UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Infermieristica Clinica

2627-1-I0104D007-I0104D00701

Aims

1. Knowledge and ability to understand
To describe:

- the conceptual and methodological foundations necessary to comprehensively assess the health status of the patient in low-complexity care settings;
- the conceptual and methodological foundations necessary to interpret data, make correlations, formulate hypotheses and identify the main risks and nursing problems;
- the scientific rationale and evidence for nursing interventions and procedures in low-complexity care settings.

2. Ability to apply knowledge and understanding
Systematically collect, validate, and organize data in a structured manner.
Aggregate data into clusters and outline an initial interpretation.
Develop initial correlations between aggregated data. Perform nursing interventions and procedures in low-complexity care settings, with a focus on fundamental care, adapting actions to the specific needs of the patient.

3. Autonomy of judgement
To use a systematic approach to assess the patient's health status, explore various plausible hypotheses to be verified based on the available data, propose an initial clinical judgement regarding health conditions, and select the most appropriate interventions based on current knowledge.

4. Communication skills
To present in a clear and systematic manner, using scientific language, the relevant data from the assessment, the potential problem identified and possible care decisions.
To provide examples for therapeutic communication techniques applicable during the initial assessment and the nurse-patient relationship.

5. Ability to learn

Develop self-directed learning skills through the analysis and reflection of clinical situations proposed in the classroom, the ability to ask questions, to assess one's own learning needs and to identify resources for integrating the latest best current evidence into professional practice.

Contents

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

Lecco, Monza and Sondrio: data collection 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). Some nursing diagnoses according to ICNP™ terminology will be presented.

Bergamo: data collection on the bio-physiological, psychological and socio-cultural dimensions of nursing care needs according to V. Henderson: Breath normally (and Circulation); Eat and drink adequately; Eliminate body wastes; Move and maintain desirable postures; Sleep and rest; Select suitables clothes, dress and undress; Maintain body temperature within normal range by adjusting and modifying the environment; Keep the body clean and well groomed and protect the integument; Avoiding danger in the environment and avoid injuring others; Communicate with others in expressing emotions, needs, fears, or options; Work in such a way that there is a sense of accomplishment; Play or participate in various forms of recreation; Learn, discover, or satisfy that leads to normal development and health and use the available health facilities. Some NANDA-International™ (Classification 2024-2026) nursing diagnoses will be presented.

Detailed program

RESPIRATORY FUNCTION: Factors affecting respiratory function, cross-cultural considerations, and life stage considerations. Assessment: characteristics of normal breathing patterns. Alterations: tachypnoea, bradypnoea, cyanosis, dyspnoea (NRS, M-Borg, MRC-DS; classification of dyspnoea severity), hypoxia and hypoxaemia (OVERVIEW), cough, sputum production, breath sounds, and pathological breathing patterns (Cheyne-Stokes, Biot, Kussmaul). Interventions: health promotion, pulse oximetry, sputum sample collection, positioning and ambulation, hydration, deep breathing exercises, effective coughing, and microclimate control, sputum sampling, nose/pharyngeal swab.

CIRCULATION: Factors affecting cardiovascular function, cross-cultural considerations, and life stage considerations. Assessment: characteristics of normal cardiovascular function, arterial pulse, blood pressure, and capillary refill time. Alterations: tachycardia, bradycardia, arrhythmia, altered pulse quality, pulse deficit, hypertension, hypotension, orthostatic hypotension, oedema, jugular venous distension, altered skin characteristics, and impaired tissue perfusion. Interventions: modification of risk factors, prevention of venous stasis and deep vein thrombosis (DVT), oedema reduction, positioning, and venepuncture.

NUTRITION: Healthy eating recommendations, factors affecting nutrition, cross-cultural considerations, and life stage considerations. Assessment: characteristics of a well-nourished person, anthropometric measurements, calorie counting (OVERVIEW), oral cavity inspection, swallowing assessment, and malnutrition risk assessment (NRS-2002, MNA); key biochemical parameters (Ht, Hb, serum albumin and prealbumin, serum transferrin, creatinine, and immunocompetence). Alterations: overweight, obesity, underweight, sudden and significant weight

fluctuations, low energy levels, loss of appetite, dysphagia, malnutrition, eating disorders (OVERVIEW), nausea, and vomiting. Interventions: promotion of adequate nutrition, nutritional status monitoring, care for patients who are fasting or experiencing vomiting, special diets, dietary supplements and artificial nutrition (OVERVIEW), capillary blood glucose monitoring, and assistance with feeding.

