



Approach to the Medically Misinformed Patient

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CFD



Objectives

- Define “medical misinformation”
- Understand the sources of medical misinformation
- Understand which patients may be influenced by medical information
- Develop an approach to discuss medical misinformation with patients
- Establish goals of care for medically misinformed patients



Case

- 31 y.o male hospitalized with severe ulcerative colitis
- Treated with IV steroids and 1 dose of infliximab in hospital
- Failed to show up for his week 2 infusion → states he did some reading about long-term risks of being exposed to a mouse protein
- Also read about effectiveness of organic diet and turmeric supplements in ulcerative colitis
- Refuses to take infliximab or any other biologic



Discussion

- What are your thoughts about this patient's decision?
- What is your initial response?
- How often do you experience similar encounters in your practice?



Medical Misinformation and Disinformation

Medical Misinformation

- Health-related claim that is not supported by scientific evidence
- False or inaccurate information that misleads the consumer

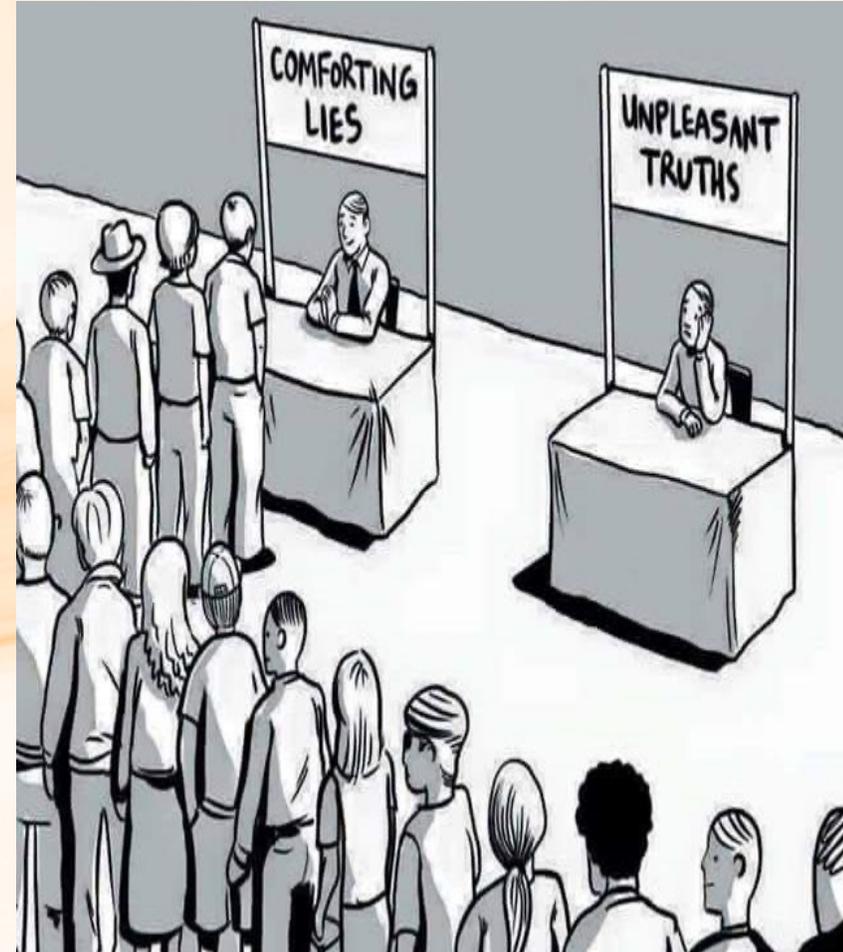
Medical Disinformation

- Intentionally false or misleading information



Why do people believe wrong things?

