

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

## Infermieristica Clinica

2425-1-I0101D917-I0101D914M

### **Aims**

\*\*The course aims to provide students with the conceptual and methodological foundations necessary to

- carry out an initial comprehensive nursing assessment of the patient (observation, objective examination, the use of validated assessment scales and instruments and the interview);
- identify the main risks/nursing problems of the person in low complexity care situations;
- to implement nursing interventions and procedures according to the current available evidence.

## **Contents**

Initial global nursing assessment of the person (collection, recording, validation of objective and subjective data), introduction to diagnostic reasoning, nursing interventions for the prevention/management of the main nursing risks/problems in low complexity care situations.

For the schools in Lecco, Monza Brianza and Sondrio: the initial global assessment will focus on the collection of data on human processes according to the Model of Human Processes (MAPU): survival processes (breathing processes, circulation processes); defence processes (consciousness processes, protection processes); energy renewal (nutrition and elimination processes, activity and inactivity processes); relationship processes (communication processes, interpersonal processes, learning processes); development processes (self-realisation processes, meaning-seeking processes). By way of example, some nursing diagnoses according to ICNP® terminology will be presented.

For the school in Bergamo: the initial comprehensive assessment will focus on the collection of data on the biophysiological, psychological and socio-cultural dimensions of nursing care needs according to V. Henderson: Breathing (and Circulation); Drinking and Eating; Eliminating; Moving and maintaining appropriate postures; Sleeping and resting; Dressing and undressing; Keeping body temperature within normal limits; Being clean and protecting skin tissue; Avoiding danger; Communicating; Acting in accordance with one's beliefs; Occupying oneself in order to feel useful; Having fun; Learning. Some nursing diagnoses NANDA-International®

## **Detailed program**

**FUNDAMENTALS OF NURSING CARE:** implications for nursing practice.

#### **HEALTH STATUS ASSESSMENT AND VITAL PARAMETERS**

**RESPIRATORY FUNCTION:** factors affecting respiratory function, cross-cultural and life stage considerations, characteristics of normal respiratory pattern. Signs/symptoms: tachypnoea, bradypnoea, dyspnoea, cough, sputum production, chest pain, respiratory noises. Interventions: promotion of respiratory function, pulse oximetry, collection of sputum sample, positioning, hydration, deep breathing, effective cough, control of microclimate.

**CARDIOVASCULAR FUNCTION:** Factors affecting cardiovascular function, cross-cultural and life-stage considerations, characteristics of normal cardiovascular function, arterial pulse and blood pressure. Signs/symptoms: tachycardia, bradycardia, arrhythmia, weak pulse, chest pain, hypertension, hypotension, assessment of oedema, altered skin characteristics, altered blood flow and reduced tissue perfusion. Interventions: promotion of cardiovascular function, prevention of venous stasis and DVT, reduction of declivous oedema, venous sampling.

**NUTRITION AND HYDRATION:** factors affecting nutrition/liquid intake, cross-cultural and life stage considerations, characteristics of normal nutrition/well-nourished/hydrated person, malnutrition risk assessment (MUST, NRS, MNA scales), main biochemical parameters. Signs/symptoms: overweight, obesity, underweight, weight loss, energy loss, altered intestinal function, altered skin, mucous membranes, teeth and skin adnexa, malnutrition, lack of appetite, dysphagia, eating disorders, nausea, vomiting, dehydration, electrolyte imbalance, altered main biochemical parameters. Interventions: promotion of adequate nutrition/hydration, monitoring of nutritional status/hydration, water balance (with calculation of perspiratio insensibilis), dietary restrictions/supplements, special diets/artificial nutrition, blood glucose measurement, assistance to the person with a self care deficit.

**URINARY ELIMINATION:** factors affecting urinary elimination, cross-cultural considerations of life stages, urination/diuresis/normal urine characteristics. Signs/symptoms: impaired diuresis, urination and urine characteristics, impaired ability to perform/complete elimination-related activities independently. Interventions: promotion of fluid intake, prevention of UTI, care of the dependent person with urinary retention/incontinence (external urinary catheters, absorbent surfaces), extemporaneous/permanent bladder catheters, prevention of CAUTI, collection of urine samples from CV/intermediate micturition, 24 h urine collection, urine examination.

**BOWEL ELIMINATION:** factors affecting elimination, cross-cultural and life-stage considerations, characteristics of normal stools. Signs/symptoms: constipation, faecalomas, diarrhoea, faecal incontinence, flatulence, distention, altered stool character, impaired ability to perform/complete elimination-related activities independently. Interventions: promotion of bowel function, assistance to the dependent person, use of laxatives/antidiarrhoeals, insertion of a rectal probe, evacuation enemas, removal of faecalomas, collection of faecal samples for occult blood testing.

