● **Original article**

DEVELOPMENT AND VALIDATION OF A NURSING CARE INSTRUMENT FOR PATIENTS IN INTENSIVE CARE UNITS

Ráisa Camilo Ferreira[1], Fábio Luis Montanari[2], Elaine Ribeiro[3], Marisa Dibbern Lopes Correia[4], Juliana Prado Biani Manzoli[5], Erika Christiane Marocco Duran[6]

ABSTRACT: Objective: to develop and validate an instrument for nursing care, based on specific literature for patients hospitalized in the Intensive Care Unit of a university hospital in the state of São Paulo.Method: methodological study, with data collection from August to December 2015, in three phases: characterization of the population and survey of the nursing diagnoses, development, and validation of the instrument for the registration of the Nursing Process.The Delphi technique was used for the content validation, with a group of experts in the area, composed of 11 judges.Results: during the data collection, 152 patients were hospitalized, 61.18% male, with a mean age of 54.9 years.The content of the instrument was validated with a validation index >0.81. Conclusion: the construction of instruments for the Nursing Process is useful to facilitate the implementation of care, to evidence the care and to increase communication and the safety of the healthcare.
DESCRIPTORS: Nursing; Patient Care Planning; Nursing Processes; Validation Studies; Intensive Care Units.

ELABORAÇÃO E VALIDAÇÃO DE INSTRUMENTO DE ASSISTÊNCIA DE ENFERMAGEM PARA PACIENTES EM UNIDADES DE TERAPIA INTENSIVA

RESUMO: Objetivo: elaborar e validar instrumento para assistência de enfermagem, baseado em literatura específica para pacientes internados em Unidade de Terapia Intensiva, de um hospital universitário do estado de São Paulo. Método: estudo metodológico, com coleta de dados de agosto a dezembro de 2015, em três fases: caracterização da população e levantamento dos diagnósticos de enfermagem, elaboração, e validação do instrumento para o registro do Processo de Enfermagem. Para a validação de conteúdo, utilizou-se a técnica Delphi, com um grupo de especialistas na área, composto por 11 jurados. Resultados: durante a coleta de dados, 152 pacientes estiveram internados, 61,18% do sexo masculino, com idade média de 54,9 anos. O conteúdo do instrumento foi validado com índice de validação > 0,81. Conclusão: a construção de instrumentos para o processo de Enfermagem é útil para facilitar a implementação da assistência, evidenciar a assistência, incrementar a comunicação e segurança dos cuidados em saúde.
DESCRITORES: Enfermagem; Planejamento de Assistência ao Paciente; Processos de Enfermagem; Estudos de Validação; Unidades de Terapia Intensiva.

ELABORACIÓN Y VALIDACIÓN DE INSTRUMENTOS DE ASISTENCIA DE ENFERMERÍA PARA PACIENTES EN UNIDAD DE TERAPIA INTENSIVA

RESUMEN: Objetivo: elaborar y validar instrumento para asistencia de enfermería, con base en la literatura específica para pacientes ingresados en Unidad de Terapia Intensiva de un hospital universitario del estado de São Paulo. Método: estudio metodológico, con recogida de datos de agosto a diciembre de 2015, en tres etapas: caracterización de la población y recogida de los diagnósticos de enfermería, elaboración, y validación del instrumento para el registro del Proceso de Enfermería. Para la validación de contenido, se utilizó la técnica Delphi, con un grupo de especialistas en el área, compuesto por 11 jurados. Resultados: durante la obtención de datos, 152 pacientes estuvieron ingresados, 61,18% del sexo masculino, con edad media de 54,9 años. Se evaluó el contenido del instrumento por medio de índice de validación > 0,81. Conclusión: la construcción de instrumentos para el proceso de Enfermería es útil para facilitar la implementación de la asistencia, evidenciarla, así como para incrementar la comunicación y seguridad de los cuidados en salud.
DESCRIPTORES: Enfermería; Planeamiento de Asistencia al Paciente; Procesos de Enfermería; Estudios de Validación; Unidades de Terapia Intensiva.