- Motivated reasoning
 - People believe information that is coherent with their worldview
 - It's true if you want it to be true
- Primacy Effects
 - The earlier you “learned” something the less likely you are to question the belief
- Social Cohesion
 - Accepting a false or unfalsifiable belief may be the “cost” of belonging to a peer community





The Impact of Social Media



- Designed to promote continued engagement
 - Expose people to what they want to hear
- Presence of informational silos
 - Algorithms promote content that is similar to
 - What people have engaged with in the past
 - What their friends are engaging with
 - Existing belief symptoms are validated
- Limited barriers to entry for creators of disinformation
- Limited liability for purveyors of false information



The Appeal of Medical Misinformation

- Fear of the unknown
- Distrust of large organizations
- Scientists equivocate, misinformers offer a clear message
- Opportunity to take control



Who is Most Susceptible to Misinformation

- Individual Factors
 - Low health literacy
 - Innumeracy
 - “intuitive” vs “reflective” personality types
 - Age
 - Young are more skeptical of authoritarianism
 - Older are more susceptible for on-line misinformation
 - Conspiratorial/paranoid mindsets
 - Distrust in the role of government as a benefactor of society
- Fractured trust in doctors and the health care system
 - General distrust of institutions and privileged classes
 - Prior unsatisfactory experiences with providers
 - Important to consider cultural context
 - Vulnerable and underprivileged populations



What are the goals of care?

- Harm reduction
 - Understand belief is sincerely and firmly held
 - You are not going to win the argument today
- Goals are:
 - Maintain a relationship
 - Build trust
 - Slow, steady nudges towards reason





Motivational Interviewing

- Directive, patient-centered counseling style for eliciting behavior change by helping patients to explore and resolve ambivalence
- Assists the patient in changing a behavior through expressing acceptance of their beliefs without judgement
- Incorporates the idea that patients are in differing stages of readiness levels for change
- Patients are viewed as team members to solve a problem rather than a clinician and patient → respects sense of self and autonomy
- Knowledge alone is usually not sufficient to motivate change



Motivational Interviewing Tenets

- **Express empathy** through reflective listening → allows the patient to feel that the clinician is supportive and therefore will be more willing to be open about their real thoughts
- **Establish discrepancy** between the patient's desired future self and probable future self based on current behaviours → can motivate to start thinking about change in behaviour to achieve desired self
- **Avoid arguments** → could cause patient to become more withdrawn and lose whatever progress has been made
- **Support self-efficacy** → builds confidence in patient's own capacity for change and helps establish trust in their physician



Motivational Interviewing Strategy

“OARS-P”

