


# Disability Management

## UNIT 2

### Introduction

Disability management focuses on absences from work as a result of illness, injury or disability, and on preventing the risks that cause these absences. The term disability often is used to refer to a disease or disorder, whether a chronic medical condition (e.g., diabetes, heart disease, arthritis, or multiple sclerosis) or a broader impairment (e.g., a physical, cognitive, mental, or sensory disorder), that affects a person's capacity to function. The term management in this context refers to how people who are living with disability control their symptoms and use treatments.

	Time needed to finish this unit	Approximately 4 weeks
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### Lessons of this unit

Lesson 1: Use of Clinical Reasoning in Disability Management & Rehabilitation

Lesson 2: Concept of Clinical Reasoning in Disability Management & Rehabilitation

Lesson 3: Importance of Clinical Reasoning in Disability Management & Rehabilitation

Lesson 4: Factors to be Considered to Establish Clinical Reasoning in Disability  
Rehabilitation Science


## Lesson-1: Use of Clinical Reasoning in Disability Management & Rehabilitation

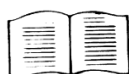


### Learning Objectives

On completion of this lesson, the learners will be able to-

- use of Rehabilitation reasoning.
- rehabilitation reasoning incorporate with disability management.

	<b>Keywords</b> Use of Clinical reasoning, Component of reasoning, Five rights
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### Subject-matter

There are several sectors where we can apply clinical reasoning. Application of clinical reasoning in each sector has different purpose. There are also several components of reasoning on the basis of practice. Effectiveness of clinical reasoning depends rightly application of ‘five rights’: right cues, right action, right patient, right time and right reason.

#### 2.1.1. Usual Usage of Clinical reasoning in Disability Management

- During disability screening and assessment;
- During clients assessment and management;
- Throughout the rehabilitation process;
- Follow-up patient’s management;
- During home visit of patients;
- Research and publication;
- Developed authentic evidence;
- Test the existing evidence.

The interplay between critical thinking and clinical reasoning informs a learner’s clinical judgment. **According to Alfaro-Le Fevre (2013), components of reasoning on the basis of practice or use within the clinical setting include the following:**

- ❖ Diagnostic reasoning (applying clinical or rehabilitation process to determine, prevent, and manage patient problems);
- ❖ Problem solving, decision making, and judgment;
- ❖ Patient, caregiver, and community safety and welfare;
- ❖ Patient- and family-centered care;
- ❖ Moral and ethical reasoning;
- ❖ Applying evidence-based practice;
- ❖ Teamwork and collaboration;
- ❖ Clinical teaching and learning;

- ❖ Using and creating electronic medical data (informatics);
- ❖ Self-improvement, stress management;
- ❖ Quality improvement (improving outcomes and care delivery systems).

### **2.1.2 The ‘five rights’ of clinical reasoning**

Effective use of the CR model by the learners and its application in practice is directly linked to the five rights of clinical reasoning, i.e, the ability to collect the right cues and take the right action for the right patient at the right time and for the right reason.

#### **The Right Cues**

The recognition of cues and clusters of cues, termed ‘‘cue acquisition’’ by Elstein and Bordage (1991) and ‘‘noticing’’ by Tanner (2006), is the fundamental basis of CR. Cues are identifiable physiological or psychosocial changes experienced by the patient, perceived through history or assessment and understood in relation to a specific body of knowledge and philosophical beliefs. Cues also include the context of care and the surrounding clinical situation.

The acquisition of cues can be influenced by many factors including the expertise and working knowledge of the decision-maker, anxiety, confidence and time pressures (O’Neill et al., 2005). When the correct cues are not acquired all of the actions that follow may be incorrect (Andersen, 1991). Making judgements or decisions based on incomplete information is a leading cause of mistakes (Alfaro-LeFevre, 2009); and early subtle cues when missed can lead to a ‘failure to rescue’

#### **Right patient**

The right patient, in this instance, refers to a patient at risk of critical illness and/or a serious adverse event. Professionals need to learn how to identify and prioritise patients in need of immediate care. Although Tanner (2006) suggests that it is background knowledge and relationships with patients that are the basis upon which professional initially grasp the clinical situation, definitive physiological parameters also need to be comprehended if the ‘right’ patient is to be recognised in a timely manner.

