

NURS1201 Summary Notes

Glossary

Term	Definition
arrhythmia	A pulse with an abnormal rhythm
adverse drug event (ADE)	Medication incidents that cause harm to patient – from nature of medicine (ADRs) and medication errors
adverse drug reaction (ADR)	Response to a drug that is unintended and harmful (e.g. allergic reaction)
afebrile	Not feverish
analgesic	A drug acting to relieve pain
anaphylaxis	Acute allergic reaction
angina	Lack of blood supply to the heart causing chest pain
anti-inflammatory	Drugs which stop the inflammation response
antibiotic	Medicine which inhibits growth of microorganism, used to treat infection
antihypertensive	Drug which lowers BP to prevent stroke and MI
antipyretic	Drug which lowers fever e.g. Ibuprofen
apnoea	Halt in breathing
arthritis	Inflammation of the joints resulting in stiffness and pain
bowel sounds	Rumbling or growling noises from the abdomen caused by peristalsis; indicate normal bowel function
bradycardia	Slow heart rate; <60 beats/min
bradypnoea	Slow breathing; <12 breaths/min
cardiac output	Stroke volume x heart rate (CO = SV x HR)
cheyne stokes	Abnormal respiration pattern from deep to shallow with periods of apnoea
cyanosis	Blue discolouration of skin; caused by poor circulation or inadequate oxygenation of blood
diastolic	Bottom BP value when ventricles of heart are at rest
dyspnoea	Difficult or laboured breathing
fasting	Abstain from consuming food or drink; usually enforced pre-op to reduce aspiration risk
febrile	Feverish; >38°C
fluid balance	Fluid input = fluid output
hyperglycaemia	Excess of glucose in bloodstream, associated with diabetes
hypertension	High BP; over 140/90

Theme 1: Professional Practice

Communication

Person Centred Care

PCC is based upon the understanding that each patient is unique and has their own personal history. It is a holistic method to the planning, provision and evaluation of healthcare that strives to create mutually beneficial partnerships between HCPs, the people they care for and their families.

Person centred care is the care of people in a way which acknowledges their personal history, experiences and skills. It is a way in which care can be planned and delivered to best suit the individual patient.

Therapeutic Communication

SOLER

Squarely sit facing patient

Open posture

Lean towards the person

Eye contact

Relaxed

Other methods

- Active listening
- Attending
- Open-ended questions
- Silence
- Prompting
- Paraphrasing/clarifying
- Touch
- Self-disclosure
- Summarising

Medication

- Medicines:
 - o Include prescription, non-prescription, CAMs (46% use)
 - o Are the largest intervention used to treat illness
- National Medicines Policy
 - o Pharmaceutical Benefits Scheme (PBS): access to medicines
 - o Therapeutic Goods Administration (TGA): quality, safety and efficacy of medicines
 - o National Prescribing Service (NPS MedicineWise): quality use of medicines
 - Selecting management options wisely
 - Choosing suitable medicines
 - Using medicines safely and effectively
 - o Trade: viable and responsible medicines industry
- **ALARM** drugs – heparin, warfarin, digoxin, lithium, phenytoin, carbamazepine, theophylline, gentamicin, clozapine
- **APINCH** – anti-infectives, potassium, insulin, narcotics, chemo, heparin/warfarin

Theme 2: Critical Thinking & Analysis

The Nursing Process

- Centred around effective communication and PCC to deliver safe care
- Closely interrelated, cyclical process
- Systematic method of identifying a health problem, establishing a plan to meet specific needs and delivering care which addresses those needs
- Types of data:
 - o Subjective – described by patient
 - o Objective – measured against acceptable standard
- Data collection methods:
 - o Observing
 - o Interviewing
 - o Examining
 - o Assessing

Phases

Assessing: collecting, organising, validating and documenting data about the person and their response to health problems; establishing their health needs