[1]RN. Undertaking PhD's Degree on the Postgraduate Program in Nursing. State University of Campinas. Campinas, SP, Brazil.
[2]RN. Clinical nurse of the Clinical Hospital of the State University of Campinas.Campinas, SP, Brazil.
[3]RN. Undertaking PhD's Degree on the Postgraduate Program in Nursing. Professor of Nursing at the University Center of Itapira, Itapira SP, Brazil.
[4]RN.Undertaking PhD's Degree on the Postgraduate Program in Nursing at of the State University of Campinas.Adjunct Professor Faculty of Nursing of the Federal University of Viçosa. Campinas, SP, Brazil.
[5]RN.Master's Degreein Nursing. Nurse of the Municipal Council of Paulínia. Campinas, SP, Brazil.
[6]RN. PhD in Nursing. Post-Doctorate. Professor of Nursing Graduation and of the Nursing Pos Graduation Program of the State University of Campinas. Campinas, SP, Brazil.

Corresponding author:
Ráisa Camilo Ferreira
Universidade Estadual de Campinas
R. Tessália Vieira de Camargo, 126 - 13083-887 - Campinas, SP, Brasil
E-mail: raisacfe@gmail.com

● INTRODUCTION

Intensive Care Units (ICUs) emerged in Brazil in 1970 due to the need to provide advanced life support to patients with clinical instability. They are environments of high complexity, with state-of-the-art technology, which aims for complete monitoring, constant surveillance, rigorous control of the vital functions and continuous and intensive multiprofessional care, with specialized human resources, specific materials and other technologies for diagnosis and treatment[1-4].

In this unit, the nurse needs to develop specific and complex actions that comprise the care management; which require scientific upgrading, interdisciplinary action, technological management and humanization extended to the family members, leading to safe, quality care[1-4].

In Brazil, in the 1970s, Wanda Horta developed the first generation of the Nursing Process (NP) supported by the Theory of Basic Human Needs (BHN), based on Maslow's theory of human motivation, reinforcing the importance of broad and humanized care, evidencing nursing as a science and supporting and empowering it as a theory[5-6].

In this scenario, the NP is the scientific method that guides the work of nurses in the investigation of the functions of the patient, identifying care needs, proposing interventions and evaluating the outcomes. It consists of five interrelated stages: nursing history, nursing diagnosis, planning, implementation and evaluation, which will guide the clinical reasoning and diagnostic decision-making, resulting from a critical-reflexive analysis of the data collected from the patients[7-8].

The second stage of this process is defined as a "clinical judgment regarding a human response to health conditions/life processes, or a vulnerability to this response, of an individual, family, group or a community"[9:25].

Studies[10-16] show an expansion in the development and use of NDs and of classification systems, evidencing the need for theoretical and practical articulation and the development of nursing care instruments that guide the data collection, composed of nursing diagnoses prevalent in ICU patients, their respective outcomes and interventions, which will guide the nursing care[10,12].

Currently, in the international and national scenario, there is an increase in the use of these instruments, with positive repercussions on the care quality, since facilitating the implementation of the NP contributes to the quality of care by addressing patients' individual needs[17-18].

The aim of this study was to construct and validate an instrument for the registration of the NP in patients admitted to ICUs, based on the theoretical model of Wanda Horta.

● METHOD

This was a methodological study for the construction and validation and an instrument(19), carried out in three phases:

Phase 1: Characterization of the population through the analysis of medical records and survey of the care plan of all patients hospitalized in the ICUs (Trauma, Clinical, Neurology, Post-Anesthetic, Coronary and Transplantation) of the Clinical Hospital of the State University of Campinas over 30 days[19-21].

Phase 2: Development of the instrument with the five stages of the nursing process. The most frequent NDs were presented according to the domains of the NANDA-International taxonomy (NANDA-I), followed by their results and interventions described according to the Nursing Interventions Classification (NIC) taxonomy. Taxonomy was not used for the results, according to the request of the nurses of the unit[5,9,20].

Phase 3: Face and content validation of the instrument by nurses with least two years experience in ICUs, who agreed to participate in the study. The content validation used the Delphi technique to obtain the opinions and criteria of a set of experts from the individual analysis of the instruments[19,21].

The evaluations were analyzed and the suggestions included in the instrument when considered relevant.