#### **Right time**

Within clinical contexts that are often complex and unpredictable, nurses engage in multiple CR episodes each day for each patient in their care. Thompson et al. (2004) observed professionals engaging in up to 50 significant CR encounters in one 8 h shift in a medical admissions unit. Similar patterns of multiple judgements and choices in bounded time frames were identified by Bucknall (2000) who found that intensive care unit nurses faced a clinical judgment or decision every 30 s.


#### **Right action:**


Nursing ‘action’ is defined as ‘‘the behaviour following on from a judgement or decision’’ (Thompson and Dowding, 2002, p. 14). This stage of the CR cycle is comprised of practical skills, intellectual activities and communication skills. The nurse has to decide which part of the plan takes priority, who is best placed to undertake the nursing action/s, which procedures and policies are involved, who should be notified and when.

#### **The right reason**

When considering the ‘right reason’ there are multiple implications. In this context, ‘right’ does not only mean that the correct reasoning processes have been employed but also that the reasoning is

ethical, legal and professional. The 'right' reason does not apply just to the process of reasoning; it is about the underpinning rationale. Consequently, when discussing this 'right' these other dimensions must be considered.

 <b>Learner's Activity</b>	Do a case study applying 'five rights' in clinical reasoning.
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 <b>Summary</b>
Clinical reasoning can be used in disability management (e.g., assessment, management, rehabilitation, research etc) and clinical setting (e.g., diagnoses, teaching and learning, creating information bank, etc). To get maximum outcomes from clinical reasoning, 'five rights' must be done correctly on the basis of patients' aspects: right cues-collection of right cues from patient, right patient-giving preference to critical patients, right time-taking decision in right time, right action-taking right decision on basis of rules, regulations, skills, experience, etc, right reasoning-taking action after judging everything rationally.

## Study Skills

### Multiple choice questions

**Tick (✓) the correct answer**

1. How many rights in clinical reasoning.
  - a. Three
  - b. Four
  - c. Five
  - d. Six.
2. Which of the term is related with right pattern?
  - a. Serious illness
  - b. Cured partial
  - c. Fitness
  - d. All night.
3. Right action is related to
  - a. Nurse
  - b. Doctor
  - c. Physiotherapist
  - d. Director

### Short Questions

1. What are the use of Rehabilitation reasoning in disability?
2. Describe the rights of clinical or rehabilitation reasoning.


## Lesson-2: Concept of Clinical Reasoning in Disability Management & Rehabilitation



### Learning Objectives

On completion of this lesson, the learners will be able to-

- understand different concept of Rehabilitation reasoning.
- describe judgement and Diagnosis.

 <b>Keywords</b>	Diagnosis, inductive, abductive, deductive, approach, cognitive
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### Subject-matter

There are several approaches, a rehabilitation professional can take into consideration in decision and care action. The clinical reasoning process is an interactive process involving all stakeholders. It is necessary to know the concept of clinical reasoning to get the best outcomes.

#### 2.2.1 Specific Reasoning in Disability Rehabilitation

Clinical or rehabilitation reasoning is present in all rehabilitation professionals care actions and decisions: in diagnosing phenomena, in choosing appropriate interventions and evaluating results. The formulation of the diagnosis includes expectations of interventions and potential outcomes in a given context and depends on the people involved (professionals, patient, family, community) and the relationships established between them.

Decisions based on **inductive, deductive and intuitive** analyses are also permeated by ethical thinking, so that clinical reasoning is fundamentally an interactive process, contextualized in care practice. Thus, several authors have proposed the integration of these logics existent in the concept of clinical reasoning.

**One basis of a theoretical model of clinical reasoning integrates three dimensions in clinical judgments:**

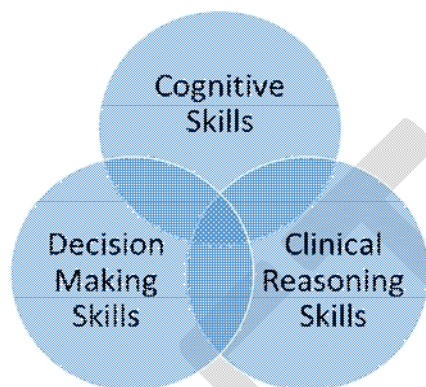
- The diagnostic dimension,
- The therapeutic dimension and
- The ethical dimension.

