

Cognitive Bias in Clinical Decision-Making

Identify and Counteract your Inner Manipulator



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We do not have financial relationships to disclose or conflicts of interest to report.

Objectives



By the end of this workshop, attendees should be able to:

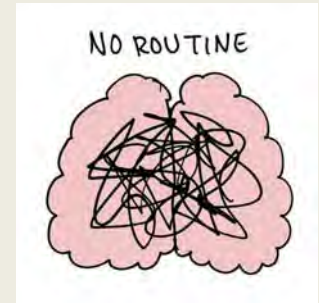
1. Describe the concept of cognitive bias.
2. Define 2 types of cognitive bias.
3. Reflect on how personal cognitive bias can impact clinical decisions and may lead to diagnostic errors.
4. Apply curricular strategies to teach yourself and your learners how to recognize and overcome cognitive bias.

Agenda

- I. Cognitive Bias introduction and theory
- II. Effect of Cognitive Bias on clinical decision making and Diagnostic Error
- III. Small Group Activity: Identifying Bias
- IV. Introduction to Cognitive Debiasing Strategies and Toolkit
- V. Small group Activity: Applying the Toolkit
- VI. Wrap Up and Questions







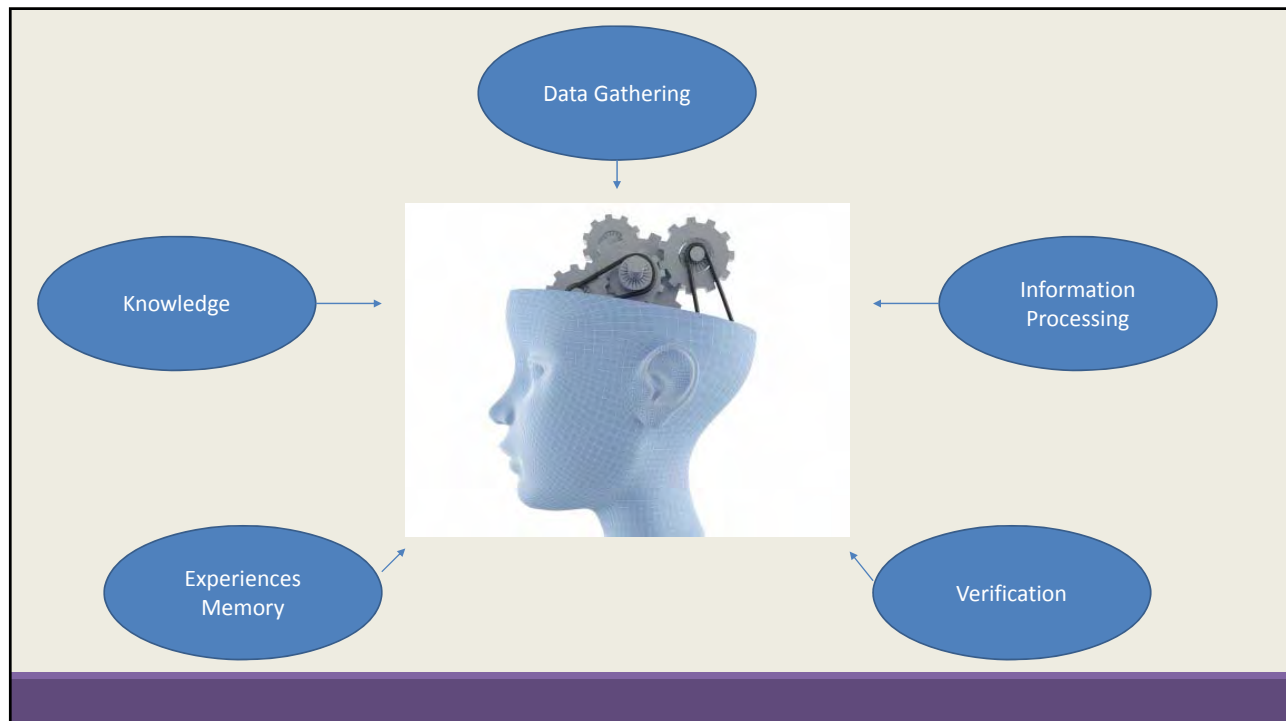
Cognitive Bias

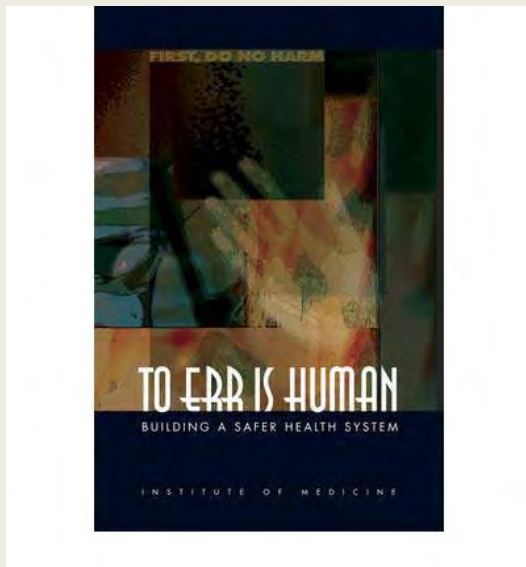


Personal Experiences become “hard wired” into the way our brain functions

The **brain looks for the simplest** way to decision making- using associations

- The brain as a **prediction machine**
- Seeks the **simplest path** to a conclusion






*"...the delivery of health care has proceeded for decades with a blind spot; **Diagnostic errors**- inaccurate or delayed diagnosis- persist throughout all settings of care and continue to harm an unacceptable number of patients."*

How often would you estimate the diagnostic error rate to be in your own practice?