BODY MOBILITY AND MECHANICS: factors affecting movement, cross-cultural and life-stage considerations, characteristics of normal mobility, assessment of the person's level of autonomy in performing activities of daily living (modified Barthel Index and Katz/ADL index). Signs/symptoms: decrease in muscle volume/strength/tone, lack of coordination, gait changes, falls, reduced joint range, pain, activity intolerance, physical/psychosocial consequences of immobility. Interventions: promotion of physical activity, prevention of osteoporosis, positioning, maintenance of joint mobility, walking, transfers, prevention of complications of immobility.

**THERMOREGULATION:**\* factors affecting TC, potential causes of altered thermoregulation, life stage considerations, normal TC pattern. Signs/symptoms: fever/pyrexia, exhaustion/heat stroke, hypothermia. Interventions: use of heat/cold for therapeutic purposes, care of the person with fever/hypothermia.

HYGIENE, SELF-CARE AND CUTANEOUS INTEGRITY: characteristics of self-care and cross-cultural and life-stage considerations, factors affecting self-care and integumentary function/wound healing, normal skin characteristics. Signs/symptoms: inadequate hygiene/care, inability to perform self-care activities, pressure wound staging (PD) according to EPUAP/NPUAP, incontinence dermatitis. Interventions: promotion of adequate personal hygiene, care of the dependent person during partial/total hygienic care, making up an occupied bed, care of the person with pediculosis, treatment of itching and incontinence dermatitis, assessment of the risk of developing LdP in adults (Braden Index) and prevention.

**SAFETY:** cross-cultural and life-stage considerations, factors influencing safety, manifestations of inadequate safety, assessment of fall risk (Conley/Stratify Index). Interventions: promotion of safety in the home/work/health care environment, prevention of falls, physical restraint (indications for use, nursing responsibilities, risks, controls and monitoring).

PREVENTION AND CONTROL OF INFECTIONS: care-related infections (ICAs), risk factors, prevention/control of ICAs: hand hygiene, use of clean/sterile gloves, use of PPE, isolation, disposal of medical waste, linen management, handling of biological specimens, management of environmental surfaces/furniture, classification of medical devices according to Spaulding, decontamination, cleansing, disinfection, sterilisation and storage; characteristics of normal resistance to infection, life stage considerations, factors affecting resistance to infection. Signs/symptoms: types of infection and manifestations. Interventions: health promotion, interventions in the presence of infection, diagnostic investigations (blood cultures, urine culture, sputum culture, co-culture, pharyngeal and nasal swab, wound culture).

SLEEP: factors affecting sleep, cross-cultural and life stage considerations, characteristics of the normal sleep/wake cycle. Signs/symptoms: insomnia, narcolepsy, sleep-disordered breathing, restless legs syndrome and periodic limb movement disorder, circadian rhythm disorders, parasomniasis. Interventions: sleep promotion, environmental modifications, intimacy and safety, rest, use of routine, cognitive measures and use of medication.

**PAIN:** Consideration of life stages, regulatory, deontological and transcultural considerations, factors affecting pain perception and response, classification of pain types (e.g. acute, persistent, nociceptive, neuropathic etc.), consequences of untreated pain, assessment of pain characteristics in adults (self-report with one-dimensional scales VRS, NRS, VAS, hints on multidimensional scales), in children and in the cognitively impaired person. Interventions: non-pharmacological and pharmacological management of pain.

**COMMUNICATION AND HELPING RELATIONSHIPS NURSING PERSON:** elements of therapeutic communication, evaluation of communication (message variables, communication skills, context, feedback, environmental and cultural influences, expressions of the resident), evaluation of communication problems. Interventions: therapeutic communication techniques and non-therapeutic responses, communication in special situations (outline).

**SENSORY PERCEPTION:** characteristics of normal sensory perception, considerations of life stages, factors influencing sensory perception. Signs/symptoms: anxiety, cognitive dysfunction, hallucinations, sensory deficits, depression and isolation. Interventions: education, preparation for procedures, nurse-patient relationship, stimulation/reduction of stimulation, sensory aids, safety.

**HEALTH EDUCATION AND HEALTH PROMOTION:** Aims of education, the teaching-learning process, assessment of the learning needs and learning readiness. Interventions: teaching strategies, teaching aids/resources, use of interpreters/translators, time/quantity of information, involvement of family/friends, evaluation of learning.