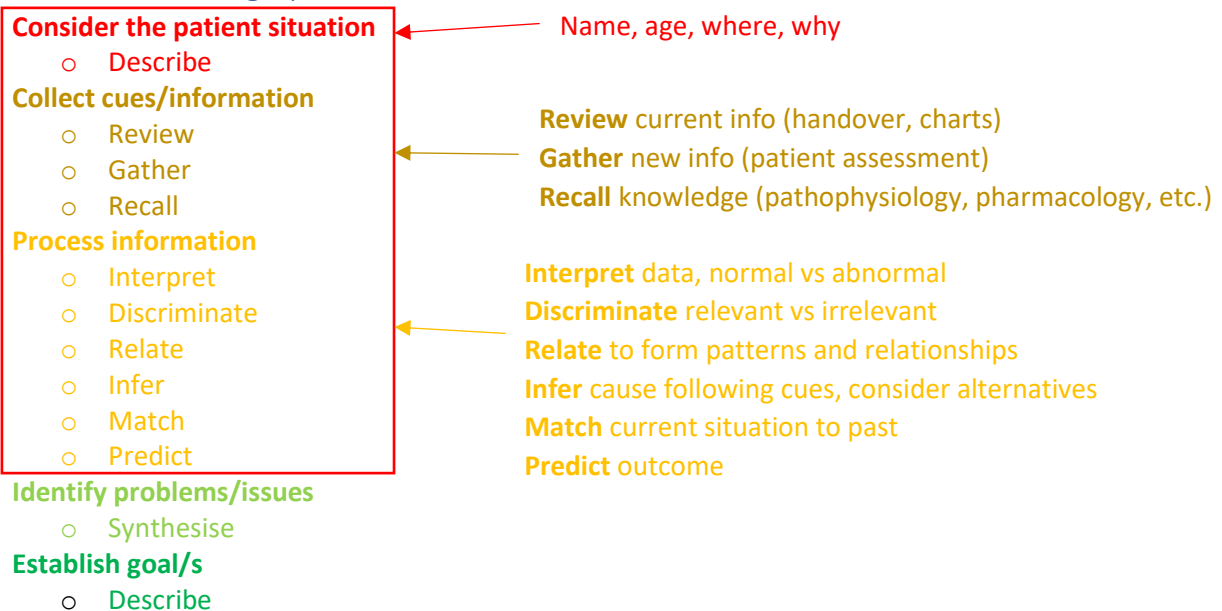
Diagnosing: analysing and synthesising data to identify the person's strengths and health problems which can be prevented by nursing interventions and form a diagnostic statement

Planning: prioritizing problems and determining how to prevent or resolve them, how to support strengths and implement nursing interventions in an organised, individualised and goal-directed way

Implementing: carrying out the care plan to assist the person to meet desired goals, promote wellness, prevent further health problems, facilitate coping with altered functioning. Document activities.

Evaluating: collecting data to determine to what degree the intended goals have been achieved and identifying factors of influence. Deciding whether to continue, modify or terminate the care plan.

Clinical Reasoning Cycle



Theme 3: Documentation & Assessments

Vital signs

Respiration

Normal range (adult)	Normal range (child 8 years)	Factors that may interfere with accurate measurement	Health factors that may cause abnormal results
12-20	15-25	<ul style="list-style-type: none"> - Body position - Recent activity (exercise) - Current environment (discomfort) - Awareness of respirations being measured - Medication - Crying 	<ul style="list-style-type: none"> - Existing health problems - Smoking - Cranial pressure

O₂ Saturation

SaO ₂ (adult)	SaO ₂ (child)	Factors that may interfere with accurate measurement	Health factors that may cause abnormal results
Normal 95-100%	Life threatening <90%	<ul style="list-style-type: none"> - Skin colour - Nail bed colour - Circulation - Exercise - Insufficient oxygen in air - Moist skin - Poor probe attachment - Shivering/movement - In MRI - Lights from hospital = light interference 	<ul style="list-style-type: none"> - Apnoea - Carbon monoxide poisoning - Any respiratory problems

