead of the disease alone<sup>(4)</sup>.

It is believed that nursing care at an ICU is indispensable, due to the gravity of the situation of hospitalized patients, which makes interviews difficult, demands adequate observation and physical exams, quick, safe and effective action from the nursing team and the permanence of these patients in the hospital for a long time. In addition, the active participation of family members is considered necessary in the ICU nursing process, since most patients admitted there cannot collaborate for its development.

The theoretical models have greatly contributed to nursing healthcare practice when used as a reference for nursing healthcare systematization.

## METHOD

**Research type and place:** Action research performed at a philanthropic hospital in Brusque, Santa Catarina, from October, 2006 to March, 2007.

**Theoretical reference:** Wanda de Aguiar Horta's Theory of Basic Human Necessities<sup>(6)</sup> and the Nursing Diagnoses of the *North American Nursing Diagnosis Association (NANDA)*<sup>(7)</sup>.

**Participants:** Fifteen people, being five clients and ten members of the nursing team. The team included two nurses and eight nursing auxiliaries/technicians.

**Ethical aspects:** The study was approved by the Review Board of Universidade do Sul de Santa Catarina (UNISUL), file #06.217.4.04.II. The participants were required to read and sign a term of consent if they decided to participate. In case of patients with reduced autonomy, acceptance was provided by their legal representatives.

**Research instruments:** The following instruments were used:

a. Structured interview applied to the members of the ICU nursing team in December 2006 and January 2007. Data were collected by the authors during the participants' work hours, according to a previous arrangement.

b. Educational lecture about NHS for ICU nursing team members, with the objective of orienting them to collaborate towards the implementation of the NHS in this sector. The lecture occurred according to the availability of all members involved, and was presented by one of the study authors.

c. The NHS registry forms: due to the characteristics of one ICU, it was necessary to elaborate specific forms that could be filled out quickly and precisely. The nursing history, nursing diagnosis and nursing prescription forms were elaborated by the authors according to their own practical experience, the interview results and consultations to the theoretical framework. The nursing diagnoses and interventions were elaborated according to the altered necessities of the patients, using the Theory of Basic Human Necessities<sup>(6)</sup> and NANDA<sup>(7)</sup>. The utilization of these forms allowed for the constant assessment of their efficiency and applicability by the authors who conceived them as well as by the study participants. The forms were modified according to the results they promoted.

d. **Result analysis:** The data were submitted to thematic analysis.

## RESULTS

After carefully reading the material compiled from the interviews with the study participants, it was observed that the nursing team members were aware of the value of knowledge to perform nursing actions, providing safety and

optimizing the results of these actions. On the other hand, it was evident that they have doubts about the role of nurses and their responsibilities in the execution of the NHS. The results were the elaboration of forms, whose utilization during the study facilitated the implementation of the NHS and how nursing team members understood it. A group of registry forms was elaborated during the study, which is shown next. The first step was the development of a *Nursing History form* (Annex 1).

Next, the *nursing diagnosis* sheet was elaborated (Annex 2), with the nursing diagnoses found most often in ICUs, with enough room to fill out the defining characteristics and related factors beside each of them.

Finally, the *nursing prescription* sheet was elaborated (Annex 3), covering several care procedures, related to the identified diagnoses, with blank spaces next to each procedure to register its duration.

## DISCUSSION

Knowledge is indeed one of the highly important values for professional actions of the nurse, since it reassures the professionals when they have to make decisions about the patient, their team and the managerial activities of the unit. This is reflected in the nursing team, since the nurse is their leader. Therefore, the initiative to assume actions and attitudes is intimately related to the knowledge that the professional has, because this assures nurses that they are acting correctly and adequately<sup>(8)</sup>.

During the interviews, it could be observed that the team does not know about the NHS. The respondents spent time thinking and needed time to elaborate their concepts, or quickly answered that they did not know what the question was about. Their testimonies were supported in practical concepts, elaborated from the judgment of the name itself, NHS. Although no participant in this study gave a concept that was fully adequate to the NHS, all of them acknowledged it as a program developed to apply nursing knowledge to patient care. However, it is not enough to acknowledge NHS as a systematic and practical method, optimized for the application of knowledge in the care provided to the patients. It is necessary that the whole nursing team involved in the implementation process of such a system knows its steps and, especially, how each of these should be implemented in their daily practice.

