

Nurs 430

Part 6: Critical Thinking



Unit I

Learning Objectives:

After completion of lecture-discussions, students are expected to be able to:

- Differentiate critical thinking, judgement, clinical reasoning, clinical decision, and clinical decision making
- Analyze situations or cases demonstrating clinical thinking, judgement, clinical reasoning, clinical decision, and clinical decision making
- Value the importance of learning the appropriate way of critically thinking, judgement, clinical reasoning, clinical decision and clinical decision making

Requirements from newly qualified nurses

- To be critical thinkers
- To have ability to critique evidence
- To apply best evidence in clinical practice to inform judgement and decision making

Requirements from beginning practitioners

- to exhibit sound judgment and decision making skills through
 - developing knowledge or domain expertise in their field of practice
 - possessing the thinking skills to use that knowledge effectively
 - understanding what constitutes good decision making practice

Critical thinking skills (definition)

- refer to cognitive skills such as analysis, evaluation, inference, deductive reasoning, inductive reasoning, interpretation, explanation and self-regulation (Beckie et al., 2001, Hicks et al., 2003, Lyons, 2008).
- purposeful, self-regulatory judgment: an interactive, reflective, reasoning process of making a judgment about what to believe or do (Beckie et al., 2001)

Critical thinking skills (definition) (continued)

- “a dynamic, purposeful, analytic process that results in reasoned decisions and judgments” (Lyons, 2008)
- “a set of dispositions and skills that enhance decision-making processes through such cognitive abilities as analysis, inference and evaluation” (Hicks et al., 2003).

Clinical reasoning (definition)

- the process by which individuals make judgements and decisions, and incorporates the skills of critical thinking
- The outputs of the reasoning process are judgements

Clinical reasoning (definition) (Hoffman, 2007; Kraischsk & Anthony, 2001; Laurie et al., 2001)
(continued)

- process by which nurses (and other clinicians)
 - collect cues
 - process the information
 - come to an understanding of a patient problem or situation
 - plan and implement interventions
 - evaluate outcomes, and
 - reflect on and learn from the process

Nature of clinical reasoning process

- is dependent upon a critical thinking disposition (Scheffer & Rubenfeld, 2000)
- is influenced by a person's
 - Attitude
 - philosophical perspective
 - preconceptions (McCarthy, 2003).
- Clinical reasoning is not a linear process but can be conceptualized as a series or spiral of linked and ongoing clinical encounters.

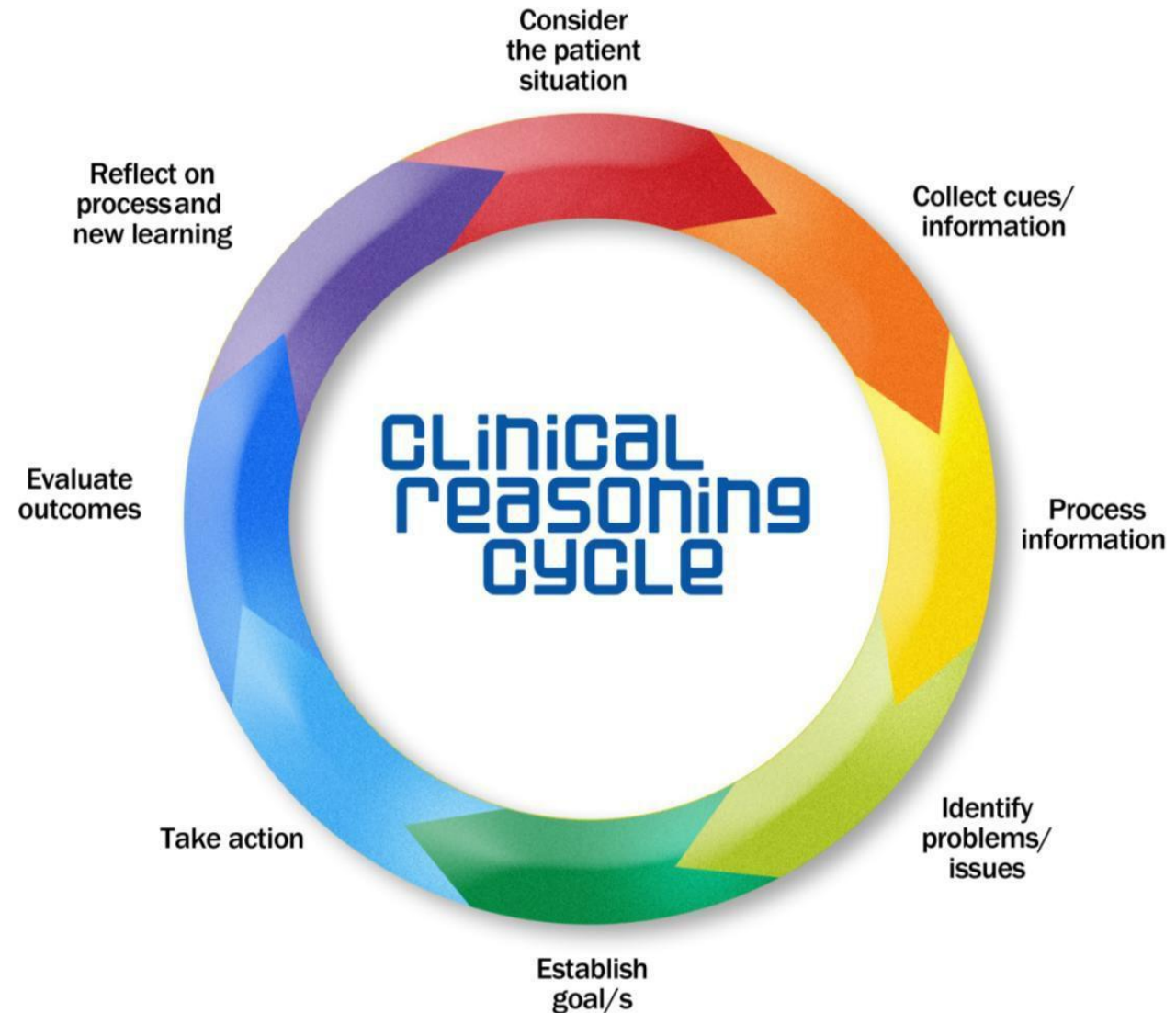
Why is Clinical Reasoning Important?

