Measuring the Impact of India’s Schedule H1 Regulations on the Sale of Over-the-Counter Antibiotics

Eric Romo
Clinical and Population Health Research Program
University of Massachusetts Medical School
India: Stand alone pharmacies a major source of antibiotic misuse

- Local, independent pharmacies often primary source of medical care, especially in rural area
- 40-60% of antibiotics sold without prescription
- Important target for intervention
Policy to Reduce Antibiotic Misuse

- Effective March 2014
- 24 antibiotics under a new “Schedule H1” drug category → 3rd/4th generation cephalosporins
- Strict penalties if sold without prescription
- Pharmacists required to document sales → inspections

What has been the impact of these regulations on the sale of Schedule H1 antibiotics by local pharmacies?

**SCHEDULE H1 DRUG – WARNING:**
- It is dangerous to take this preparation except in accordance with the medical advice
- Not to be sold by retail without prescription of a Registered Medical Practitioner
A quasi-experimental approach for evaluating longitudinal effects of interventions

Know the specific point at which an intervention occurs

Causal hypothesis: Observations after intervention will have a different level or slope from those before intervention.
Hypothetical Results

What we hope to see:

No Effect

Other things we could see:

Data Source?

- Schedule H1 drugs
- Trend after intervention
- Substitution Effect

Schedule H1 Regulations

Antibiotic Sales

Pre-intervention

Time

Post-intervention

Other Antibiotics
Acknowledgements:
- Muhammad Zaman, PhD
- Bill Jesdale, PhD
- Kate Lapane, PhD
- Camilla Benedicto-Pimentel, PhD
- Apurv Soni, MD-PhD Candidate

Contact: Eric.Romo@umassmed.edu