It was also observed that most respondents acknowledged the NHS as a support for the nursing service to be provided correctly, based on an adequate data research and application of adequate care. In addition, this would serve to improve the nursing sciences. One of the questions asked in the interview regarded the importance the respondents attributed to the NHS. The respondents were asked to rate the NHS on a scale from 1 to 10, with 1 meaning the lowest importance and 10 the maximum. Most participants considered NHS to be of little importance, especially because

they did not have knowledge about what the NHS is. Only two respondents stated that it was of maximum importance for nursing actions, because it helped the team to work well, but they felt that they were not well-prepared to apply it in their daily practices.

In Brazil, according to COFEN<sup>(3)</sup> resolutions the NHS is a prerogative of the nurse, but it is worth noting that all members of the nursing team are part of this process, because all of them can contribute, at the opportune moment, with information or activities that will favor patient healthcare. In this study, it seemed that the function of the nurse and the nursing team in the application of NHS was not well-defined, since even nurses had doubts regarding their responsibilities in this process, and eventually delegated some of their functions to nursing technicians and/or auxiliaries. This difficulty in recognizing the person who is truly responsible for NHS was observed when they were asked whether they knew who should perform it, and the following answers were obtained:

The nurse (Begônia).

The nurse and her team (Tulipa).

The nursing team (Gérbera).

Therefore, if there were difficulties in answering who is responsible for performing NHS, it was even more difficult to recognize their own NHS roles, according to the quotations below:

I believe that this means helping to follow the script that she elaborated. That's it (Lírio).

Bringing everything we learn into practice, you know, what the nurse or the chief-of-sector teaches the staff, the nursing team. And you have to do it as good as you can to put it into practice, otherwise it's no use, right? (Margarida).

Implanting the NHS (Tulipa)

The roles are well-defined when the nurse assumes their responsibilities and delegates coherent functions to her employees, i.e., the nurse collects the data with the aid of the team, prepares the nursing diagnoses and elaborates a healthcare plan or nursing prescription. This plan will be implemented by the whole nursing team, according to the complexity of the procedure and availability of staff in the period, so that, next, the nursing assessment can be performed. Here, the implemented care will be evaluated. In this sense, the nursing team will only be able to develop an adequate nursing healthcare systematization when all their members know which roles they have to play, and, especially, their responsibilities.

In the development of the NHS in healthcare practice, there were some difficult and also some easy aspects, which will be mentioned next to collaborate with all nursing professionals wanting to implement NHS. One of the difficulties happened due to the instruments used, because these had never been tested or applied, i.e., there was no previ-

ous idea of how they should work, or if they were applied adequately to achieve the desired outcomes. Another difficulty was: having to spend more time on the bureaucratic activity, developing NHS, than usual, because only one synthetic nursing assessment was performing in the daily work routine. Therefore, developing NHS would take more time, but it would yield nursing care with the desired quality.

The main facilitating aspect was due to being able to fill out the forms fast – more specifically in the application of the nursing history, where only the necessary items were marked, while those that were not present were added. The time spent to apply the NHS in each patient was approximately 40 minutes. However, during the development, the nurse was constantly required to perform activities on the patient, such as puncturing a vein, performing a bladder or nasogastric tube procedure. These actions delayed the conclusion of the process.

Indeed, the most difficult and time-consuming step in the implementation of the nursing process was the diagnosis. This happened because it does not depend on the nurse to simply identify it, but also to describe its defining characteristics and related factors in the case of previously-established problems. If dealing with potential problems, it is up to the nurse to identify the risk factors. As such, it is necessary to have knowledge and quick and logical reasoning to associate the signs and symptoms with their possible causes. It is important for the nursing prescription to be objective, but flexible enough to be broadened, according to each patient's needs. This was one of the easy aspects found during its execution, because of the presence of basic healthcare procedures and the possibility of adding others as necessary.

