The Science of Influence: Managing Implicit Bias and Conflicts of Interest

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Disclosures

• Dr Freeman – has not had in the past 3 years a financial interest, arrangement or affiliation with one or more organizations that could be perceived as a direct or indirect conflict of interest in the content of this presentation.
• Dr Sukhera – has not had in the past 3 years a financial interest, arrangement or affiliation with one or more organizations that could be perceived as a direct or indirect conflict of interest in the content of this presentation.
Objectives

1. Review the neuroscience and psychology of implicit bias and reciprocity relating to influences on health professional decisions and behaviour.
2. Provide examples of how implicit bias adversely influences behaviour and trust.
3. Discuss techniques for mitigating the adverse influence of implicit bias on trust and clinical decisions.

Session Outline

- Introduction and Video 10 minutes
- Science of Influence and Bias 15 minutes
- Examples from Pharma 15 minutes
- Case Discussion 30 minutes
- Mitigating influence of Bias 10 minutes
- Question and Answer 20 minutes
Derren Brown Video

- [https://www.youtube.com/watch?v=YQXe1CoKWqQ](https://www.youtube.com/watch?v=YQXe1CoKWqQ)

Influence and Reciprocity

- *Influence*—a power affecting a person, thing, or course of events, especially one that operates without any direct or apparent effect.
- *Reciprocity*—quality or state of being reciprocal; mutual dependence, action, or influence.

Friedlander, 2007
Influence of Sponsorship

![Image of a scale with -5 to +5]

Montague, 2007

How Does Implicit Bias Occur?

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<th>Constructive Use of negative bias</th>
<th>Destructive Use of negative bias</th>
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<td>Negative</td>
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<td>Positive</td>
<td>Constructive use of positive bias</td>
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Montague, 2007
Bias in Healthcare

• Amongst 202 first year medical students at Johns Hopkins School of Medicine, 66% showed implicit preferences towards Caucasians and 86% demonstrated preference towards upper class (Haider, 2011).

• A study found that despite explicitly stating they were not biased, physicians are less likely to recommend thrombolysis to African-American patients compared to Caucasians (Green, 2007).

Bias in Healthcare

• Studies have found Bias impacts several other areas:
  – against females (Verdonk, 2008)
  – obese individuals (Sabin, 2012)
  – fathers (Stivers, 2007)
  – patients with chronic pain (Sabin, 2012; Weinstein et al, 2000)
  – chronic fatigue syndrome (Friedberg, 2008)
6 Patterns of the Unconscious

• Diagnosis bias
• Pattern recognition
• Anchoring bias
• Confirmational bias
• Commitment validation
• Internalized bias

Diagnosis Bias

– The automatic inclination to imbue a person or thing with certain qualities based on initial perceived value
Pattern Recognition

• The tendency to sort and identify information based on prior experience or habit.

Anchoring Bias

• The common tendency to rely to heavily or “anchor” on traits or pieces of information when making decisions
Confirmation Bias

• We look for what confirms our beliefs and ignore what contradicts them

Commitment Validation

• Becoming attached to and/or maintaining belief in something because we have committed to it and and/or want to avoid further losses.
Internalized Bias

• The experience of anxiety or concern in a situation where a person has the potential to confirm a negative stereotype about their social group based on societal biases.
• Internalized bias impacts our behaviour significantly.

Another form of unconscious bias: pharma and medical education
Public and professional attitudes to pharma gifts


Percentage that Considered Gift Influential

Physician Attitudes to Promotional Activities

A little
38%
A lot
1%
None
61%

A little
51%
A lot
33%
None
16%
Policies and Guidelines on physicians and industry relationships

• CPSO: Physicians’ Relationships with Industry: Practice, Education and Research

• CMA: Guidelines for Physicians Interaction with Industry

• SSMD: Policy and Guidelines for Interactions between Schulich School of Medicine and Dentistry and Pharmaceutical, Biotech, Medical Device, Medical/Dental Supply, and Research Equipment Supplies Industry
Case One

• At a major medical conference you visited a booth in the exhibit hall that was advertising a new proton pump inhibitor. After chatting with the representative they presented you with a very expensive desk ornament with the name of the new PPI on it and asked to visit your office in the next couple of weeks and bring lunch for you and your staff. How do you respond?

Case One (part two)

• The rep arrives and before the morning patients are gone, sets up a display and lunch in the waiting room. You have a medical student in the practice and she asks if she can go out to see the display and have lunch while you finish your charting.
Case Two

- A 32-year-old female who presents to the emergency department of a community hospital where you doing an on-call shift. The patient is complaining of severe abdominal pain. You read in her health record that she has a remote history of opiate addiction and has had a psychiatric history. On physical exam she is showing signs of an acute abdomen. You also suspect she may be drug-seeking. One of the nurses states, “I don’t know why these people come thinking we can help them. They should go straight to psychiatry!”

Balancing Acceptance and Denial

“...That was hard because it was kind of like okay, well, I mean...like which...maybe I sort of am moderately...I don’t know. I think I was kind of...I sort of hedged in the middle there, like I disagreed, but then I was also kind of like a little concerned, because at the same time I’m kind of going, yeah, but I don’t know everything.”

- Emergency Nurse

Adapted from Teal, 2012
How do we address unconscious bias?

- 1) recognize and accept your bias
- 2) self-reflect
- 3) constructive uncertainty
- 4) explore your discomfort
- 5) engage with people who are different from you
- 6) get feedback
P.A.U.S.E. Model (Ross, 2008)

- P – pay attention to what’s actually happening
- A – acknowledge your own reactions, interpretations and judgments
- U – understand other possible reactions, interpretations and judgments
- S – search for the most empowering productive way to deal with the situation
- E – execute your action plan