According to this model, the collection and processing of information is strongly influenced by ethno-cultural and motivational aspects of subjects, by the professional's interests and philosophical foundations, their beliefs about rehabilitation conceptual focus and its social function, and their implicit and explicit values, especially when there is little time for decision-making. Thus, encouraging sensitivity to relevant ethical cues on admission and in daily assessments of patients is very important within an integrated approach.

### 2.2.2. Judgement and diagnosis:

- Problem Framing - Diagnosis
- Problem Solving – Treatment decisions

#### Problem Solving:



#### Cognitive Approaches to Decision Making:

- underpinned by research from cognitive sciences;
- explores / explains the thought processes used ;
- developed from work comparing expert and novice behaviours.

#### Two Key Factors

- Your **previous experience** of the same or similar problems
- Your knowledge base including **what you learned and stored** in memory about solving problems on previous occasions

### 2.2.3 Processes utilised depend upon how familiar the problem is to the practitioner:

#### Unfamiliar problem

- Hypothetico Deductive Reasoning

#### Familiar problem

- Pattern Recognition

#### Inductive Approach

##### Inductive reasoning

It is described as probabilistic since a conclusion is reached on the basis of the probability of that conclusion in relation to the evidence available. The evidence is evaluated in relation to existing knowledge. - *Source of error* (Albert et al 1988)

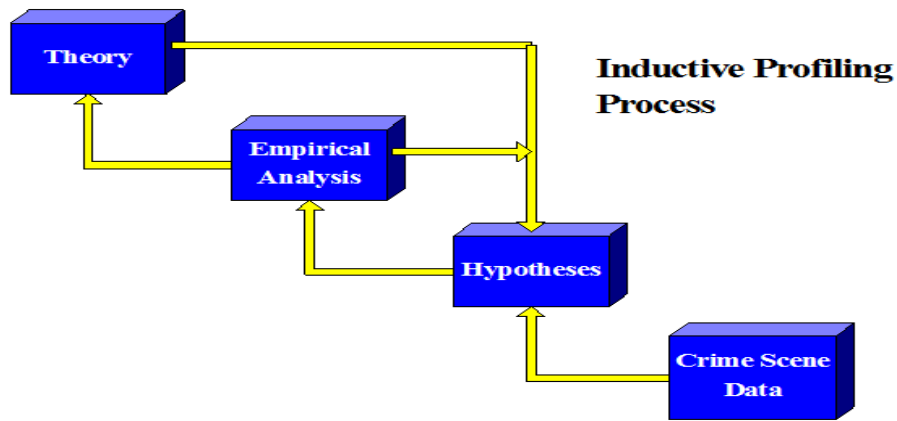


Fig. 2.1. Inductive profiling process

**Deductive Approach: It is opposite to inductive approach**

Deductive reasoning, also deductive logic, logical deduction is the process of reasoning from one or more statements (premises) to reach a logically certain conclusion. It differs from inductive reasoning and abductive reasoning. Deductive reasoning links premises with conclusions. If all premises are true, the terms are clear, and the rules of deductive logic are followed, then the conclusion reached is necessarily true.

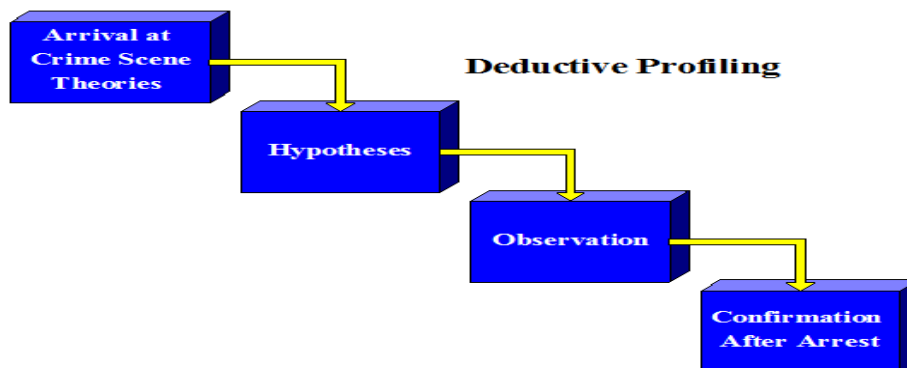


Fig. 2.2. Deductive profiling process

Deductive reasoning (top-down logic) contrasts with inductive reasoning (bottom-up logic) in the following way:

