Do implicit biases affect health care?

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Implicit biases

- Associations made below the level of conscious awareness that lead us to evaluate a person negatively on the basis of characteristics such as race or gender,
  - even when explicitly committed to equal treatment for all

Implicit biases

- Lack of consensus on a definition of ‘implicit’ in psychology literature.
- Negative definition: a process that is not ‘explicit’ i.e. products of intention, consciously available, controlled and requiring mental resources (Nosek & Riskind, 2012).
- However, consensus on valid methods to measure implicit processes: IAT, affective priming task, semantic priming task

Let’s try this

I am aware of the possibility of encountering interpretations of my IAT test performance with which I may not agree.

Knowing this,

I wish to proceed

Implicit Association Test (Harvard)

URL: https://implicit.harvard.edu/implicit/

- Male

____	man	____
____	hers	____
____	lady	____
____	boy	____
____	he	____

- Female

Male/Career		Female/Family
___	manager	___
___	kitchen	___
___	laundry	___
___	briefcase	___
___	relatives	___
___	office	___
___	briefcase	___
___	profession	___
___	home	___

Male/Family		Female/Career
___	marriage	___
___	children	___
___	salary	___
___	garden	___
___	employees	___
___	office	___
___	job	___
___	kitchen	___
___	home	___

Implicit biases in health care

- We identified 42 studies in a systematic review
  - 13 examined racial/ethnic bias
  - But also 10 other biases:
    - Gender (14)
    - Socio-economic status or SES (11)
    - Age (11)
    - Mental illness (4)
    - Weight (3)
    - Intravenous drug use (2)
    - Brain injured patients perceived to have contributed to their injury (2)
    - Disability (1)
    - Social circumstances - desiring an active lifestyle, having a demanding career, having family demands (1)

1. Health professionals have implicit biases:
   - Only 2 /42 studies failed to find evidence of implicit bias:
     - One of these did find a positive correlation between levels of implicit bias and over-diagnosis of subjects (Peris et al. 2008).
     - The other was the only study that used a simulation encounter instread of a video or written vignette (Barnato et al. 2011)

2. The interaction effects between different patient characteristics in the assumption studies are varied and unpredictable:
    - Often straightforward effects of, e.g. race, were not found. Only when the interaction between gender or SES and race was measured was a bias evident.

3. Implicit bias affects clinical judgement and behaviour:
   - Signifiant correlation between high levels of implicit bias and biased treatment responses to vignettes (4 IAT studies).
   - 24 out of the 25 studies that used the assumption method found that some kind of bias was evident in e.g.:
     - treatment recommendations
     - number of questions asked
     - number of tests ordered
     - willingness to help the patient

4. Implicit bias affects clinical behaviour in ‘real world’ contexts:

- Significant correlation between high levels of implicit bias and negatively rated interaction (3 studies)
- Used measures of physician-patient interaction:
  - 1 used patient ratings and audiotape measures of communication (Cooper et al. 2012)
  - 2 just used patient ratings

How could this affect:

- Management for a woman who comes into the ER complaining of oppressive chest pain

How could this affect:

- Management for a woman who comes into the ER complaining of nausea and dizziness

How could this affect:

- Management for a man who comes into the ER complaining of sadness and lack of pleasure in life

How could this affect:

- Management for a man who comes into the ER after a bar fight

How could this affect:

- Management for an Erythrean refugee who is unable to eat at her fifth month of pregnancy

How could this affect:

- Management for a Kenyan refugee, a man this time, who is loosing weight

How could this affect:

- A discussion to explain glycemic control to a patient with poor understanding of the local language

How could this affect:

- A supervision exercise for a young female doctor by an older male doctor

How do implicit biases make us vulnerable?

- Negative associations
- Stereotypical associations regardless of valence
- In others
  - Health care providers
  - »Society »
- In ourselves

Vulnerability

•Vulnerability is a dispositional property.

A glass is fragile: it will break *if* it falls
Reasons, circumstances, manifestations

•To be vulnerable is to have morally protected interests which can be frustrated.

•To be particularly vulnerable is to be at greater risk that one's interests will not be taken into just consideration.