Each item was evaluated according to a five-point Likert scale (1 Strongly disagree, 2 Partially disagree, 3 Neither agree nor disagree, 4 Partially agree and 5 Strongly agree), resulting in the Content Validation Index (CVI = Number of 4 or 5 responses/Total number of responses).To obtain consensus, the CVI should be >0.78,otherwise, further rounds of evaluation should be carried out[21]. In this study, the instrument was validated in the first round.

The study was approved by the Research Ethics Committee (CEP) of the institution, under authorization No. 954.231[22].The data collection of phases 1, 2 and 3 occurred from August to December 2015, in the sites mentioned above.The inclusion criteria were to be hospitalized in these sites, to be over 15 years of age, with the exclusion criterion being not having the NP instruments completed in the previous 48 hours of hospitalization.

● **RESULTS**

During the data collection, 152 patients were admitted to the ICUs, with a mean age of 54.90 years and a standard deviation of 16.83 years; the mean time of hospitalization was 8.05 days and the standard deviation was 5.24. Other data from the profile of the patients hospitalized during the data collection period are shown in Table 1.

Table 1 - Profile of patients admitted to the ICUs of the UNICAMP Clinical Hospital.Campinas, SP, Brazil, 2018

Variables	Categories	n	%
Age (years)	< 20	5	3.29
	20⊢35	21	13.81
	35⊢50	30	19.74
	50⊢65	55	36.18
	65⊢80	33	21.72
	>80	8	5.26
Gender	Male	93	61.18
	Female	59	38.82
Days hospitalized	<5	51	33.55
	5⊢15	90	59.22
	15⊢30	11	7.23
Total		152	100

The medical diagnoses presented by the patients were heterogeneous, with a higher frequency of cardiovascular diseases (32; 21.00%), followed by Sepsis/Septic shock (29; 19.13%); Post-operative and Polytrauma (27; 17.77%); Transplantation (hepatic, cardiac or renal) (15; 9.87%); Stroke(11; 7.20%); Hematologic diseases and neurological syndromes (3; 1.98%) and others (5; 3.30%).

Of these, 90 patients (59.21%) presented the following risk factors and/or comorbidities:Arterial Hypertension (67; 34.90%); Diabetes Mellitus (45; 23.44%); Dyslipidemia (23; 11.98%); Hypothyroidism (17; 8.85%); Smoking (15; 7.81%); Obesity (8; 4.17%); Alcoholism (4; 2.08%) and others (13; 6.77%).

The most frequent ND was Risk of infection.Table 2 presents the titles of the NDs and the Nursing Outcomes listed by the nurses of the ICUs.

Table 2 - Nursing Diagnoses and expected outcomes obtained in the ICU of the Clinical Hospital - UNICAMP Campinas, SP, Brazil, 2018

Nursing Diagnostics and expected outcomes	n	%
Risk for infection/Will not present infection	1220	100
Bathing self-care deficit/Will perform self-care activity or communicate satisfaction with it despite the limitations	1185	97.13
Impaired physical mobility/ Will present increased strength and endurance	918	75.25
Risk for impaired skin integrity/The skin will not be adversely affected	904	74.10
Impaired skin integrity/Will show signs of progressive scarring of the skin	851	69.75
Risk for aspiration/Will not aspirate secretions	757	62.05
Ineffective airway clearance/Will present free airways	746	61.15
Imbalanced nutrition: less than body requirements/Will maintain body mass index	648	53.11
Acute Pain/Will report pain relief	467	38.28
Impaired spontaneous ventilation/Will present improved gas exchange	379	31.07
Risk for falls/Avoid falling	12	0.98
Constipation/Improve bowel function	12	0.98
Risk for decreased cardiac tissue perfusion/Maintain cardiac tissue perfusion	9	0.74
Total	8108	

Table 3 presents the items contained in the Nursing Prescription prepared by the nurses of the ICUs.