**COGNITIVE PROCESSES:** characteristics of normal cognitive processes/models, cross-cultural and life stage considerations, factors affecting cognitive function, assessment of cognitive function (Mini Mental State Examination). Signs/symptoms: disorganised thinking, delirium, dementia, depression, alterations in wakefulness, expressive/receptive/global aphasia, dysarthria. Interventions: therapeutic communication, orientation to surroundings and reality, environmental restrictions, fluid/nutrition supply, mobility, safety, alternative methods of communication.

**SELF CONCEPT:** characteristics of self-concept and self-perception, cross-cultural and life-stage considerations, factors influencing self-concept, initial assessment of the normal pattern and disorders of self-concept

**LOSS**: normal characteristics of the bereavement and loss process, transcultural and life-stage considerations, factors affecting bereavement, assessment of normal and dysfunctional manifestations of bereavement, care of the dying and post-mortem care.

**STRESS, COPING AND ADAPTATION:** normal coping patterns, factors affecting coping, assessment of coping pattern.

**HUMAN SEXUALITY:** cross-cultural and life stage considerations, factors affecting sexuality, impact of illness and disability on sexuality

**SPIRITUAL HEALTH:** characteristics of spirituality, transcultural and life stage considerations, factors affecting spiritual health, evaluation of the spiritual dimension. Signs/symptoms: alterations in spiritual function. Interventions: support during spiritual practices, listening and support, facilitation of relationships with significant others, cultural mediation/worship ministry, referral to other professionals.\*\*

## **Prerequisites**

This course builds on the knowledge of Fundamentals of Nursing and Midwifery Sciences, Biomedical Sciences 1, Hygiene, Occupational Medicine and Medical Statistics.

## **Teaching form**

All lectures are delivered in face-to-face mode with the possibility of guided discussion of clinical cases and videos.

## **Textbook and teaching resource**

#### Bibliography for the exam:

Craven RF, Hirnle CJ, Henshaw CM (2024) Principi fondamentali dell'assistenza infermieristica. VII edizione. Milano: CEA (capitoli 6, 14, 17 - 20, 24 - 37, 39 - 43).

European Pressure Ulcer Advisory Panel, National Pressure Injury Advisory Panel and Pan Pacific Pressure Injury Alliance. (2019). Prevenzione e trattamento delle ulcere/lesioni da pressione. Guida rapida di riferimento. Emily Haesler (Ed.). EPUAP/NPUAP/PPPIA (ed. italiana a cura di AISLEC). Disponibile da:

https://www.epuap.org/wp-content/uploads/2020/11/qrg-2019-italian.pdf

Gould VC and the Healthcare Infection Control Practices Advisory Committee – HICPAC. (2019). Guideline for prevention of catheter-associated urinary tract infections 2009. HICPAC. (Last update: June 6, 2019). Disponibile da:

https://www.cdc.gov/infectioncontrol/guidelines/cauti/index.html

Registered Nurses' Association of Ontario. (2017). Preventing Falls and Reducing Injury from Falls (4th ed.). Toronto, ON: RNAO. Disponibile da:

https://rnao.ca/bpg/guidelines/prevention-falls-and-fall-injuries

TESTO DI APPROFONDIMENTO PER LE SEDI DI LECCO, MONZA BRIANZA E SONDRIO:

### In depth text for the schools in Lecco, Monza Brianza and Sondrio:

Ausili D, Baccin G, Bezze S, Bompan A, Macchi B, Alberio M, Sironi C, Di Mauro S (2018) Il Modello assistenziale dei processi umani 2018: un quadro teorico per l'assistenza infermieristica di fronte alla sfida della complessità. Milano: CNAI. Link per il reperimento della terminologia ICNP®

Disponibile da: https://www.icn.ch/what-we-do/projects/ehealth/icnp-browser

### In depth text for the school in Bergamo:

Herdman TH, Kamitsuru S, Takáo Lopes C (2024) Nanda International. Diagnosi infermieristiche-Definizioni e Classificazione 2024-2026. Milano: CEA. [in stampa].

#### Semester

Second semester.

#### Assessment method

The details are available in the Syllabus of Metodologia clinica nelle scienze infermieristiche.

## Office hours

By appointment.

# **Sustainable Development Goals**

GOOD HEALTH AND WELL-BEING | GENDER EQUALITY | REDUCED INEQUALITIES | PEACE, JUSTICE AND STRONG INSTITUTIONS | PARTNERSHIPS FOR THE GOALS