- effective clinical reasoning skills have a positive impact on patient outcomes
- poor clinical reasoning skills often fail to detect impending patient deterioration resulting in a “failure-to-rescue” (Aiken, Clarke, Cheung, Sloane, & Silber, 2003).

Top 3 Reasons for Adverse Patient Outcomes

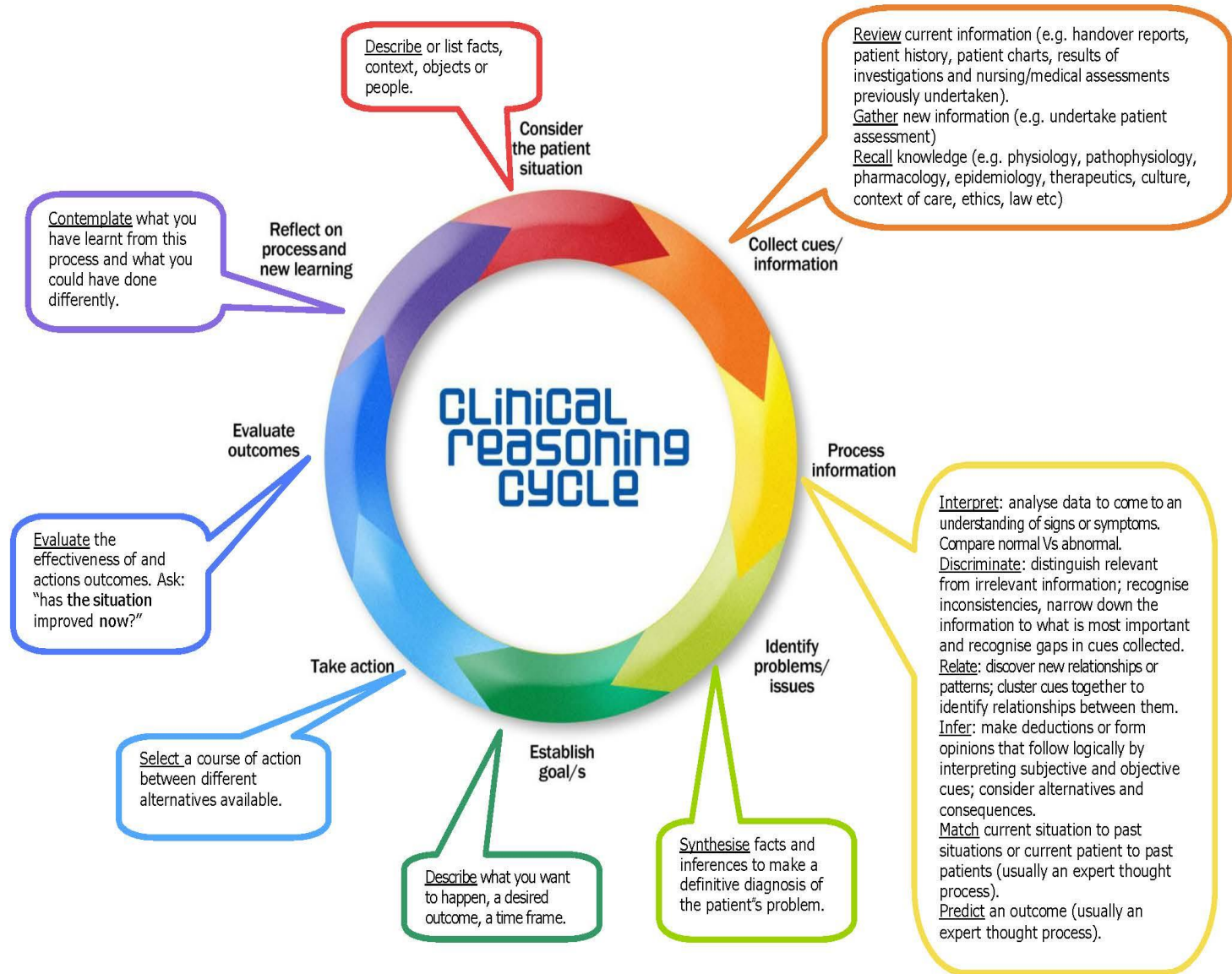
- failure to properly diagnose
- failure to institute appropriate treatment
- inappropriate management of complications