Table 3 - Nursing Prescription surveyed in the ICU of the UNICAMP Clinical Hospital.Campinas, SP, Brazil, 2018

Prescribed Items	n	%
Orient the patient before starting the procedures	1220	100
Maintain universal precautionary care and wash hands before and after handling with patient	1220	100
Place/maintain identification wristband	1220	100
Perform oral hygiene	1220	100
Perform intimate hygiene	1220	100
Replace fixations	1220	100
Perform replacement after 72 hours of peripheral venipuncture	1220	100
Perform change of position every 2 hours	1220	100
Observe and record acceptance of diet, eliminations, bleeding and pain	1220	100
Maintain bed with raised side rails and bell next to the patient	1220	100
Perform bed bath	1185	97.13
Perform dressing	918	75.25
Maintain head elevated with decubitus position of __ degrees	904	74.10
Change tracheostomy fixation	467	47.92
Check and record drain flow and its characteristics	379	31.07
Total	17273	

Eleven specialist nurses, with a mean of 13.27 years of experience in the intensive care unit, participated in the third phase of this study; 10 (91%) were female; with a mean age of 38 years, standard deviation of 7.65 years. Regarding qualifications, the nurses were distributed as follows: 5 (45.45%) had a postdoctoral degree, 2 (18.18%) had a doctorate and 4 (36.37%) had a Master's degree, and 7 (63.63%)

had a teaching career and 4 (36.36%) worked in care.In both the forms, all the domains received CVI >0.78, ranging from 0.81 to 1.00, dispensing with the need for a new round of evaluation.

Based on the data obtained, in the specific literature on critical patients, NDs, Expected Outcomes and Nursing Interventions, a two-part NP instrument was constructed.In the first part, Nursing History was constructed following the NANDA-I domains, presented in Figure 1.

Figure 1 - Nursing History Instrument.Campinas, SP, Brazil, 2018

Domains	Summary of the items
Domain 1: Health Promotion	Identification of the patient, nursing history.
Domain 2: Nutrition	Weight, type of diet, use of catheters for feeding, acceptance of diet, fasting time, evaluation of oral cavity and oropharynx.
Domain 3: Elimination and Exchange	Investigation of alterations in the functions and physical examination of the respiratory, digestive and urinary systems.
Domain 4: Activity/Rest	Assessment of general condition, limitation in activities of daily living, presence of fractures, movement limitations, cardiovascular, pulmonary and physical examination.
Domain 5: Perception/cognition	Evaluation of the neurological system, organs of senses and sensitivity.
Domain 9: Coping/stress tolerance	Assess how the patient is coping with the disease.
Domain 10: Life principles	Inquire about religious practices.
Domain 11: Safety/protection	Evaluation of the integumentary system, lymph nodes, mouth and salivary glands.
Domain 12: Comfort	Inquire about pain/discomfort* and check intravenous devices.

*Investigate characteristics and factors of improvement and worsening.
Source: Adapted from NANDA-I by the authors.

The second part of the instrument includes the NDs, interventions and outcomes presented in ANNEX 1. The instrument was constructed in a checklist format, with a space also reserved for recording the development and the intervention schedules for four days. At the end of the instrument, a blank space was included so the nurse could add additional diagnoses.

● **DISCUSSION**

In the first phase of this study the profile of the population was plotted, which corroborates that found in the literature, with a predominance of males, in the age group of 50 to 65 years.This profile reflects two Brazilian realities: the first being men seeking health services late, with this occurring only after the worsening of their pathologies, often still unknown to them.The second is the demographic transition in recent years characterized by population aging, which is directly related to the increase in the incidence of chronic noncommunicable diseases (NCDs) [10-18,23].

Almost 60% of the study sample presented some comorbidity, similar to that found in other studies[24-25], with the majority of incidents being cardiovascular diseases and diabetes.This is associated with the risk factors of smoking, poor diet and sedentary lifestyle, which leads to being overweight or obese, dyslipidemia, worsening or onset of hypertension and diabetes mellitus[24].

The data presented here coincide with the causes of hospitalization, with a prevalence of cardiovascular diseases, followed by severe sepsis and septic shock - the main causes of death in ICUs. The postoperative period, due to the complexity of the surgical procedure performed and/or patient instability, requires continuous monitoring and care, thus justifying the maintenance of these patients in this place. Polytrauma, which was also a leading cause of hospitalization in this study, was responsible

for approximately 39 hospitalizations per day in Brazil, with an average of 11 days in intensive care[14,24-25]. The mean length of hospital stay was similar to that of other studies, confirming that the length of stay in the ICU can adversely affect the patients' health status, increasing the risk of infections, respiratory complications and mortality[10-18,24].