- A. 10% or more (weekly)
- B. 1% (monthly)
- C. Almost Never


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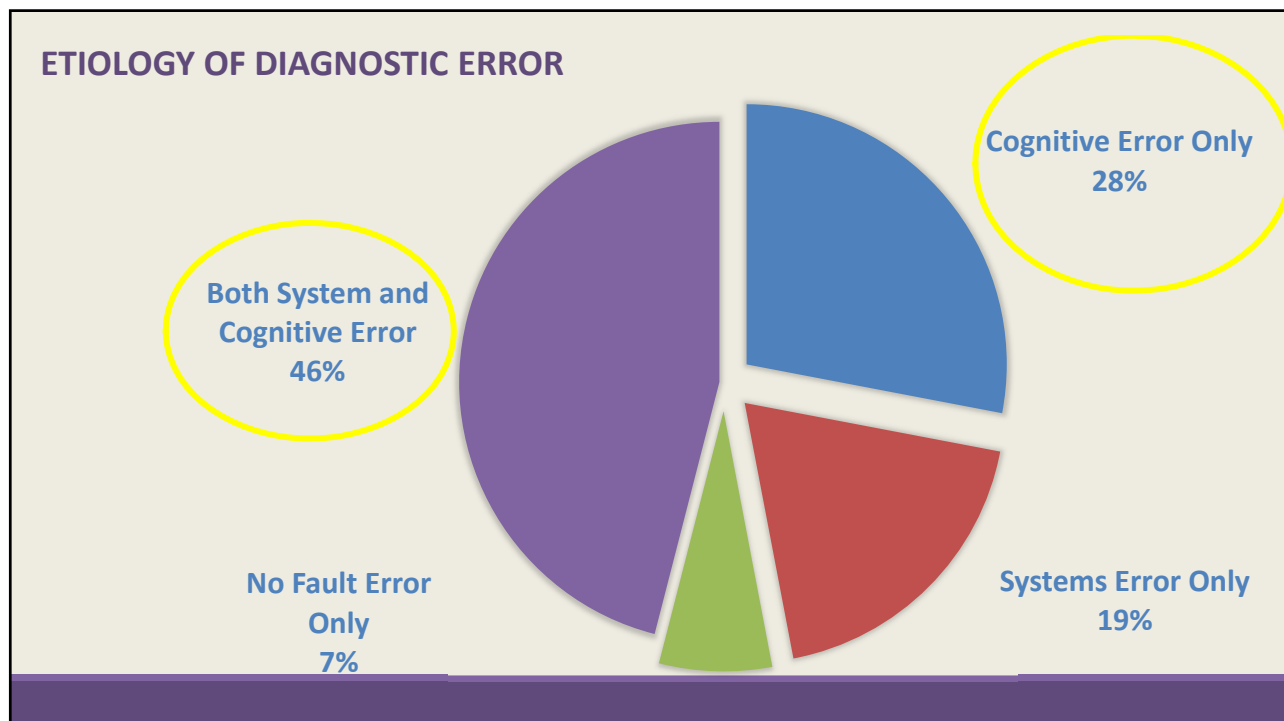
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Cognitive Biases and Diagnostic Errors

Diagnostic Error

Estimated rate of 10-15%

Higher in fields that rely on data gathering and synthesis vs visual interpretation

System errors

No-fault errors

COGNITIVE ERRORS

- Failed heuristics
- Cognitive biases
- Not usually a lack of knowledge but a problem in thinking