## FINAL CONSIDERATIONS

With the application of the nursing processes, we noted the importance of healthcare systematization at the ICU, as that is the only way for nurses to provide quick and quality care. It is concluded that the employees at the studied ICU know little about NHS, and they recognize that it is necessary to learn more in order to apply it in practice. It was also perceived that the whole nursing team is greatly interested in knowing NHS better and making it part of their routine. The association of Wanda de Aguiar Horta's Theory of Basic Human Necessities and NANDA opened the horizon for the participants. In addition to organizing the service, it awakened the desire of studying and the feeling of belonging to the healthcare, being responsible for efficient and individualized nursing care.

The experience acquired in this study had plenty of facilitating aspects, such as the good rapport with the nursing team, the efforts of all members to participate in the study, the broad knowledge they had of the forms used and their interest in the topic. However, there were difficulties, such as inexperience to use the NHS in their daily

routine and the forms that had never been used before. All these aspects were fundamental for individual and collective growth. Finally, there is satisfaction with the activities developed and, hence, the intention to continue, with the implementation of the NHS, using the elaborated forms and making them part of the nursing care provided at the studied ICU.

In this sense, the study showed a weakness and a limitation in nursing routine, since there are several intensive care units in Brazil that may be in the same situation as the one found in this study. On the other hand, it can be stated that nursing care can be implemented as long as the nursing team, especially the nurse, is willing to overcome existing difficulties.

## REFERENCES

1. Gomes AM. Enfermagem na UTI. 2ª ed. São Paulo: EPU; 1988.
2. Souza MF. As teorias de enfermagem e sua influência nos processos cuidadosos. In: Cianciarullo TI, Gualda DMR, Melleiro MM, Anabuki MH. Sistema de Assistência de Enfermagem: evolução e tendências. 3ª ed. São Paulo: Ícone; 2001. p. 29-40.
3. Conselho Federal de Enfermagem (COFEN). Resolução n. 272, de 27 de agosto de 2002. Dispõe sobre a Sistematização da Assistência de Enfermagem – SAE [legislação na Internet]. Brasília; 2002. [citado 2008 mar. 12]. Disponível em: <http://www.portalcofen.gov.br/2007/materias.asp?ArticleID=7100&sectionID=34>
4. Alfaro-Lefevre R. Aplicação do processo de enfermagem: promoção do cuidado colaborativo. 5ª ed. Porto Alegre: Artmed; 2005.
5. Backes DS, Esperança MP, Amaro AM, Campos IEF, Cunha AD. Sistematização da Assistência de Enfermagem: percepção dos enfermeiros de um hospital filantrópico. Acta Sci. Health Sci. 2005;27 (1):25-9.
6. Horta WA. Processo de enfermagem. São Paulo: EPU; c1979.
7. Benedet SA, Bub MBC. Manual de diagnósticos de enfermagem: uma abordagem baseada na teoria das necessidades humanas e na classificação diagnóstica da NANDA. 2ª ed. Florianópolis: Bernúncia; 2001.
8. Domingues TAM, Chaves EC. O conhecimento científico como valor no agir do enfermeiro. Rev Esc Enferm USP. 2005;39 (n.esp):580-8.

### Annex 1

Nursing History at the Philanthropic Hospital of Brusque, Santa Catarina – October, 2006 to March, 2007.