In deductive reasoning, a conclusion is reached reductively by applying general rules that hold over the entirety of a closed domain of discourse, narrowing the range under consideration until only the conclusion(s) is left. In inductive reasoning, the conclusion is reached by generalizing or extrapolating from specific cases to general rules, i.e., there is epistemic uncertainty. However, the inductive reasoning mentioned here is not the same as induction used in mathematical proofs – mathematical induction is actually a form of deductive reasoning.

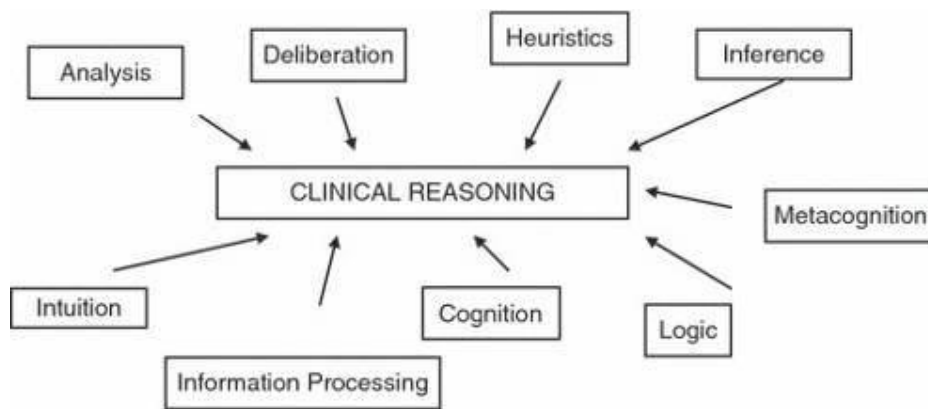



Fig.2.3: Concept of clinical reasoning

	<b>Learner's Activity</b>	Prepare a concept model of clinical reasoning.
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	<b>Summary</b>
<p>The reasoning for clinical rehabilitation professionals have to do in a sequential way—first diagnosis, then intervention and finally evaluating result. Decision will be taken on the basis of inductive, deductive and intuitive analyses, and have to involve professionals, patient, family and community for the positive outcomes on patients.</p>	



### Study Skills

#### Multiple choice questions

**Tick (✓) the correct answer**

1. Deductive reasoning follows—
  - a. bottom-up logic
  - b. top-down logic
  - c. free thinking
  - d. None of the above.
2. Inductive reasoning follows—
  - a. top-down logic
  - b. bottom-up logic
  - c. conclusion through deduction
  - d. Conclusion through addition.
3. Conclusion is made in inductive reasoning based on—
  - a. practical experience
  - b. probable evidence
  - c. previous data



d. Present data.

### **Short Questions**

1. Describe the concept of Rehabilitation reasoning.
2. Describe judgement and Diagnosis.
3. What is inductive and deductive reasoning?

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## Lesson-3: Importance of Clinical Reasoning in Disability Management & Rehabilitation



### Learning Objectives

On completion of this lesson, the learners will be able to-

- understand the importance of Rehabilitation reasoning.
- rehabilitation reasoning incorporate with disability management and rehabilitation with examples.

 <b>Keywords</b>	Patient outcomes, Skills, Expertise, Practice, Experience
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### Subject-matter

Skillness in clinical reasoning will have positive impact on patient outcomes otherwise outcomes will affect adversely on the patient. Skillness/expertise will develop in practitioners through a combination of different forms of knowledge.