In this context, characterizing the population to be worked with is paramount in order to direct the development and validation of nursing process instruments. This has been increasing in recent years, since it allows adaptation to the institutional reality and to the profile of the patients attended. The creation of these instruments minimizes the completion time as the checklist format already contains the main ND, outcomes and nursing interventions, and provides the information obtained with uniformity and continuity, as well as helping in the organization of the nurses' work process[10-11,16].

The profile of the nurses who validated the instruments presented a great amount of care experience in ICUs, with a high percentage having strictosensu graduate degrees, demonstrating the professional quality and refinement and the technical-scientific preparation.There were representatives from both the teaching and care areas, leading to a greater legitimacy of their opinions and, therefore, legitimacy of the instrument, which was assessed with minimum CVI of 0.81 and maximum CVI = 1, highlighting the positive evaluation of the instrument and its validity[10,21,26].

Studies indicate[10,12,21,26] that instruments with valid content support the development in the care practice and, when using the Delphi technique to reach consensus among specialists, minimize direct influence, allow access to distant participants and favor personal and clinical reasoning.The analysis of the instruments demonstrated the need to synthesize data and improve the semiological investigation to facilitate their implementation, coinciding with that found in this study[10,21,26].

The most frequently found NDs belonged to the following NANDA-I domains: Domain 11-Safety/Protection and Domain 4-Activity/Rest, with the Risk of Infection associated with vulnerability to pathogens from the hospital environment itself and from invasive procedures.The prescribed limitations of movements, musculoskeletal alterations and use of pharmacological agents were related to the change in mobility.The procedures performed and immobility were related to tissue integrity, similar to the literature, due to the clinical severity of the patients and the complexity of the diseases[10-18,24].

The nursing outcomes obtained reflect the profile of critical patients requiring continuous nursing care, however, at the request of the institution in which the research was carried out, which has not yet introduced the use of the Nursing Outcomes Classification, the nursing results written in the instrument developed in this study were not based on classification, but were designed with the purpose of covering the respective ND and directing the nursing interventions[23]. Among them, patient-related care was more prevalent, such as patient identification, hand hygiene and maintenance of standard precautions for all, informing patients about the procedures that will be performed and about the prevention of falls andimplementing safe care in order to minimize the risks related to care[10-18,27].

The NANDA-I domains:Domain 1- Health promotion, Domain 6- Self-perception, Domain 7- Role relationships, Domain 8- Sexuality and Domain 13- Growth/development were not identified as attributable to this profile of patients during the characterization and review of the literature.Thus, they were not incorporated into the instrument, since care directed toward the maintenance of life, recovery of health and the reduction of sequela is prioritized for these patients[10-18,24].

The limitations of this study are the low number of judges, despite following the requirements of the Delphi technique; and, the fact that it was a local characterization and not a multicenter study, although the findings are similar to those of other studies[10-18,24].

● **FINAL CONSIDERATIONS**

The study stands out due to the fulfillment of the steps for validation of the instrument focused on the reality of the service and the patients of an intensive care unit, considering the particularities and complexities of this context.The construction and validation of instruments containing the Nursing Process steps facilitates the qualification of care, amplifies thevalorization of the work done, increases communication and the safety of the healthcareand stimulates critical and reflexive reasoning and

anticipatory care planning.In addition, it reduces the time spent by nurses making records.

From this perspective, the work aimed to affirm the NP as a scientific technology guiding the clinical practice of nurses and their team, in order to make their work scientific, credible, resolutive, reliable and visible.

It is also necessary to carry out further studies to evaluate the applicability and to prepare a guide for completing the instrument, in order to promote its improvement.

● ACKNOWLEDGMENTS

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ANNEX 1

Nursing Process Instrument organized by domains, with nursing outcomes and interventions, Campinas 2018

Domain 2- Nutrition

Nursing Diagnosis:00002 Imbalanced nutrition: less than body requirements

Outcome(s):Improved nutritional status

Nursing interventions:Offer the diet to the patient, monitor the acceptance of food; estimate or evaluate weight loss.