Blood Pressure

Normal range (adult)	Normal range (child 5-8 years)	Factors that may interfere with accurate measurement	Health factors that may cause abnormal results
<120 <80	Normal systolic 80+ (2 x child's age in years)	<ul style="list-style-type: none"> - Cuff size - Emotional state - Time limit - Previous measurements - Age - Exercise - Stress - Ethnicity - Gender - Medications - Obesity - Diurnal variations (time of day) 	<ul style="list-style-type: none"> - Disease processes (conditions affecting cardiac output or blood volume) - Hypervolaemia/hypovolaemia - Hypertension - Haemorrhage

Theme 4: Collaborative Practice

Handover

ISBAR

Bedside

Introduce yourself and the patient (name, age sex, doctor)

Situation of patient explained – immediate identify risk or issues

Background of patient explained, referring to history

Assessments that have been done and any strategies in place

Recommendation of what needs to be done e.g. assessment, discharge

Phone

Introduce yourself, where you're from and why you're calling

Situation including involved patient and their symptoms

Background of patient including admission, medications, significant assessment

Assessment of what the patient's condition is, what they are at risk of and what they need

Request/Recommendation of what patient needs e.g. review, new medication, transfer

Interprofessional Communication

- 70-90% clinical errors caused by poor communication
- Therapeutic communication:
 - o Increases tissue healing, immunity, emotional wellbeing, blood pressure, pain and rate of complications
- CALD patients more likely to experience adverse events
- Social media
 - o Portrays who you are to future employers, colleagues, patients
- Spirituality must be able to be discussed
- Interprofessional team:
 - o Doctors (MOs, JMOs)
 - o Nurses (RNs, ENs, EENs, AINs)
 - o Pharmacists
 - o Occupational therapists
 - o Physiotherapists
 - o Social workers
 - o Aboriginal liaison officer
 - o Dietician
 - o Speech pathologist
 - o Urologist

Cultural Considerations

- Indigenous patients should have access to Aboriginal liaisons
- Pneumonia immunizations should be checked due to high incidence in Indigenous population
- Education should be provided on increased disease risk due to heritage

Theme 5: Provision of Care in Different Contexts

Limb Injuries

Colles Fracture

- Common in falls
- Fracture of radius in risk due to backward hand displacement

Plaster Casts

- Used to treat fractures, provide pain relief and correct deformities

Risks

- Ulcers
- DVT
- Neurovascular deficit
- Compartment syndrome: increased pressure causing inflammation which can lead to tissue damage
 - o Symptoms: poor cap refill, pallor, swelling, altered sensation, pain, lack of motion

General Care

- Avoid getting cast wet
- Do not scratch under the cast
- Avoid walking on the cast
- Do not move the cast around
- Do not remove your own cast
- Do not force anything down the cast
- Do not drive while wearing a plaster cast
- Do not alter cast but cutting or trimming
- Do not pull padding out from cast
- Elevate the limb with the cast
- Exercise the limb to improve circulation
- Regularly inspect cast for damage or signs of unexpected staining from blood or discharge

Limb Assessment

- Neurovascular assessment of a limb – ensure to compare assessments with both limbs
 - o Colour – should be normal, pale = poor circulation, blue = lack of blood and oxygen, black = necrotic
 - o Warmth – should be warm to touch, cold = poor circulation, hot = inflammation/infection
 - o Sensation – should be normal, altered = suppression of sensory nerves, itchy = normal for first few days
 - o Movement – should be normal, limited = pain, damage, cast restricting
 - o Pain – should be absent/managed
 - o Pulse – should be present and normal (60-100)
 - o Temperature – should be normal, possibly slightly warm
 - o Capillary refill – should be <2 secs, >2 secs = poor circulation