Clinical Reasoning Cycle



http://www.utas.edu.au/__data/assets/pdf_file/0003/263487/Clinical-Reasoning-Instructor-Resources.pdf

Figure 2: The clinical reasoning process with descriptors



Judgement (definition)

- ‘an assessment between alternatives’

Decisions (definition)

- ‘a choice between alternatives’ (Dowie, 1993)

Types of reasoning process used to reach judgements and decisions (Thompson and Dowding, 2009a)

- hypothetico- deductive reasoning
- analytical reasoning using algorithms and decision support tools (such as decision analysis or Bayes' theorem)

Judgement

- Opinions about other people (Weiss et al., 2006)
 - Example in healthcare: health status and functional ability, predictions of future behavior
- An assessment between alternatives (Dowie, 1993)
- A process that involves the integration of information about a person to reach an evaluation or assessment of their state or condition (Crow et al., 1995; Maule 2001)
 - Example in nursing: information such as vital sign readings, how they look at patient's condition or behavior

Table 1.1 Types of judgement

Type of judgement	Definition	Example
Causal judgement (diagnosis)	A statement expressing a state or condition based on the presence of attributes that are used to explain a problem	Nurse diagnoses the cause of a patient's incontinence (based on information collected during a full assessment)
Descriptive judgement	A statement expressing a state or condition based on the presence of attributes that had been observed directly or obtained from another source	Nurse judges that the patient is 'stable' (based on information collected during an assessment)
Evaluative judgement	A statement expressing a qualitative difference in a state or condition based on the presence of attributes that had been observed directly or obtained from another source	Nurse judges that the patient's condition has 'deteriorated' (based on information collected about the patient at this point in time, compared with a previous occasion)
Predictive judgement	A statement expressing a belief in the likely course of a patient's state or condition, based on presence of attributes that had been observed directly or obtained from another source	Nurse judges that the patient will have problems postoperatively (based on information collected about the patient preoperatively)

Adapted from Lamond et al (1996) and Cioffi (1998).

(Thomson & Dowding, 2009, p4)

Clinical decisions (definition)

- Choice between alternatives (Dowie, 1993)
- Produce some kind of outcome in the form of an action
 - Example: 'To do' or 'not do' something
- Decisions in healthcare are usually made under conditions of uncertainty—we do not know (with certainty) what will happen because of our decision or action

Box 1.1

An example of clinical judgements in practice

Although he's generally unwell (descriptive judgement), he wasn't dramatically worse than he had been (evaluative judgement), ... we started to through things like blood pressure, blood pressure OK (descriptive judgement), did his heart rate and it was 30, so it was, 'Oops' and obviously you're stopped in your tracks because there's something not quite right here (descriptive judgement) and went back over things, what's happened, what drugs was he on and we actually hadn't altered any of his medication. So we had to try and work it back and there wasn't anything obvious but obviously there had been some kind of acute event or some acute change (causal judgement), so we had to organise an ECG. No – in fact we didn't – we discussed it with the consultant and because of his age and he was so slow we actually admitted him (decision) and it turned out that he was in complete heart block, possibly related to his beta-blockers or an ischaemic event because he was a diabetic (causal judgement/diagnosis).

Clinical decision making (definition)


- The process that involve weighing up of potential costs and benefits associated with each option you are considering, before deciding on a course of action (Baron, 2000)

Decisions normally follow judgments (see case)

- The nurse made a number of judgments
 - The patient is “unwell”, that his problem has ‘probably’ been caused by a ‘new event’.
 - On the basis of these judgments (as well as discussion with the consultant) the nurse decides that the best course of action (the decision) is to admit the patient to hospital.

Importance of why nurses need to know about 'decision making'

- to be recognized as autonomous decision making professionals
- Develop nursing in ways that provide enough freedom to practice and exercise judgment with the minimum of interference in the relationship between patient and nurse
- Opportunity to rethink the ways in which we
 - train, develop, and self-regulate the profession
 - establish and market our contribution to enhanced patient outcomes

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- Dowding, D.W., Gurbutt, R., Murphy, M., Lascelles, M., Pearman, A., & Summers, B. (2012). Conceptualising decision making in nursing education. *Journal of Research in Nursing*, 17(4), 348-360.
 - Thompson, C. & Dowding, D. (2009). *Essential Decision Making and Clinical Judgement for Nurses*. China: Churchill Livingstone Elsevier.
 - Clinical reasoning: Instructor resources. Available from http://www.utas.edu.au/__data/assets/pdf_file/0003/263487/Clinical-Reasoning-Instructor-Resources.pdf