#### 2.3.1 Basic Importance of rehabilitation reasoning

- Rehabilitation Professionals with effective clinical reasoning skills have a positive impact on patient outcomes. Conversely, those with poor clinical reasoning skills often fail to detect impending patient deterioration resulting in a “failure-to-rescue” (Aiken, Clarke, Cheung, Sloane, & Silber, 2003).
- This is significant when viewed against the background of increasing numbers of adverse patient outcomes and escalating healthcare complaints (NSW Health, 2006).
- According to the NSW Health Incident Management in the NSW Public Health System 2007 (2008) the top three reasons for adverse patient outcomes are failure to properly diagnose, failure to institute appropriate treatment, and inappropriate management of complications. Each of these is related to poor clinical reasoning skills.
- The Quality in Australian Healthcare Study (Wilson et al, 1995) found that “cognitive failure” was a factor in 57% of adverse clinical events and this involved a number of features including failure to synthesise and act on clinical information.
- Education must begin at the undergraduate level to promote recognition and management of the deteriorating patient, the use of escalation systems and effective communication (Bright, Walker, and Bion, 2004).
- In clinical practice experienced professionals engage in multiple clinical reasoning episodes for each patient in their care.
- An experienced professionals may enter a patient’s room and immediately observe significant

data, draw conclusions about the patient and initiate appropriate care. Because of their knowledge, skill, and experience the expert nurse may appear to perform these processes in a way that seems automatic or instinctive. However, clinical reasoning is a learnt skill.

### 2.3.2. Reasoning for health outcome

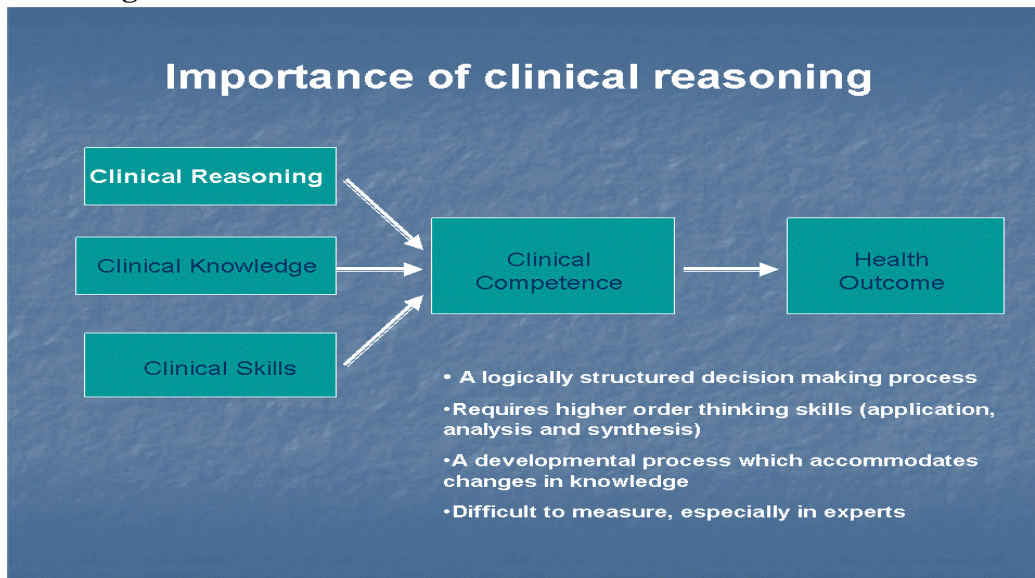


Fig: 2.4. Important of clinical reasoning

### 2.3.3. Reasoning of expertise from Skill and Clinical Issues:



Fig: 2.5. Important of clinical reasoning

	<b>Learner's Activity</b>	What happens to patient if health care professionals fail to effective clinical reasoning?
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	<b>Summary</b>
Skillness in clinical reasoning should be rational to have a positive impact on patient outcomes. On the contrary, poor clinical reasoning skills will adversely affect patient outcomes. Poor clinical reasoning is related to improper diagnosis, inappropriate treatment	

and inappropriate management of complications. To get positive outcomes, the health care providers' skill in clinical reasoning will be such that just observing significant data of patient can initiate appropriate intervention. To do so, health care providers have to have knowledge, skill and experience in clinical reasoning.



## Study Skills

### Multiple choice questions

#### Tick (✓) the correct answer

1. Which term is related with adverse patient outcomes-
  - a. failure to properly diagnose
  - b. failure to appropriate treatment
  - c. failure to manage complication
  - d. all of the above.
  
2. Positive health outcome will come through proper-
  - a. clinical reasoning
  - b. clinical knowledge
  - c. clinical skills
  - d. all of the above.
  