<b>I. IDENTIFICATION</b>							
Name: _____		Age: _____					
Gender: _____		Marital Status: _____		Religion: _____			
Occupation: _____				City of Origin: _____			
Precedence: _____				Admission Date: _____		Registry: _____	
Referring sector: _____		Current bed: _____		Medical diagnosis: _____			
<b>II. INTERVIEW</b>							
Previous hospitalizations (amount and reasons): _____							
Background: <input type="checkbox"/> SH <input type="checkbox"/> DM <input type="checkbox"/> Smoking <input type="checkbox"/> Alcoholism <input type="checkbox"/> Others: _____							
What does the patient know about his/her current condition? _____							
Fears and anxiety: _____							
<input type="checkbox"/> Pain (location and manifestation): _____							
<b>III. PHYSICAL EXAMINATION</b>							
<b>1. Psychobiological needs</b>							
<b>1.1 Neurological regulation</b>							
<i>Consciousness:</i> <input type="checkbox"/> Alert		<input type="checkbox"/> Lethargic		<input type="checkbox"/> Obnubilated		<input type="checkbox"/> Torpor	
						Glasgow: _____	
<i>Pupils:</i> <input type="checkbox"/> Isochoric		<input type="checkbox"/> Anisochoric		<input type="checkbox"/> Myosis		<input type="checkbox"/> Mydriasis	
						<input type="checkbox"/> FMR	
<i>Physical mobility:</i>		Upper limbs <input type="checkbox"/> Preserved:		<input type="checkbox"/> Paresis:		<input type="checkbox"/> Plegia:	
						<input type="checkbox"/> Paresthesia:	
		Lower limbs <input type="checkbox"/> Preserved:		<input type="checkbox"/> Paresis:		<input type="checkbox"/> Plegia:	
						<input type="checkbox"/> Paresthesia:	
		<input type="checkbox"/> Slow movement		<input type="checkbox"/> Involuntary movement		<input type="checkbox"/> Seizures:	
<i>Fala e linguagem:</i>		<input type="checkbox"/> Aphony		<input type="checkbox"/> Dyslalia		<input type="checkbox"/> Dysarthria	
						<input type="checkbox"/> Disphasia	
						<input type="checkbox"/> Aphasia	
<i>Medication:</i>		<input type="checkbox"/> Psychotropics:		dose: _____		ml/h	
		<input type="checkbox"/> Neuromuscular blockers:		dose: _____		ml/h	
<b>1.2 Oxygenation</b>							
<i>Breathing:</i>		<input type="checkbox"/> Spontaneous		<input type="checkbox"/> Catheter		<input type="checkbox"/> Mask	
				Prosthetics: <input type="checkbox"/> TOT		<input type="checkbox"/> Tracheotomy	
		<input type="checkbox"/> Others		O <sub>2</sub> : _____		liters/min	
				SpO <sub>2</sub> : _____			
RF: _____		<input type="checkbox"/> Dyspnea		<input type="checkbox"/> Tachypnea		<input type="checkbox"/> Bradypnea	
						<input type="checkbox"/> Central neurogenic hyperventilation	
<input type="checkbox"/> Apneustics		<input type="checkbox"/> Biot		<input type="checkbox"/> Cheyne-Stokes		<input type="checkbox"/> Kussmaul	
						<input type="checkbox"/> In spells	
<input type="checkbox"/> Mechanic ventilation		Modality: _____		CV: _____		FiO <sub>2</sub> : _____	
				PEEP: _____		SpO <sub>2</sub> : _____	
						Cuff pressure: _____	
<i>Pulmonary Auscultation:</i>		VM Present		<input type="checkbox"/> Bilaterally		<input type="checkbox"/> Reduced	
				Adventitious sounds: <input type="checkbox"/> Rhonchi:		<input type="checkbox"/> Hissing:	
						<input type="checkbox"/> Rales:	
<i>Coughing:</i>		<input type="checkbox"/> Non-productive		<input type="checkbox"/> Productive		<input type="checkbox"/> Expectoration	
						<input type="checkbox"/> Aspiration (amount and characteristics):	
<i>Thoracic drain</i> <input type="checkbox"/> Time and characteristics:							
<i>Gasometrics:</i> Data/Time: _____		pH: _____		pCO <sub>2</sub> : _____		PO <sub>2</sub> : _____	
				BIC: _____		BE: _____	
						TCO <sub>2</sub> : _____	
						sO <sub>2</sub> : _____	
<b>1.3 Cardiovascular Regulation</b>							
HF: _____		bpm		BP: _____		mmHg	
				PVC: _____		cmH <sub>2</sub> O	
				PAM: _____		mmHg	
<i>Pulse:</i> <input type="checkbox"/> Regular		<input type="checkbox"/> Irregular		<input type="checkbox"/> Impalpable		<input type="checkbox"/> Filiform	
						<input type="checkbox"/> Palpable	
						<input type="checkbox"/> Full	
<i>Skin color:</i>		<input type="checkbox"/> Regular		<input type="checkbox"/> Pale		<input type="checkbox"/> Cyanosis	
<i>Capillary refill time:</i>		<input type="checkbox"/> ≤ 2 seconds		<input type="checkbox"/> > 2 seconds			
<i>Enzymatic markers:</i>		Ck: _____		CkMB: _____		Troponin: _____	
<i>Edema:</i>		<input type="checkbox"/> Feet		<input type="checkbox"/> Lower limbs		<input type="checkbox"/> Lower limbs and upper limbs	
						<input type="checkbox"/> Anasarca	

