Mining for Voices: Reframing Hydraulic Fracturing as a Public Health Issue

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Introduction

- Hydraulic fracturing: a process used to extract fossil fuels from rock formations1
  - Chemicals injected in ground under high pressure
  - Rocks fissure, releasing trapped oil and gas
  - PA allows designation of fracking chemicals as “trade secret or confidential proprietary information”2 to avoid content disclosures2
- 1.6 million Pennsylvania residents live within 1 mile of active oil and gas development sites3

- 80% of studies on potential health impacts of fracking demonstrate risks or actual harms to human health1
- Fracking also implicated in accelerating climate change5
  - Climate change linked to increases in unpredictable health emergencies
  - Extreme heat, flooding, droughts, food shortages, vector-spread diseases

- 2012 gag order in PA6
  - Physicians barred from speaking about potential health impacts of fracking
  - Struck down in 2016 by PA Supreme Court
- How can we encourage physicians to speak up about the potential dangers of fracking?
  - Increasing physician understanding and engagement in climate change issues and fracking in particular
  - Reframing the public health messaging around fracking

Methods

- Reframing fracking as a public health issue
  - Using current and past public health issues as models to generate new approaches to regulating fracking
  - Focused on precautionary principle
  - Incomplete information can be used to create policy that values the health of individuals and communities
- Marijuana and driving as a model
  - Candidate model for fracking regulation
  - Performed review of literature on the association between marijuana intoxication and motor vehicle crashes or impaired driving capacity
  - Qualitative analysis of 12 studies
- Policy paper contextualizing fracking in terms of marijuana and driving
  - Arguing for precautionary approach to the potential harms of fracking
  - Planned for the future
- Partnership with Physicians for Social Responsibility (PSR) Philadelphia
  - 501c3 non-profit organization
  - Promotes social responsibility by protecting health, the environment, and communities
  - Working directly with Dr. Pouné Saberi
  - Experience with physician advocacy work
  - Nexus of social, political, and economic influences on health
  - Elected to the PSR Board of Trustees as a Student Member

Results

- Qualitative review of marijuana and driving7,8
  - Inconclusive evidence for link between marijuana intoxication and motor vehicle crashes
  - Inconclusive evidence for link between marijuana intoxication and impairment of driving-related functions
- Fracking policy paper
  - Outlining a novel approach to fracking as a public health issue
  - Working with Dr. Pouné Saberi to ideate, workshop, and write
  - Forthcoming in Winter 2019

Discussion

- Placing fracking in the context of other public health issues
  - Learning from historical and modern examples
  - Highlighting the precedent for precautionary approaches to public health issues
- Educating health professionals about the urgency of climate change
- Engaging health professionals in climate change advocacy
- Experience with public policy and public health non-profit work
- Future: write policy paper

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- Christopher Chambers, MD
- Physicians for Social Responsibility

References

3. Physicians, Scientists, and Engineers for Healthy Energy. Infographic: Oil and gas development proximity to U.S. residents.