Nursing Diagnosis:00026 Excess fluid volume

Outcome(s):Improve water balance

Nursing interventions:Monitor the serum electrolyte level, recognize and report the presence of electrolyte imbalance and perform water balance, monitor fluid intake and neurological manifestation of electrolyte imbalance.

Nursing Diagnosis:00025 Risk for imbalanced fluid volume

Outcome(s):Improve water balance and electrolyte and acid-base balance

Nursing interventions:Check the patient's hydration conditions (mucosa, edema, pulse and heart rate); identify and quantify bleeds; perform water balance.

Domain 3- Elimination and Exchange

Nursing Diagnosis:00011 Constipation

Outcome(s):Adequate bowel elimination

Nursing interventions:Identify factors that may contribute to the constipation, monitor the characteristics of bowel eliminations.Stimulate water intake, if there is no restriction, administer diet and laxative medications, according to protocol.

Nursing Diagnosis:00030 Impaired gas exchange

Outcome(s):Improved gas exchange with improved respiratory pattern

Nursing interventions:Monitor and record respiratory pattern; provide supplementary oxygenation, record mechanical ventilator parameters, pay attention to changes in skin coloration and changes in the respiratory pattern, maintain elevated decubitus position.

Domain 4- Activity/Rest

Nursing Diagnosis:00085 Impaired physical mobility

Outcome(s):Improved physical mobility

Nursing interventions:Perform progressive mobilization within the limits imposed by the patient's condition.Perform joint movement amplitude exercises, unless there is contraindication.Position the patient in joint alignment to prevent complications.

Nursing Diagnosis:00091 Impaired bed mobility

Outcome(s):Improve the level of mobility; Prevent complications and Prevent pain due to incorrect

positioning

Nursing interventions:Perform progressive mobilization within the limits imposed; position the patient in joint alignment; perform a position change 2/2h; monitor and record signs of immobility complication; keep the bedding clean, dry and without wrinkles or folds; maintain prophylaxis for thromboembolism, assess conditions of the patient's skin.

Nursing Diagnosis:00029 Decreased cardiac output

Outcome(s):Cardiac output reestablish or Cardiac output improved

Nursing interventions:Observe and note peripheral perfusion, promote bed rest; rigorously control infusion rate, perform water balance, monitor and record vital signs, and report changes.

Nursing Diagnosis:00032 Ineffective breathing pattern

Outcome(s): Obtain improvement in respiratory pattern

Nursing interventions:Aspirate tracheobronchial secretions, encourage sputum through coughing, record and report changes in the respiratory pattern.

Nursing Diagnosis:00202 Risk for ineffective gastrointestinal perfusion

Outcome(s):Maintain the adequacy of the blood flow in the vessels of the abdominal viscera to maintain organ function

Nursing interventions:Record and report abdominal distension, vomiting, hematemesis, melena and symptoms of hemodynamic instability.

Nursing Diagnosis:00203 Risk for ineffective renal perfusion

Outcome(s):Maintain the adequacy of the blood flow in the vessels of the abdominal viscera to maintain organ function

Nursing interventions:Perform water balance daily, record and report signs and symptoms of hydroelectrolytic imbalance and symptoms of renal impairment.

Nursing Diagnosis:00200 Risk for decreased cardiac tissue perfusion

Outcome(s):Maintain adequate cardiac tissue perfusion

Nursing interventions:Keep the patient in continuous cardiac monitoring, record and report changes in vital signs or skin color and temperature.Keep patient supine and perform water balance.

Nursing Diagnosis:00201 Risk for ineffective cerebral tissue perfusion

Outcome(s):Maintain adequate nutrition in the tissues at the cerebral capillary level

Nursing interventions:Monitor and record neurological changes, level of consciousness and intracranial pressure.

Nursing Diagnosis:00204 Ineffective Peripheral Tissue Perfusion

Outcome(s):Improve peripheral tissue perfusion

Nursing interventions:Record and report changes in heart rate and rhythm; signs and symptoms of inadequate tissue oxygenation.

Nursing Diagnosis:00033 Impaired spontaneous ventilation

Outcome(s):Present improve gas exchange

Nursing interventions:Record and report changes in respiratory pattern and skin color, provide supplemental oxygen as prescribed.Maintain decubitus position elevated at 45°.