ECG: <input type="checkbox"/> Sinusal rhythm <input type="checkbox"/> Regular <input type="checkbox"/> Altered:	
Vasoactive drugs:	<input type="checkbox"/> Dopamine ml/h <input type="checkbox"/> Dobutamine ml/h <input type="checkbox"/> Noradrenaline ml/h
<b>1.4 Thermal regulation</b>	
Temperature: °C	
<b>1.5 Sensorial perception</b>	
Sight: <input type="checkbox"/> Normal <input type="checkbox"/> Altered:	Hearing: <input type="checkbox"/> Normal <input type="checkbox"/> Altered:
<b>1.6 Hormonal and Electrolytic Regulation</b>	
Glycemia:	Na: K: Ca:
<b>1.7 Hydration and Bladder elimination</b>	
Skin turgidity: <input type="checkbox"/> Preserved <input type="checkbox"/> Reduced	
Urinary elimination: Volume: ml/h <input type="checkbox"/> Spontaneous <input type="checkbox"/> Retention <input type="checkbox"/> Incontinence <input type="checkbox"/> Urinary catheter <input type="checkbox"/> External device	
Characteristics: <input type="checkbox"/> Dysuria <input type="checkbox"/> Oliguria <input type="checkbox"/> Anuria <input type="checkbox"/> Polyuria <input type="checkbox"/> Hematuria <input type="checkbox"/> Others	
Kidney function: <input type="checkbox"/> Normal <input type="checkbox"/> Altered: Urea: Creatinine:	
<b>1.8 Dieting and Intestinal Elimination</b>	
Type of diet:	Weight:
Appetite: <input type="checkbox"/> Normal <input type="checkbox"/> Increased <input type="checkbox"/> Reduced	
Administration: <input type="checkbox"/> Oral <input type="checkbox"/> Nasogastric tube <input type="checkbox"/> Parenteral <input type="checkbox"/> Others:	
Presence of: <input type="checkbox"/> Nausea <input type="checkbox"/> Vomit (amount and characteristics):	
Abdomen: <input type="checkbox"/> Flat <input type="checkbox"/> Globous <input type="checkbox"/> Distended <input type="checkbox"/> Hurts when palpated <input type="checkbox"/> Others:	
Abdominal noise: <input type="checkbox"/> Present <input type="checkbox"/> Absent <input type="checkbox"/> Reduced <input type="checkbox"/> Increased	
Ostomy <input type="checkbox"/> Local:	
Intestinal elimination: Frequency: times/week <input type="checkbox"/> Normal <input type="checkbox"/> Constipation <input type="checkbox"/> Diarrhea <input type="checkbox"/> Incontinence <input type="checkbox"/> Others:	
<b>1.9 Skin-mucosa integrity</b>	
Skin: <input type="checkbox"/> Normal <input type="checkbox"/> Cyanosis <input type="checkbox"/> Jaundice <input type="checkbox"/> Pallor <input type="checkbox"/> Itching <input type="checkbox"/> Petechiae: <input type="checkbox"/> Ecchymoses: <input type="checkbox"/> Bruises: <input type="checkbox"/> Excoriations: <input type="checkbox"/> Others:	
Eyes: <input type="checkbox"/> Jaundice <input type="checkbox"/> Conjunctive edema <input type="checkbox"/> Others:	
<b>1.10 Therapy</b>	
Venous network:	
Muscle structure:	
Catheter: <input type="checkbox"/> Peripheral puncture <input type="checkbox"/> Jugular <input type="checkbox"/> Subclavia <input type="checkbox"/> Double lumen <input type="checkbox"/> Other: Indwelling time: Characteristics of the location:	
Drain <input type="checkbox"/> Local: Characteristics:	
<b>1.11 Physical safety</b>	
<input type="checkbox"/> Necessity of restriction to bed: <input type="checkbox"/> Isolation:	
<b>2 PSYCHOSOCIAL NEEDS</b>	
<b>2.1 Emotional and gregarious security</b>	
<input type="checkbox"/> Needs an accompanying partner <input type="checkbox"/> Anxiety <input type="checkbox"/> Fear <input type="checkbox"/> Solicitor <input type="checkbox"/> Others:	
<b>3 PSYCHOSPIRITUAL NEEDS</b>	
<input type="checkbox"/> Practitioner <input type="checkbox"/> Needs spiritual aid	
<b>4 RELEVANT LABORATORY EXAMS</b>	
Nurse/stamp:	Date/Time:

**Annex 2**

Nursing diagnoses at the Philanthropic Hospital of Brusque, Santa Catarina – October, 2006 to March, 2007

Name:	Record#:	Bed:
<b>1 PSYCHOBIOLOGICAL NEEDS</b>		
<i>1.1 – NEUROLOGICAL REGULATION</i>		
1 - Changing in the thinking process ( ) _____		
2 - Memory affected ( ) _____		
3 - Acute confusion ( ) _____		
4 - Unilateral Negligence ( ) _____		
5 - Reduced intracranial adaptive capacity ( ) _____		
6 - Dysreflexia ( ) or risk of ( ) _____		
<i>1.2 – SENSORY PERCEPTION</i>		
1-Perceptive sensory alterations: visual, auditive, kinesthetic, olfactive, gustatory, tactile ( ) _____		
2 - Pain( ) _____		
3 - Nausea( ) _____		
<i>1.3 – OXYGENATION</i>		
1 - Inneficient breathing pattern ( ) _____		
2 - Hampered gaseous exchanges ( ) _____		
3 - Inability to maintain spontaneous breathing ( ) _____		
4 - Inefficient airway clearance ( ) _____		
5 - Dysfunctional response to ventilatory weaning ( ) _____		
<i>1.4 – VASCULAR REGULATION</i>		
1 - Reduced cardiac debt ( ) or risk for ( ) _____		
2 - Alterations in tissular perfusion: cerebral, cardiopulmonary, renal, gastrointestinal, peripheral ( ) _____		
3 - Risk for peripheral neurovascular dysfunction ( ) _____		
<i>1.5 – THERMAL REGULATION</i>		
1 - Risk for alterations in body temperature ( ) _____		
2 - Hypothermia ( ) _____		
3 - Hyperthermia( ) _____		
<i>1.6 – HYDRATION</i>		
1 - Fluid volume excess ( ) _____		
2 - Fluid volume deficit ( ) or risk for ( ) _____		
3 - Risk for body fluid imbalance ( ) _____		
<i>1.7 – DIETING</i>		
1 - Difficulty swallowing ( ) _____		
2 - Nutritional alterations: _____ than body needs ( ) _____		
3- Nutritional alterations: risk for _____ than body needs ( ) _____		



**1.8 – ELIMINATIONS**

- 1 - Alteration in urinary elimination ( ) \_\_\_\_\_
- 2 - Urinary incontinence \_\_\_\_\_ ( ) or risk for ( ) \_\_\_\_\_
- 3 - Urinary retention ( ) \_\_\_\_\_
- 4 - Constipação ( ) \_\_\_\_\_
- 5 - Intestinal incontinence ( ) \_\_\_\_\_
- 6 - Diarrhea ( ) \_\_\_\_\_

**1.9 – PHYSICAL INTEGRITY**

- 1 - Damaged skin integrity ( ) or risk for ( ) \_\_\_\_\_
- 2 - Damaged tissular integrity ( ) \_\_\_\_\_
- 3 - Alterations in the oral mucosa ( ) \_\_\_\_\_

**1.10 – SLEEP AND RESTING**

- 1 - Disturbances in the sleep pattern ( ) \_\_\_\_\_
- 2 - Sleep deprivation ( ) \_\_\_\_\_
- 3 - Fatigue ( ) \_\_\_\_\_

**1.11 – PHYSICAL ACTIVITY**

- 1 - Hampered physical mobility ( ) \_\_\_\_\_
- 2 - Intolerance to activity ( ) or risk for ( ) \_\_\_\_\_
- 3 - Hampered walking ( ) \_\_\_\_\_
- 4 - Hampered mobility in bed ( ) \_\_\_\_\_
- 5 - Delayed surgery recovery ( ) \_\_\_\_\_