LIQUIDS AND ELECTROLYTES: Factors affecting fluids and electrolytes, and life stage considerations. Assessment: fluid balance (including calculation of perspiratio insensibilis) and electrolyte balance. Alterations: fluid and electrolyte imbalance (dehydration, hypovolaemia, fluid volume excess, hypokalaemia, hyperkalaemia, hyponatraemia, hypernatraemia). Interventions: health promotion, increasing or restricting oral fluid intake.

URINARY ELIMINATION: Factors affecting urinary elimination, cross-cultural considerations, and life stage considerations. Assessment: characteristics of micturition, urinary output, and normal urine. Alterations: urinary output (polyuria, oliguria, anuria), micturition (dysuria, strangury, frequency/pollakiuria, bladder tenesmus, nocturia, enuresis, urgency, urinary retention, urinary incontinence), and urine characteristics (haematuria, bacteriuria, pyuria, proteinuria, glycosuria, and altered colour, odour, clarity, and pH). Interventions: promoting micturition, prevention of urinary tract infections (UTIs), assistance for dependent or incontinent patients (male external catheters, absorbent products), care for patients with acute/chronic urinary retention, intermittent or indwelling urinary catheterisation, continuous bladder irrigation via three-way catheter and closed-circuit system, prevention of catheter-associated UTIs (CAUTIs), and urine sample collection (catheter specimen of urine, mid-stream urine, 24-hour urine collection, and urinalysis).

INTESTINAL ELIMINATION: Factors affecting bowel elimination, cross-cultural considerations, and life stage considerations. Assessment: characteristics of normal stools (frequency, colour, quantity, odour, consistency and shape - Bristol Stool Chart) and physical examination of the abdomen and perirectal area. Alterations: constipation (Rome III criteria), faecal impaction, diarrhoea, faecal incontinence, rectal tenesmus, flatulence, meteorism, abdominal distension, and altered stool characteristics (haematochezia, rectal bleeding, melaena, acholic stools, ribbon/pencil-shaped stools, and changes in consistency). Interventions: promoting bowel function, assistance for dependent or incontinent patients, use of laxatives and antidiarrhoeals (OVERVIEW), insertion of a rectal tube, administration of an enema, manual removal of a fecaloma, and stool sample collection (faecal occult blood test, stool culture, and parasitological examination).

BODY MOBILITY AND MECHANICS: Factors affecting movement, and life stage considerations. Assessment: postural alignment and balance, coordination of movement, gait, range of motion (ROM), muscle trophism, tone, and strength (MRC Scale), activity tolerance, postural blood pressure changes, and assessment of independence in activities of daily living (Modified Barthel Index, IADL, ADL). Alterations: reduced muscle volume, strength, or tone; lack of coordination, gait disturbances, reduced range of motion, activity intolerance, and consequences of immobility. Interventions: promotion of physical activity, positioning, maintaining joint mobility, ambulation, transfers, and prevention of complications related to immobility.

THERMOREGULATION: Factors affecting thermoregulation, life stage considerations, and potential causes of alterations. Assessment: measurement of body temperature, skin assessment, and assessment of level of consciousness. Alterations: fever, hyperthermia (heat exhaustion/heatstroke), hypothermia, and frostbite. Interventions: care for patients during febrile stages, and in case of hyperthermia and hypothermia.

HYGIENE, SELF CARE AND SKIN INTEGRITY: Self-care characteristics, cross-cultural considerations, and life stage considerations; factors affecting self-care and integumentary function. Assessment: inspection of the skin and skin appendages, and assessment of lesions. Alterations: inadequate hygiene/self-care, reluctance or inability to perform self-care activities, pruritus, exanthema, primary and secondary lesions (OVERVIEW), EPUAP/NPUAP staging of pressure ulcers, and moisture-associated skin damage (MASD). Interventions: promotion of adequate personal hygiene, assistance for dependent patients during partial or total hygiene care, occupied bed making, care for patients with pediculosis or scabies, management of pruritus and moisture-associated skin damage, pressure ulcer risk assessment in adults (Braden Scale), and prevention, taking a wound swab.

SAFETY: Definition of safety, life stage considerations, and factors affecting safety. Manifestations of inadequate safety and fall risk assessment (Conley, Stratify, STEADI algorithm). Interventions: safety promotion in home,

workplace, and healthcare environments; fall prevention, and physical restraint (indications, devices, nursing responsibilities, risks, and monitoring).