Martin A., Tavaglione N., Hurst SA: Resolving the conflict: clarifying 'vulnerability' in health care ethics. *Kennedy Institute of Ethics Journal*. 2014;1:51-72

All or some?

- It is a matter of degree
- At some point we are all vulnerable, but not always in the same way.

Vulnerability is not principally a matter of individual flaws

Protections require a diagnostic approach:

- What is the morally protected interest?
- What makes it fragile?
- What might appropriate protections be?
- Who is responsible for protection?

Martin A., Tavaglione N., Hurst SA: Resolving the conflict: clarifying 'vulnerability' in health care ethics. *Kennedy Institute of Ethics Journal*. 2014;1:51-72

Some questions this does *not* resolve:

- What interests are morally protected?
- How should we prioritize among required protections?
- How do the reasons for the fragility of interests affect responsibility for protection?
- …and yes there are others.

This approach exports these questions from the definition of vulnerability. Inasmuch as an interest is recognized as protected, then if it is fragile we have a case of vulnerability.

> Protecting vulnerability *implies a duty to guarantee equal protection for vulnerable participants, whose rights and claims are more difficult to protect*

Martin A., Tavaglione N., Hurst SA: Resolving the conflict: clarifying 'vulnerability' in health care ethics. *Kennedy Institute of Ethics Journal*. 2014;1:51-72

Outlining claims

1. Formal Definition of Claims

   Claims: What They Are

2. Substantive Definition of Claims

   Claims: Which They Are

Tavaglione N., Martin A., Mezger N., Durieux S., François A., Jackson Y., Hurst SA: Fleshing out vulnerability. Bioethics. 2014. In Press

List of Claims

General

1. Physical Integrity – Positive
2. Physical Integrity – Negative
3. Autonomy
4. Freedom
5. Social provision
6. Impartiality in the exercise of authority
7. Social bases of (self-) respect
8. Communal belonging

Application to healthcare

1. Beneficence

List of Claims

General

1. Physical Integrity – Positive
2. Physical Integrity – Negative
3. Autonomy
4. Freedom
5. Social provision
6. Impartiality in the exercise of authority
7. Social bases of (self-) respect
8. Communal belonging

Application to healthcare

2. Non-Maleficence

List of Claims

General

1. Physical Integrity – Positive
2. Physical Integrity – Negative
3. Autonomy
4. Freedom
5. Social provision
6. Impartiality in the exercise of authority
7. Social bases of (self-) respect
8. Communal belonging

Application to healthcare

3. Informed consent, Non-paternalism

List of Claims

General

1. Physical Integrity – Positive
2. Physical Integrity – Negative
3. Autonomy
4. Freedom
5. Social provision
6. Impartiality in the exercise of authority
7. Social bases of (self-) respect
8. Communal belonging

Application to healthcare

4. Presumption against constraint, Freedom to take risks, Defiance against excesses in public health policies

List of Claims

General

1. Physical Integrity – Positive
2. Physical Integrity – Negative
3. Autonomy
4. Freedom
5. Social provision
6. Impartiality in the exercise of authority
7. Social bases of (self-) respect
8. Communal belonging

Application to healthcare

5. Non-market access to healthcare, Protection of healthy environments, Policies addressing the social determinants of health

List of Claims

General

1. Physical Integrity – Positive
2. Physical Integrity – Negative
3. Autonomy
4. Freedom
5. Social provision
6. Impartiality in the exercise of authority
7. Social bases of (self-) respect
8. Communal belonging

Application to healthcare

6. Ordinary medical fairness, Neutrality

List of Claims

General

1. Physical Integrity – Positive
2. Physical Integrity – Negative
3. Autonomy
4. Freedom
5. Social provision
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8. Communal belonging

Application to healthcare

7. Non-condescension, Claim not to be treated as a fungible thing

List of Claims

General

1. Physical Integrity – Positive
2. Physical Integrity – Negative
3. Autonomy
4. Freedom
5. Social provision
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8. Communal belonging

Application to healthcare

8. Ordinary medical fairness, Norms against prejudice, Claim to non-stigmatization

Synthesis

Special Protection Thesis – Fleshed Out

If individual/group X has a greater likelihood of being denied adequate satisfaction of some of their claims to

(i) physical integrity,
(ii) autonomy,
(iii) freedom,
(iv) social provision,
(v) impartial quality of government,
(vi) social bases of self-respect or
(vii) belonging,

then X deserves special attention, care or protection.