**1.12 – BODY CARE**

- 1 - Self-care deficit: ( ) \_\_\_\_\_
- 2 - Self-care deficit syndrome ( ) \_\_\_\_\_

**1.13 – PHYSICAL / ENVIRONMENTAL SECURITY**

- 1 - Altered protection ( ) \_\_\_\_\_
- 2 - Risk of infection ( ) \_\_\_\_\_
- 3 - Risk of injury ( ) \_\_\_\_\_
- 4 - Risk of trauma ( ) \_\_\_\_\_
- 5 - Hampered household maintenance ( ) \_\_\_\_\_
- 6 - Risk of aspiration ( ) \_\_\_\_\_
- 7 - Risk of suffocation ( ) \_\_\_\_\_
- 8 - Risk of violence: directed ( ) \_\_\_\_\_
- 9 - Stress syndrome caused by change ( ) \_\_\_\_\_
- 10 - Inefficient therapy control: ( ) \_\_\_\_\_

**2. PSYCHOSOCIAL NECESSITIES**

**2.1 – COMMUNICATION**

- 1 - Hampered communication ( ) \_\_\_\_\_

2.2 – GREGARIOUS
1 - Hampered social interaction( ) _____
2 - Social isolation ( ) _____
3 - Risk for loneliness ( ) _____
2.3 –EMOTIONAL SECURITY
1 - Anxiety( ) _____
2 - Fear( ) _____
3 - Powerlessness( ) _____
4 - Inneficient denial ( ) _____
5 - Post-traumatic syndrome( ) or risk for ( ) _____
2.4 – LOVE, ACCEPTING
1 - Altered family processes( ) _____
2 - Feelings of guilt ( ) _____
3 - Chronic sadness ( ) _____
2.5 – SELF-ESTEEM, SELF-CONFIDENCE, SELF-RESPECT
1 - Self-esteem disturbance ( ) _____
2 - Body image disturbance ( ) _____
2.6 – FREEDOM AND PARTICIPATION
1 - Decision conflict ( ) _____
2 - Coping inefficient ( ) _____
3 - Defensive coping ( ) _____
2.7 – HEALTHCARE EDUCATION /LEARNING
1 - Hampered adjustment ( ) _____
2 - Lack of knowledge ( ) _____
2.8 – SELF-REALIZATION
1 - Role changes ( ) _____
<b>3. PSYCHOSPIRITUAL NEEDS</b>
3.1 - SPIRITUALITY
1 - Spiritual suffering ( ) _____
2 - Risk of spiritual suffering ( ) _____
Nurse/stamp: _____ Date/Time: _____

**Annex 3**

Nursing prescriptions at the Philanthropic Hospital of Brusque, Santa Catarina – October, 2006 to March, 2007

Name:	Record#:	Bed:
Controlling the level of consciousness and pupil patterns		
Verifying vital signs and pulse oxymetrics		
Observing and communicating changes in the breathing pattern		
Performing oral aspiration, nasal aspiration, OTT, tracheotomy and changing fixation material		
Changing airways and filters near the OTT		
Changing all airways		
Cleaning/changing MV		
Maintain adequate water levels in the humidifiers		
Measuring and recording cuff pressure		
Observing and communicating alterations of the cardiac graph		
Reporting SP $\leq 90$ or $\geq 180$ mmHg		
Reporting DP $\leq 50$ or $\geq 100$ mmHg		
Washing nasogastric tube /gastrostomy with 20ml water		
Controlling urinary flow, report if $\leq 50$ or $\geq 200$ ml/h		
Maintaining bedhead at 30°		
Rotating the subcutaneous injections		
Rotating the oxymeter sensors		
Changing venous puncture bandages		
Changing surgery incision bandages and reporting characteristics		
Controlling flow of the _____ drain and reporting characteristics		
Controlling the validity of the venous puncture, associated devices and polyfix		
Cleaning the tracheotomy stoma with saline solution		
Maintain heel protectors		
Communicating changes in dorsal and/or heel skin		
Performing body hygiene in bed		
Performing scalp hygiene		
Performing oral hygiene		
Performing eye hygiene and protecting with humidified bandages		
Performing comfort massages and changing bed positions		
Sitting the patient out of the bed		
<b>Nurse/stamp:</b>	<b>Date/time:</b>	