3. Expertise build in clinical reasoning through-
  - a. practice-techniques-skill based activity
  - b. techniques-practice-skill based activity
  - c. skill based activity-techniques-practice
  - d. none of the above

### Short Questions

1. What are the basic importance of Rehabilitation reasoning?
2. Describe the process of reasoning for health outcome.
3. Highlight the reasoning of expertise from skill and clinical issues.

## Lesson-4: Factors to be considered to Establish Clinical Reasoning in Disability Rehabilitation Science



### Learning Objectives

On completion of this lesson, the learners will be able to know-

- basic factors to establish Rehabilitation reasoning.
- influencing factors of Rehabilitation reasoning.

	<b>Keywords</b>	Internal factor, External factor, Decision making
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### Subject-matter

Certain basic factors should be considered in clinical reasoning in disability management. Clinical reasoning is influenced by some internal and external factors. Decision may need to change with the passage of time in dynamic setting. Definitely certain attributes will have decision markers in clinical reasoning.

#### 2.4.1 Basic Factors need to be considered to establish clinical reasoning in disability:

- Socio-cultural conditions;
- Client beliefs;
- Therapist values and beliefs;
- Social attitude to disability;
- Individual attributions;
- Client attributions;
- Therapist attributions;
- Participants working in hospitals stated;
- The Workplace Environment;
- Knowledge of managers of rehabilitation services;
- Working in an inter-professional team;
- Limited clinical facilities and resources.

#### 2.4.2 Factors influencing clinical reasoning

##### ➤ External factors

- Client- his or her needs, expectations, values and beliefs
- Professional and institutional policies
- Community needs and expectations

-Resource availability and funding

➤ **Internal Factors**

-Personal values and beliefs

-General and domain specific knowledge

-individual cognitive or reasoning strategies

**Orasanu & Connolly (1993) described the characteristics of decision making in dynamic settings (e.g. healthcare settings) in the following way:**


- ❖ problems are ill-structured and made ambiguous by the presence of incomplete dynamic information and multiple interacting goals.
- ❖ the decision-making environment is uncertain and may change while decisions are being made.
- ❖ goals may be shifting, ill-defined or competing.
- ❖ decision making occurs in the form of action feedback loops, where actions result in effects and generate further information that decision makers have to react to and use in order to make further decisions.
- ❖ decisions contain elements of time pressure, personal stress and highly significant outcomes for the participants.
- ❖ multiple players act together with different roles.
- ❖ organizational goals and norms influence decision making.


### 2.4.3 Attribute of Decision Makers

The physiotherapists had a number of frames of reference that guided their decision making. These are:

- ❖ a multi-dimensional professional knowledge base;
- ❖ a conceptual framework for acute care physiotherapy practice;
- ❖ individual practice models;
- ❖ Personal frames of reference that included their values, beliefs and attitudes.

Decision-making research in the field of psychology has established that attributes of individuals influence decision making, with particular reference to decision-making biases. It has been found that attributes of decision makers, such as their capabilities, confidence, self-efficacy, emotions, frames of reference, and degree of expertise, also influenced their decision making.

 <b>Learner's Activity</b>	How attributes of decision maker influence decision making?
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 <b>Summary</b>	In the process of clinical reasoning in disability management basic factors related to patient, resources, organization and environment need to be considered. Factors related to these will influence clinical reasoning. In dynamic setting, decision maker is to work interdependently and decision may need to revise in changing environment over time either
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due to the previous actions of the decision maker or due to events that are outside of the control. Knowledge, concept, experience, values, beliefs and attitudes, capabilities, confidence, self-efficacy, emotions, frames of reference, and degree of expertise of decision makers will influence decision making.



## Study Skills

### Multiple choice questions

#### Tick (✓) the correct answer

1. Which one is the external factor that influence in clinical reasoning?
  - a. Personal values
  - b. Personal beliefs
  - c. Funding
  - d. General knowledge
  
2. Which one is the internal factor that influence in clinical reasoning?
  - a. Institutional policy
  - b. Domain specific knowledge
  - c. Available resource
  - d. Community needs
  
3. Attribute of decision makers is
  - a. professional knowledge
  - b. individual practice models
  - c. conceptual frame work
  - d. all of the above

### Short Questions

1. Describe basic factors or establish in Rehabilitation reasoning.
2. What are the influencing factors of Rehabilitation reasoning?