Multiple Sclerosis

- Myelin sheathing of neurons attacked by own immune system
- Cause: genetic or Epstein Barr Virus
- Symptoms: fatigue, pain, sexual dysfunction, movement and coordination problems, altered sensation

Theme 6: Healthcare Considerations

Elimination

- **Hydration:** Sufficient water to maintain fluid volume balance
- **Dehydration:** Loss of H₂O, fluid volume deficit
- Hypovolaemia: decrease in circulating blood volume
 - o Weight loss (due to fluid loss)
 - o Decreased urine output, increased SG (1.020 – 1.030)
 - o Thirst
 - o Altered mental status
- Hypervolaemia: increase in circulating blood volume
 - o Weight gain
 - o Increased urine output, very dilute with low SG (1.000-1.010)
 - o Lung sounds – crackles and wheezing
 - o Increased JVP
- Fluid balance = what we lose vs what we gain
- Structure:
 - o Intracellular – most fluid
 - o Extracellular – intravascular (blood, where IV meds are given) + interstitial (where oedema occurs)
- Checking fluid status
 - o Breathing sounds
 - o Urine: volume, colour, smell (e.g. diabetes = sweet smelling)
 - o Utilise touch – pitting oedema, bilateral (check both sides)
 - o Vital signs
 - o Weight
 - o General appearance and behaviour

UTI

- Women more likely
- Risk factors:
 - o Diabetes
 - o Kidney stones
 - o Age
 - o Catheterisation
 - o Faecal incontinence
 - o Poor hygiene
 - o Sexually active women
 - o Pregnancy
 - o Recent antibiotic usage (microflora imbalances)
- Symptoms:
 - o Burning sensation during urination
 - o Cloudy, reddish, foul-smelling urine
 - o Fever/chill
 - o N+V
 - o Lower abdominal pain
- Dipstick, UA + MSU taken
 - o Leucocytes and nitrates often present in UTI

Theme 7: Medication Profiles

Red = must know

Blue = CAMs

Generic Name	Morphine sulphate
Trade Name	MS contin, Sevredol, Momex, Ordine
Mode of Action	Mimic endogenous opioids
Indication	Pain
Contraindication	Comatose patients (unless terminal)
Adverse Effects	N+V, drowsiness, headache, dizziness, itch, constipation
Nursing Actions	Monitor for 18-24 hours after first administration for respiratory depression, give diluted dose over 4-5 mins in IV

Generic Name	Codeine phosphate
Trade Name	Actacode Linctus, w/ paracetamol: Panadeine Forte
Mode of Action	Mimic endogenous opioids
Indication	Pain, diarrhoea
Contraindication	Comatose patients (unless terminal)
Adverse Effects	N+V, drowsiness, headache, dizziness, itch, constipation
Nursing Actions	Morphine preferred over codeine, should not be taken by children <12, <18 undergoing tonsillectomy or breastfeeding women

Generic Name	Amoxicillin
Trade Name	Amoxil
Mode of Action	Bactericidal; interfere with bacterial cell wall peptidoglycan synthesis
Indication	Chronic bronchitis, community-acquired pneumonia, sinusitis, gonococcal infection, acute prostatitis – inflammation caused by bacteria
Contraindication	Penicillin allergy
Adverse Effects	Diarrhoea, nausea, pain at site of injection
Nursing Actions	Avoid rapid IV injection of large doses as it may cause seizures, use in lieu of ampicillin

Generic Name	Ibuprofen
Trade Name	Nurofen
Mode of Action	Inhibits COX; analgesic, antipyretic and anti-inflammatory effects
Indication	Fever, rheumatoid arthritis, osteoarthritis, inflammation-related pain
Contraindication	Severe heart failure, peptic ulcer, GI bleeding, severe hepatic impairment, post-op pain relief
Adverse Effects	Pain at injections site, nausea, GI bleeding, headache
Nursing Actions	Not recommended in children with low-grade fever, can negate effects of aspirin