Topic 1: Cognitive Biases 1

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Objectives

- By the end of this lecture, the learners will be able to
1. list the classes of cognitive biases
2. describe and give examples of cognitive biases in each of these classes

Introduction

- Although Type 1 process is often effective in making decisions, it is more affected by cognitive biases than Type 2 decision making

- Cognitive bias or error is defined as our deviations from rationality

- May derail a clinician into diagnostic biases if left unchecked

Classification of Cognitive Biases

Classification (Campbell et al, 2007)
1. Over attachment to a particular diagnosis
2. Failure to consider another diagnoses
3. Inheriting someone else's thinking
4. Errors in prevalence perception or estimation
5. Errors contributed by patient characteristics or presentation context
6. Physician affect or personality
7. Impact of environmental factor

Over attachment to a particular diagnosis

Anchoring

Confirmation Bias

Anchoring

- This refers to our tendency to fixate our perception on to the salient features in the patient's initial presentation so much so that we fail to adjust our initial impression even in light of later information.

Confirmation bias

- This refers to our tendency to look for confirming evidence to support the diagnosis we are "anchoring" to, while downplaying, or ignoring or not actively seeking evidences that may point to the contrary.

Failure to consider another diagnoses

Search satisficing

Search satisficing

- This refers to our tendency to stop looking or call off a search for a second diagnoses when we have found the first one.

- This bias can prove to be detrimental in polytrauma cases.

Inheriting someone else's thinking

Triage cueing
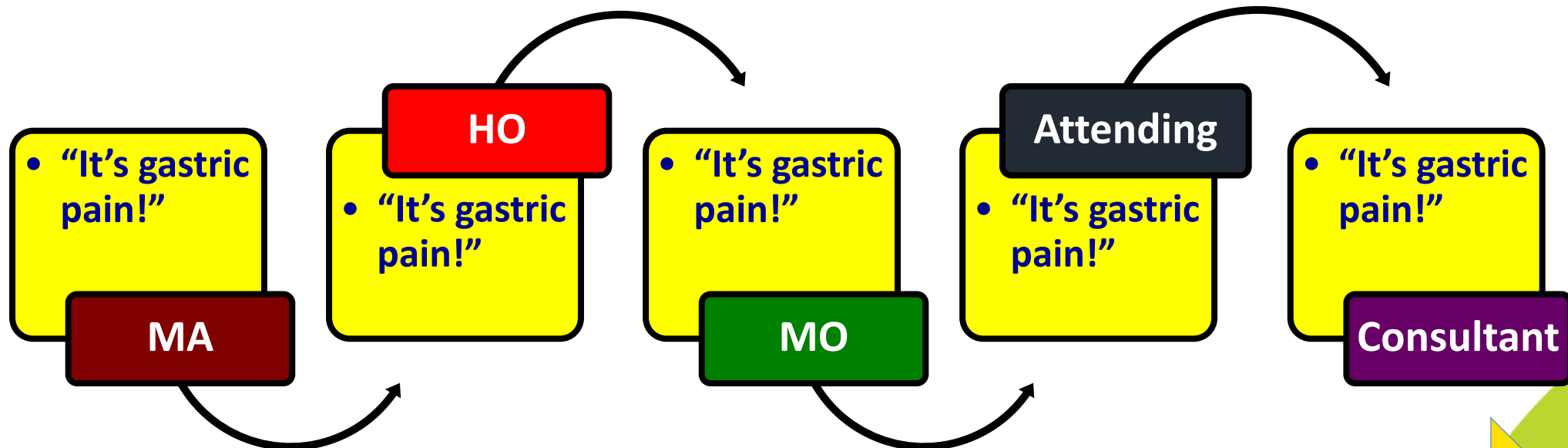
Diagnostic Momentum

Triage cueing

- This is basically a form of anchoring where once a triage tag has been labelled on a patient, the tendency is to look at the patient only from the perspective of the discipline in which the patient is tagged to.

Diagnostic Momentum

- Refers to the phenomenon where once a diagnostic label is attached to a patient, it tend to become stickier and stickier (and gains momentum) as the consultation progresses from one level of staff to another (for example, from a junior doctor to a senior doctor to a consultant) up to the point that this label becomes difficult to shed.

Diagnostic Momentum

A 50-year-old man with acute onset of epigastric pain