Nursing Diagnosis:00108 Bathing self-care deficit

Outcome(s):R:Improvement in self-care, going from totally dependent to the least dependent possible

Nursing interventions:Perform oral hygiene with an antiseptic solution, perform bath _____, and intimate hygiene in the patient after eliminations and whenever necessary.

Domain 5 - Perception/Cognition

Nursing Diagnosis:00128 Acute Confusion

Outcome(s):Improvement in mental confusion

Nursing interventions:Provide a safe environment, always maintain raised bed side rails, evaluate the level of agitation and contain the patient in the bed, if necessary.Always identify yourself when addressing the patient and explain where he/she is.

Nursing Diagnosis:00051 Impaired verbal communication

Outcome(s):Promote improvement in the verbal communication of the patient.

Nursing interventions:Record and report changes in speech, swallowing and comprehension, communicate in a balanced way using normal tones during care activities, establish eye contact, make sure the patient understands.

Domain 9-Coping/Stress Tolerance

Nursing Diagnosis:00141 Post-trauma syndrome

Outcome(s):Promote improvement and recovery of post-trauma syndrome; Promote improvement in coping and self-control of anxiety and depression

Nursing interventions:Record and report the acceptance of the event (accident, illness,..)and level of anxiety, assisting the person to identify and make contact with people and resources of support.

Domain 10 - Life principles

Nursing Diagnosis:00083 Decisional Conflict

Outcome(s):Promote improvement in coping and self-control of anxiety and depression

Nursing interventions:Remedy doubts and provide support regarding the disease, assist in the logical process of decision making, facilitating the recognition of the problem by explaining in accessible language.

Domain 11: Safety/Protection

Nursing Diagnosis:00004 Risk for infection

Outcome(s):Prevent infection

Nursing interventions:Record and report changes: at the surgical incision site, catheters every 24 hours, phlogistic signs.Sanitize the hands before and after each procedure, perform disinfection with _____ on the intravenous devices before administering medications, maintain aseptic technique, perform dressing with indicated solution daily, change venous access every 72 hours and whenever necessary.Perform hygiene of the bed, fomites, and furniture.

Nursing Diagnosis:00039 Risk for aspiration

Outcome(s):Avoid the occurrence of aspiration, bronchoaspiration

Nursing interventions:Keep the patient in an elevated position especially during and after food and water intake, always aspirate the airways when necessary.Monitor and/or assist in food and water intake, record and report signs of difficulty in swallowing and choking.

Nursing Diagnosis:00031 Ineffective airway clearance

Outcome(s):Promote airway clearance

Nursing interventions:Keep patient elevated and aspirate the airways whenever necessary.

Nursing Diagnosis:00046 Impaired skin integrity

Outcome(s):Prevent aggravation of the existing wound, promote healing and report the appearance of new wounds

Nursing interventions:Change the decubitus position every 2 hours, keep the patient's skin clean and dry, replace disposable diapers frequently, put a cushion under bony prominences and relieve pressure in these areas.Perform dressing as directed.

Nursing Diagnosis:00047 Risk for impaired skin integrity

Outcome(s):Maintain skin integrity

Nursing interventions:Change decubitus position every 2 hours, always keep the patient's skin clean and dry.Change disposable diapers whenever necessary, do not leave strange particles on the bedding, avoid folds and change bedding once a day, put a cushion under areas of pressure in bony prominences and evaluate them.Use protocol devices to prevent pressure ulcers.

Nursing Diagnosis:00155 Risk of falls

Outcome(s):Prevent falling

Nursing interventions:Provide patient and companion with guidance on the risk of falls, identify risk of falls in patients with a history of falls and a greater risk of falls due to clinical aggravation, always keep the wheels of the stretcher locked during transfer to another stretcher or wheelchair.Always keep the bed rails raised, record and report deterioration in the level of consciousness and acute or chronic mental confusion.

Domain 12 - Comfort

Nursing Diagnosis:00132 Acute pain

Outcome(s):Stop or minimize the painful experience

Nursing interventions:Perform an investigation of the pain and its characteristics, factors of improvement and worsening, promote adequate rest/sleep to facilitate pain relief, perform analgesia according to the medical prescription whenever necessary.