Can’t I Just Rely on Herd Immunity?

*why measles vaccination is always best for children*

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Disclosure

- No financial conflicts of interest to disclose.
- All pictures in this presentation are freely available in the public domain.
Best not to vaccinate? – *Argument A*

1. In highly vaccinated society, risk for getting measles is low.
2. Benefit from measles vaccination is low.
3. Measles vaccination has risks.
4. We should do what is best for the child.

Conclusion:
Non-vaccination is best for the child. That way child is protected through herd immunity, while not running vaccine risks.
Today

• Measles and vaccination basic facts

• Ethical principles of decision-making for children

• Critically review Argument A
And:

• Policy suggestions
• Talking with parents
These Ideas in Published Work:

Measles and Measles Vaccine Basic Facts

• Measles is dangerous and highly infectious.

• Measles vaccine is effective, safe, and cost-effective.

• Measles can be eliminated – “herd immunity”.
  o (93-95% coverage with 2 doses)
  o Imported outbreaks, clustering

• There is always a susceptible group.
Medical Decision-Making for Children

• Best Interest Standard
• Harm Principle

Usually: Measles vaccination provides life long protection, negligible risk of harm, measles a devastating illness.
Conclusion: Measles vaccination is best for a child.
BUT – Argument A?
Usual Response to Argument A

- Not enough risk of harm to override parents
- Free riding is unfair
Does *Argument A* Hold?

- Reasons why measles vaccination is better
- *Argument A* is self-defeating
Best not to vaccinate? – *Argument A*

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Best not to vaccinate? – *Argument A*

1. + 2. = Herd immunity reliably protects a child from measles.

3. Measles vaccination has risks.
4. We should do what is best for the child.

Conclusion:
Non-vaccination is best for the child. That way child is protected through herd immunity, while not running vaccine risks.
Reasons why vaccination is better

1. Vaccination better and more reliable protection
2. Actions of others may compromise herd immunity
3. No room for non-vaccination (93-95%)
4. Worse complications in highly vaccinated societies
5. Limits child’s options and freedom
Argument A is self-defeating

- If used – lose herd immunity – endemic transmission
- Eg. United Kingdom
- Tragedy of the Commons/ Not universalizable
Conclusion

• Vaccination – reliable protection
• Herd immunity – not reliable protection (and other reasons)
• Self-defeating

Conclusion: Measles vaccination best for a child (unless medical contra-indications)
Conclusion (2)

- Parents, clinicians, governments have obligations to vaccinate eligible children
- Two justifications: individual best interest, public benefit (free riding)
Policy Suggestions

• Strongly worded opt-out policy (make it hard to say no)
• Education (various modalities, well researched)
• Trusting clinical relationships (parents-clinicians)
Talking with parents (1)

• Trusting relationship
• Shared goal: health of the child
• On the same team vs. adversarial
• Advocate for the child
Talking with parents (2) – Opel et al.

• How we phrase our initial conversation is important
• Participatory: “What do you want to do about shots?”
• Presumptive: “Well, we have to do some shots.”
• Significantly higher odds of resisting vaccines if participatory initiation used (17.5 odds ratio)
• If parents resist, and clinicians stick to recommendation – 47% of parents change their minds.

Talking with parents (2) – Opel et al.

• So – use presumptive initiation (“We have to do shots today”)
• Take lead in initiating conversation
• Communicate your recommendation and stay with it
• Remember the important trust relationship!

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