

Decisions, Decisions: The Science and Art of Clinical Reasoning in Pharmacy

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Objectives

- Describe influences on clinical reasoning in the health professions
- Apply clinical reasoning principles to challenging pharmacy practice situations
- Reflect upon one's own clinical reasoning and decision making processes for the purpose of self-improvement







Why is practice change so difficult?

- Risk aversion
- Need to be liked
- Responsibility avoidant
- Deference to authority/hierarchy
- Decisional paralysis

Rosenthal M, Austin Z and Tsuyuki R. Are pharmacists the ultimate barrier to practice change? CPJ 2010, 143(1): 37-42.







What's in a decision?

Every decision is a battle between intuition/emotion and logic/reasoning

- Fast and slow systems for decision making
- Fast system is generally invisible, powerful and dominant
- Slow system requires energy and deliberate concentration
- As a result, "...our thinking is riddled with systematic mistakes known to psychologists as cognitive biases"...and, strangely enough, our slow system masterfully invents reasons to justify these mistakes







Examples of cognitive biases

- The Present Bias: Disproportionate emphasis on immediate pain/gain
- Confirmation Bias: Seeing only the evidence that confirms what we already know/believe
- Negativity Bias: Pain remembered more than gain
- Status Bias: Deferring to authority/hierarchy means "respect", not "avoidance"







How does this apply to pharmacists?

- Adherence to Processes vs Focus on Outcomes
- Expecting the right answer vs Searching for a "least worst" alternative
- Seeking Certainties vs Managing Probabilities (Anticipating/Mitigating Risk)
- Avoiding conflict at all costs







Case #1

You receive a prescription for Ciprodex® i gtt bid for a 40-year old patient. It's Friday evening and the MD's office is closed for the long weekend. The patient is clearly suffering and anxious to get home as soon as possible. According to the product monograph, the usual dose is iv gtt bid; the patient has no other conditions that she is aware of that would warrant such a low dose.







Adherence to Process vs Focus on Outcomes

- Historically, pharmacy has been a rule-bound and ruleenforcing profession
- We have been educated and socialized into belief that following rules = best outcomes
- Reality, however, suggests otherwise: slavish adherence to rules can produce paradoxically bad outcomes
- But "the rules" are changing...







Case #2

A woman arrives at the pharmacy looking for her 80 year old mother's post-chemo anti-emetic prescriptions (dexamethasone + ondansetron + prochlorperazine). Her mother has just completed her third course of chemo; you have filled this regimen for the past two courses. The clinic was supposed to fax the prescription to the pharmacy but you cannot locate it now. The clinic is now closed for the weekend.







Expecting the Right Answer vs Seeking "least worst" alternatives

- Scientific foundations of pharmacy produce cognitive inflexibility
- Emotional discomfort around distinction between "right" and "least worst" produces paralysis and/or avoidance
- We may let the vain quest for "perfect" interfere with the realistic attainment of "good"







Seeking Certainties vs Managing Probabilities

- In primary care, ~30-40 per cent of patients do not have an actual empirically defensible diagnosis, yet something still needs to be done
- Decisions are decisions precisely because there is ambiguity and lack of certainty involved – this is why we need professionals in society
- Clinical practice is inherently ambiguous; risk balancing is all that may be possible
- Managing emotional impact of believing "if something goes wrong, I will handle it then..." is essential







Case #3

A 17 year old female patient with severe acne has been prescribed Accutane® 40 mg caps od x 30 days, once a month for the past six months. She has responded well to it and has not experienced significant side effects. This month, she missed her appointment with the dermatologist and has completely run out of the medication. She believes she will "break out" in a matter of days without the medication. Her next appointment with her MD is next month.







Conflict avoidance

- Are we avoiding personal toll of conflict/stress/negativity, at the expense of patients and their needs?
- Learning to manage conflict effectively and professionally is challenging – but a separate task from making responsible clinical decisions
- Are we using "respect for authority" as a code word for "avoiding responsibility"?







Summary

- Clinical decision making is a complex amalgam of emotion, logic, and environment
- Path of least resistance most frequently influences our decision making
- We tend towards 'satisficing' rather than 'maximizing' options
- We would rather forgo potential gain to ensure avoidance of pain, not recognizing that this actually can backfire







Conclusions

- Professional responsibility and ethical practice must be important factors in clinical decision making
- Emotional (fast) decision making processes may not always produce best outcomes
- Not making a decision IS making a decision
- "If not me now...then who when?"







References and further readings

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