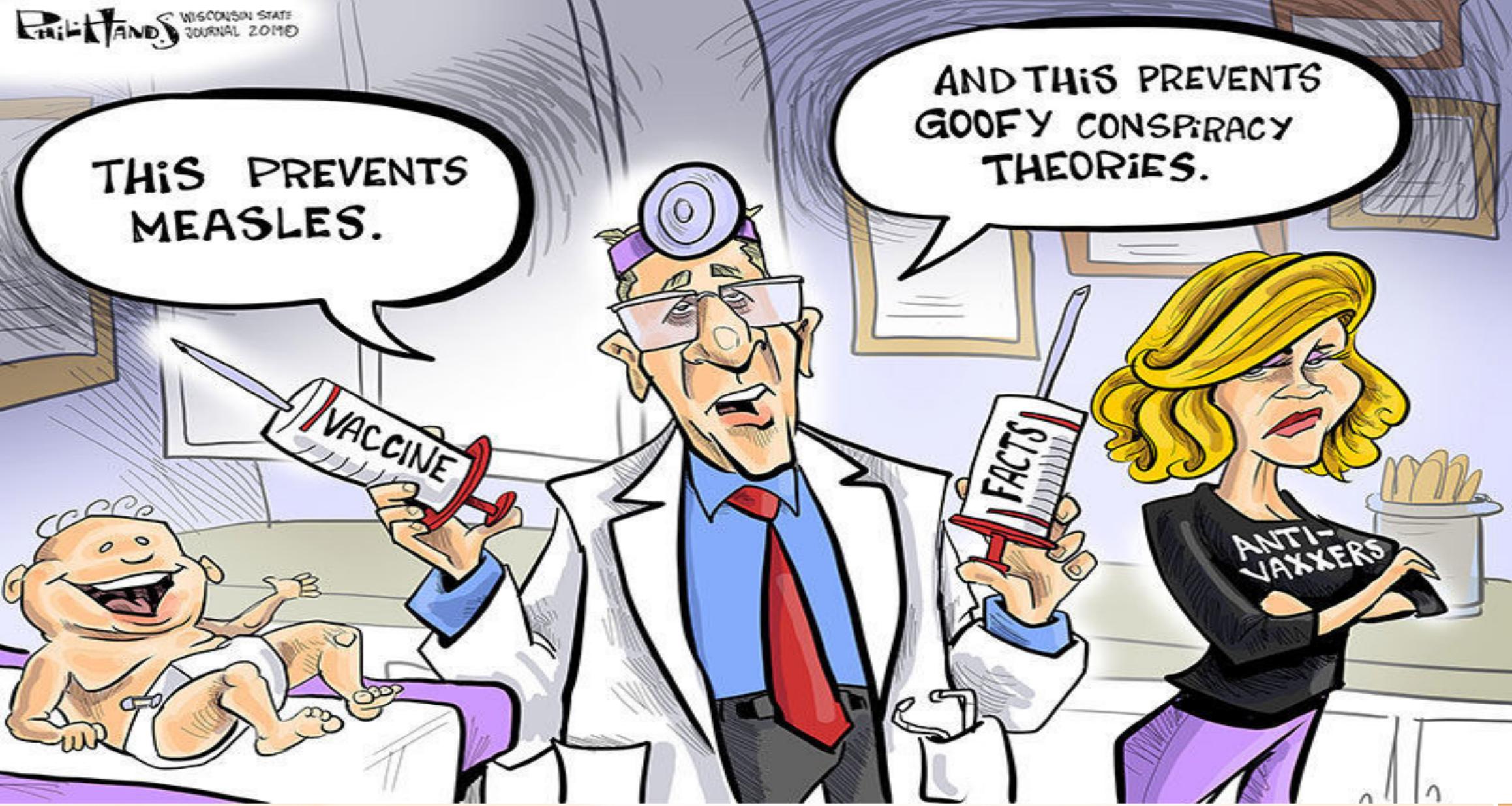
Open-ended questions to engage the patient

Affirm the patient’s desire to have control over their health and help them to focus on their goals

Reflect on the patient’s decision and whether it would help them to achieve their goals and how alternate behaviours could work better

Summarize the discussion

Plan a path to achieve their goals





A vaccination against medical misinformation

Prevention is better than cure: Addressing anti-vaccine conspiracy theories

Daniel Jolley¹  | Karen M. Douglas²

TABLE 2 Means and standard deviations across conditions for conspiracy belief, perceptions that vaccines are dangerous, and intentions to vaccinate in Study 2

Means (SD)			
Condition	Anti-vaccine conspiracy belief	Perceived dangers of vaccines	Intention to vaccinate
Conspiracy	3.61 (1.50)	3.28 (1.66)	5.16 (1.97)
Anti-conspiracy/Conspiracy	2.76 (1.23)	2.56 (1.48)	6.05 (1.20)
Conspiracy/Anti-conspiracy	3.19 (1.20)	3.08 (1.29)	5.58 (1.63)



What Can We Do to Combat Misinformation?

- Identify people who are at risk for misinformation susceptibility
- Provide high quality science based preparation in advance of biologic therapy
- Share success stories from your own practice
- Encourage your patients who have followed the “right” evidence to share their positive experiences on social media platforms
- Be objective and don’t make it personal → allow patients to choose what they want to do after providing them with accurate information
- Offer the opportunity for a second opinion with another HCP