INFECTION PREVENTION AND CONTROL: Healthcare-associated infections (HCAIs), risk factors, prevention and control: standard precautions (hand hygiene, use of PPE, healthcare waste disposal, linen management, handling of sharps, Spaulding classification of medical devices, and methods of decontamination) and transmission-based precautions (contact, droplet, and airborne).

SLEEP: Factors affecting sleep, transcultural considerations and life stages, characteristics of the normal sleep/wake cycle. Assessment: identification of sleep/wake cycle (exemplification of PSQI scale), physical examination. Alterations: insomnia, narcolepsy, respiratory sleep disorder, restless legs syndrome, circadian rhythm disorders, parasomnias (HINTS). Interventions: recommendations for sleep hygiene, changes in the environment, ensuring intimacy and safety, rituals for sleep, rest, use of routine, HINTS on cognitive measures and use of drugs.

PAIN: Legal, ethical, and cross-cultural considerations, and life stage considerations; factors affecting pain perception and response; types of pain (acute, persistent, nociceptive, neuropathic, central), and consequences of untreated pain. Assessment: physiological and behavioural responses to pain, and characteristics of pain in adults: PQRST, self-reporting using unidimensional scales (NRS, VAS, VRS); OVERVIEW of multidimensional scales (MPQ, BPI); OVERVIEW of assessment in patients with cognitive impairment (Abbey, PAINAD). Interventions: non-pharmacological methods (comfort, cutaneous stimulation, cognitive and behavioural techniques), and continuous assessment.

COMMUNICATION AND NURSE-PATIENT RELATIONSHIP: The elements of therapeutic communication. Assessment: ability to articulate sound, vocalization and pronunciation of words, elements of paraverbal and non-verbal communication. Alterations: dysarthria, dysphonia, presence of verbal expression of negative emotions (e.g. anger, fear). Interventions: therapeutic communication techniques and non-therapeutic responses, communication in special situations (OVERVIEW).

SENSORY PERCEPTION: (OVERVIEW) characteristics of normal sensory perception, life stage considerations, and factors affecting sensory perception. Assessment: (OVERVIEW) physical assessment of sensory function (vision, hearing, smell, taste, and somatic sensations). Alterations: (OVERVIEW) sensory deficits (impaired vision, hearing, taste, smell, and touch). Interventions: (OVERVIEW) education, sensory aids, and safety precautions.

HEALTH EDUCATION AND HEALTH PROMOTION: Aims of patient health education; the teaching-learning process. Assessment: learning needs and the patient's readiness to learn. Interventions: (OVERVIEW) educational strategies, teaching aids/resources, use of interpreters/translators, involvement of family members/significant others, and assessment of learning.

COGNITIVE PROCESSES: (OVERVIEW) Characteristics of normal cognitive processes (consciousness, attention, memory, learning, and communication), cross-cultural considerations, and life stage considerations; factors affecting cognitive function. Assessment: level of consciousness (GCS scale), cognitive function (MMSE scale), and orientation. Alterations: (OVERVIEW) altered states of consciousness, impaired communication (expressive, receptive, and global aphasia; dysarthria), (OVERVIEW) memory deficits, delirium, and confusional states. Interventions: therapeutic communication, orientation to surroundings and reality, safety, and alternative communication methods.

SELF CONCEPT: (OVERVIEW) Characteristics of self-concept and self-perception, cross-cultural considerations, and life stage considerations; factors affecting self-concept. Assessment: (OVERVIEW) social self (occupation, family situation, social groups), personal identity (self-description, strengths and weaknesses), physical self (e.g. body image concerns), digital self, self-esteem, and threats to self-concept (e.g. illness, role changes). Alterations: (OVERVIEW) self-care deficits, emotional and behavioural changes.

LOSS AND BEREAVEMENT: (OVERVIEW) Characteristics of the grief and loss process, cross-cultural considerations, and life stage considerations; factors affecting grief. Assessment: (OVERVIEW) physical,

psychological, and spiritual signs; strategies and support for grief management. Interventions: (OVERVIEW) referral to other professionals; (OVERVIEW) care of the dying person and post-mortem care; (OVERVIEW) support for the patient and caregiver during anticipatory and post-mortem grief; (OVERVIEW) support for the caregiver following bereavement/loss.