Examples

Some patients in contexts of emergency may have to take quick decisions with no time to ponder the pros and cons of a proposed treatment.

Therefore it becomes likelier that their claim to autonomy, and the associated norm of informed consent, will be frustrated => they are vulnerable to insufficient regard for their autonomy

Possible remedy: give the patient the treatment that is necessary to address the emergency while postponing any non-urgent decisions until such a time when the patient can take balanced informed decisions.

Examples

In modern hospitals, patients often interact with a new professional at every appointment and have to give the same information, over and over, to an ever-changing roster of interlocutors.

Many patients thus feel as if they are handled like fungible or interchangeable things – like numbers without a face => their claim to the social bases of self-respect is thus frustrated.

In order to address that form of vulnerability, hospitals need to remedy the lack of continuity in the patient-staff relationships. For example, they might hire continuity agents in charge of the required ‘personal touch’ and transmissions of personal information.

Negative associations

Physical integrity – negative	Advance directives less likely to be respected or expected in some than in others ?
Physical integrity-positive	Sub-optimal decisions are suggested in the literature, failure to diagnose or treat.
Autonomy	Less explanation, less regard for decisions.
Freedom	We have biases against some forms of risks, and these we tend to curtail more than others.
Social provision	For same risks, we tend to curtail social provision more for some than for others.
Impartiality in the exercise of authority	Ordinary medical fairness may be affected by implicit biases
Social bases of (self-)respect	Implicit biases are stereotypes and their application will likely lead to a greater treatment as fungible.
Communal belonging	A hospital clearly not designed for you is exclusionary and humiliating. There are ‘right’ and ‘less right’ patients.

Julie Rerat

Stereotypical associations

- Doctors will prescribe fewer additional tests when a coronary patient is a woman.

Abuful A, Gidron Y, Henkin Y. Physicians' Attitudes toward preventive therapy for coronary artery disease: is there a gender bias? Clin Cardiol. 2005 Aug; 28(8):389-93

- Female patients presenting symptoms of depression are identified faster by the general population.

Swami V. Mental health literacy of depression: gender differences and attitudinal antecedents in a representative British sample. PLoS One. 2012;7(11):e49779

- Female doctors are seen as more dominant when they display the same behavior as male doctors.

Blanch-Hartigan D1, Hall JA, Roter DL, Frankel RM. Gender bias in patients' perceptions of patient-centered behaviors. Patient Educ Couns. 2010 Sep;80(3): 315-20

- Fear is attributed to a crying baby girl, aggressiveness to boys.

Steuer FB1, Bode BC, Rada KA, Hittner JB. Gender label and perceived infant emotionality: a partial replication of a classic study. Psychol Rep. 2010 Aug;107(1):139-44

Stereotypical associations

Physical integrity – negative	Those associated with changing their minds about consent or refusal
Physical integrity-positive	Those with diseases associated with a different group
Autonomy	Those associated with valuing autonomy less
Freedom	Those associated with having less freedom, or with valuing it less
Social provision	Those associated with not needing it?
Impartiality in the exercise of authority	Those assumed less equal, indirectly those whom we assume to want VIP treatment?
Social bases of (self-)respect	We have many stereotypical associations with 'patients' and this can lead to treatment as fungible
Communal belonging	Associations with the disease group can be exclusionary (or not)

Conclusion

- Implicit biases exist in health care
- They can make us vulnerable
  - Negative associations can make our claims more fragile
  - Stereotypical associations can also make our claims more fragile, even when they are not negative.
  - Our own implicit biases as patients can also harm us
- While some are based on shared prejudice, others seem to be the flip side of learning.
  - How to address them is an important question, and it unlikely to have a simple answer.

What can we do?

- Awareness raising is important but beware: it can activate the bias

- Some interventions work:
  - Motivation
  - Identification with the outgroup
  - Counter-exemplars
- ...but this is short term only

- Longer term action may require:
  - Structural change
  - Focusing on behavior rather than biases