

The Relationship Between Opioid Prescription & Child Removals

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Rural Health and Safety Education:
Combating Opioids Webinar Series



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Our Practice Is Our Passion

Outline

1. Very brief background on me & this research
2. Background on child removals & data
3. Florida study
4. California study
5. U.S. study
6. Takeaways & limitations
7. Questions / Comments

Background

- Me
 - Economist
 - Diverse/scattered research agenda
 - Goal: Use data to increase understanding of significant health questions
- Research
 - Learned of suspected opioid/foster care relationship 1st & 2nd hand
 - Surprised by lack of existing research on question

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Child Removals

- Process
 - Grounds for removal
 - The child has been abused, neglected, or abandoned, or is suffering from or is in imminent danger of illness or injury as a result of abuse, neglect, or abandonment
 - Selected potential maltreatments (causes)
 - Physical abuse, sexual abuse, neglect, parental alcohol abuse, parental drug abuse, abandonment

Child Removals

- Data
 - AFCARS (Adoption & Foster Care Analysis & Reporting System)
 - Mandatory system to which states must report data
 - Variable used: # children removed by county, year, & cause
 - Children may be removed for multiple causes

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Florida Study

- Sample
 - FL counties, 2012-2015 (annual)
- Outcome variables
 - # removals per 1000 children aged 0-19
 - All causes
 - Parental drug abuse
 - Parental neglect
- Prescription variable
 - # opioid prescriptions per 100 capita
 - From FL prescription drug monitoring program

Florida Study

- Select control variables
 - Additional script rates
 - Benzodiazepines
 - Stimulants
 - Pop percentages by demographic
 - Gender
 - Race
 - Ethnicity
 - Poverty rate
- Separate analyses by quartile white population proportion

Florida Study

- Results
 - All counties
 - One “standard deviation” increase in script rate associated with 32% increase in parental neglect rate
 - By quartile white population proportion
 - Associations roughly twice as large (or larger) in 4th quartile than 1st

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California Study

- Sample
 - CA counties, 2009-2016 (quarterly)
- Outcome variables
 - # removals per 1000 children aged 0-19
 - All causes
 - Parental drug abuse
 - Parental neglect
- Prescription variable
 - Rate of residents prescribed 90+ MMEs/day
 - From CA Opioid Overdose Surveillance Dashboard

California Study

- Select control variables
 - Average weekly wage
 - Average number of jail bookings
- Separate analyses by urbanicity
 - RUCC group
 - Metro
 - Rural areas adjacent to metro area
 - Rural areas not adjacent to metro area

California Study

- Results
 - All counties
 - One “standard deviation” increase in rate of high-dose prescriptions associated with 9% increase in overall removal rate
 - By urbanicity
 - Associations largely limited to rural counties adjacent to metro areas

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U.S. Study

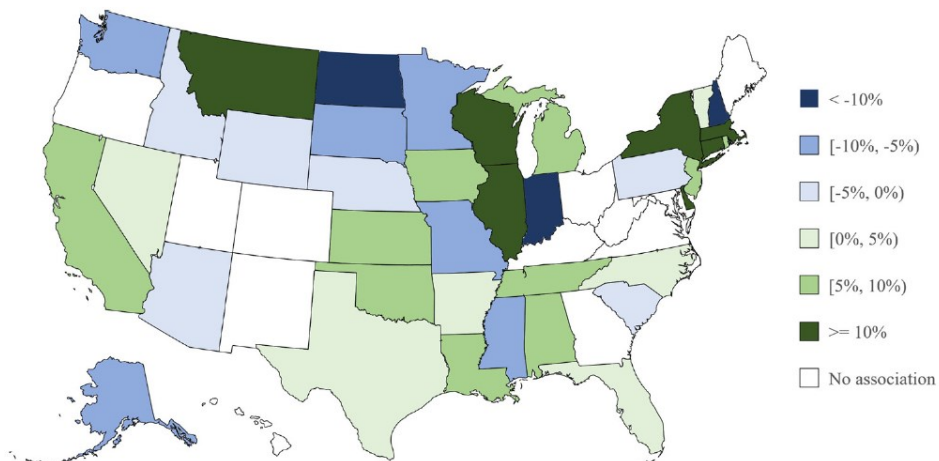
- Sample
 - US counties*, 2010-2015 (annual)
- Outcome variables
 - # removals per 1000 children aged 0-19
 - All causes
 - Parental drug abuse
- Prescription variable
 - # opioid prescriptions per 100 residents
 - From QuidesIMS Transactional Data Warehouse (via CDC)

U.S. Study

- Select control variables
 - Proportion residents by gender, race, age/ethnicity
 - Poverty rate
 - Unemployment rate
- Separate analyses by state

U.S. Study

- Results



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Takeaways

- FL study
 - Positive association between removals & prescription rates
 - Especially in counties w/ high white population proportion
- CA study
 - Positive association between removals & high dosage prescriptions
 - Especially in rural areas adjacent to metro areas
- US study
 - Relationship between removals & prescription rates varies across states
 - Perhaps related to stage of opioid crisis in that state?

Limitations

- Estimates reflect associations, not causations
- Do not reflect illicit opioids
- Do not control for diversion across counties
- Only examining extreme outcome of removal

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Questions / Comments

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Thank you!