Cognitive Biases Lead to Cognitive Errors

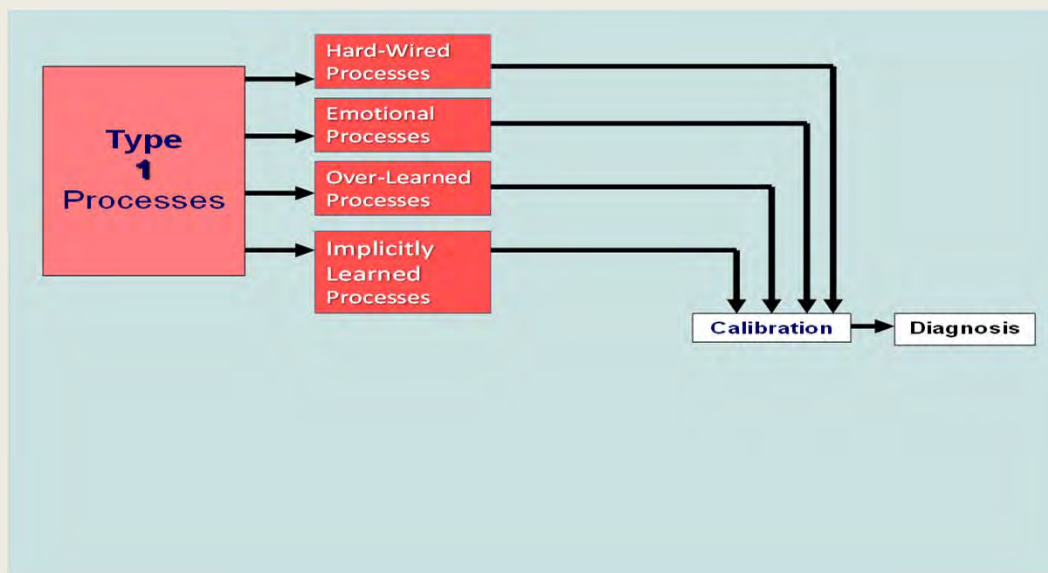
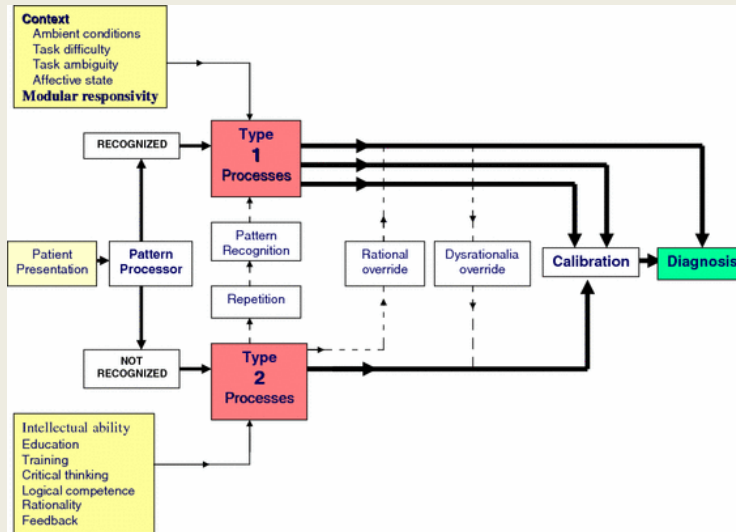
Bias has a negative connotation

We all have them and must accept that we do

“Cognitive Dispositions to Respond”

“Predictable deviations from rationality”

Dual Process Theory: A Model for Diagnostic Reasoning



Risky Situations → Biases

Was this patient handed off to me?

Was the diagnosis suggested to me by a colleague?

Did I accept the first diagnosis that came to mind?

Did I consider other organ systems besides the obvious one?

Is this a patient I don't like, or like too much, for some reason?

Am I feeling fatigued?

Am I cognitively overloaded or overextended?

Am I stereotyping this patient?

Have I effectively ruled out must-not-miss diagnoses?

Small Group Activity #1



- Select case from your folder
- First read it individually
- Using “List of Cognitive Bias/Heuristics” identify heuristics applied in case
- Personal reflection and small group share

Mitigating Cognitive Bias: What's In Your Toolkit?



How do we **overcome** cognitive bias?

1. **Familiarize** yourself and be **Aware** of heuristics
2. Be **Conscious** of the decisions you make
3. Prompt yourself and your learners to **Reflect**
4. **Slow down** and be deliberate
5. When a diagnostic error is made, be **Open to learn and reflect**
5. Check out our **TOOLKIT!**



Tools to overcome cognitive bias

High-reliability professions:

Airlines
Submarines
Nuclear Plant Operators
Medicine (CLABSI)



High-reliability professions:

Operating Room
Procedures
Our thoughts should be just as important!

Great ways to get **learners** engaged in thinking about **diagnostic error** and **cognitive bias**



Even in a time crunch, **one simple question** and forcing yourself to **pause and reflect** can be life saving

The Toolkit

- General Diagnostic Error “Time out” Checklist
- Modified Graber Checklist (SAFER)
- Trowbridge’s Twelve Tips
- How Do Doctor’s Think Pocket Card
- Clinical Excellence Commission’s Take 2- Think, Do: **Red Team, Blue Team** Challenge
- The Power of the Simple Questions
- Resources inventory

Small Group 2 Activity #2



Using the same case you reviewed in activity 1:

- Apply assigned tool to mitigate your cognitive bias
- After using the tool, reflect on how this changed your thinking
- Be ready to share with large group

Time: 10 minutes

So... what are YOU going to do?



Understand and Recognize Cognitive Bias


Be **open** and **aware** to its effects on clinical decision making

Slow down. Take a moment to **Pause** and **Reflect.**

When in Doubt, **check it out....**

Share your toolkit with colleagues and learners!

PAUSE... REFLECT...
ANY QUESTIONS?



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Resources

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