STRESS, COPING AND ADAPTATION: (OVERVIEW) Concepts of stress, adaptation, resilience, and coping; (OVERVIEW) factors affecting coping. Assessment: (OVERVIEW) assessment of coping patterns and emotional distress (Numerical Rating Scale-NRS). Interventions: (OVERVIEW) lifestyle changes, crisis intervention, and de-escalation techniques.

HUMAN SEXUALITY: (OVERVIEW) transcultural and life stage considerations, factors affecting sexuality, impact of disease and disability on sexuality. Assessment: (OVERVIEW) examination of male and female genitals, breast examination, sexual activity, protection against sexually transmitted infections, pregnancies, sexual function, changes in gender identity, diseases, environment, surgery. Alterations: OVERVIEW sexual abuse, erectile dysfunction, ejaculatory, orgasmic, genito-pelvic pain and penetration disorder. Interventions: OVERVIEW education (self-awareness, self-examination, sexual education, responsible sex), use of contraceptives, sending to other professionals.

SPIRITUAL HEALTH: (OVERVIEW) Characteristics of spirituality, cross-cultural considerations, and life stage considerations; factors affecting the spiritual dimension. Assessment: assessment of the spiritual dimension. Interventions: (OVERVIEW) support during spiritual practices, listening and support, and referral to other professionals.

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Prerequisites

This course is based on the knowledge of Foundations of Nursing and Midwifery Sciences, Biomedical Sciences 1, Hygiene, Occupational Medicine and Medical Statistics.

Teaching form

All the lessons (n. 16 lessons of approximately 3 hours each 3 hours each) are offered in italian, and in dispensative mode (deductive lesson) in the initial part which is aimed at engaging students interactively in the following part (inductive lesson, with the possibility of guided discussion, in plenary and small groups, of simulated clinical cases and video sequences). All activities are carried out in-person.

Textbook and teaching resource

Core reading list for the examination (for all four degree course locations):
Craven RF, Hirnle CJ, Henshaw CM (2024) Principi fondamentali dell'assistenza infermieristica. VII edizione. Rozzano (MI): CEA (capitoli 6, 14, 17 - 20, 24 - 37, 39 - 43).

National Pressure Injury Advisory Panel, European Pressure Ulcer Advisory Panel and Pan Pacific Pressure Injury Alliance (2026) Pressure Injuries/Ulcers: Definition and Etiology - Skin and Tissue Assessment - Preventive Skin Care. Nutrition in Pressure Injury Prevention - Repositioning for Pressure Injury Prevention - Full Body Support

Surfaces for Prevention of Pressure Injuries - Preventing Pressure Injuries in Seated Individuals - Preventing Heel Pressure Injuries - Device-Related Pressure Injuries. In: Prevention and Treatment of Pressure Ulcers/Injuries: Clinical Practice Guideline. The International Guideline: Fourth Edition. Emily Haesler (Ed.). Disponibile da: https://internationalguideline.com

European Association of Urology Nurses (2024) Evidence-based Guidelines for Best practice in Urology Health Care. Indwelling Catheterization in Adults. EAUN. Disponibile da: https://nurses.uroweb.org/guidelines/indwelling-catheterisation-in-adults-urethral-and-suprapubic

Supplementary bibliographic references
Skill checklists and videos about the procedures are available on the Nursing and Allied Health Reference Source database, accessible via the Medicine and Surgery Library website. The detailed list of procedures is available on the e-learning page of the 'Clinical Nursing' teaching module.

Semester

Second Semester.

Assessment method

Assessment Methods: Written and oral examination covering the topics of the course syllabus and the core bibliography. There are no mid-term assessments.

Written Exam: 31 multiple-choice questions with only one correct answer, designed for a comprehensive assessment of student preparation (24 questions on Clinical Nursing; 7 questions on Introduction to Professional Deontology). No marks are deducted for incorrect or omitted answers. The cut-off score for admission to the oral exam is 18/30. The time allowed for the exam is 40 minutes. Results (pass/fail) are usually published within 3 days of the written test.

Oral Exam: within 15 days of the written exam. The assessment will evaluate the candidate's ability to demonstrate, clearly and comprehensively: the methods for assessing the patient’s health status; nursing interventions for preventing and managing key care risks and problems; and the ethical and deontological implications of nursing practice.

Final Assessment: Graded on a 30-point scale, the final mark is calculated as a weighted average of the scores obtained in the individual components (written exam: 40% weighting; oral exam: 60% weighting). The final grade will be communicated directly at the end of the oral exam.

Office hours

By appointment.

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION | REDUCED INEQUALITIES | PARTNERSHIPS FOR THE GOALS