Are Racial/Ethnic Disparities in Youth Psychotropic Medication Due to Overuse by Whites?

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Background

  - 14% of adolescents with a 12-month MH disorder prescribed 1+ psychotropic medication
  - 2.5% of adolescents without a 12-month MH disorder prescribed 1+ psychotropic medication

- Since 2004, dramatic increases in youth antipsychotic medication (Zito et al. 2013 Matone et al. 2012) and stimulant use (Zuvekas Vitiello 2012; Olfson et al. 2015)

- At the same time, FDA antidepressant blackbox warnings (2004) associated with significant reductions in diagnosis, treatment and antidepressant prescriptions (Gibbons et al. 2007),
  - Concern over increases in suicide attempts since BBW (Lu et al. 2014)

- Need for updated research to inform the field’s knowledge of appropriate targeting of medication use among youth
Background - disparities

Compared to racial/ethnic minority youth,

- White youth are twice as likely to fill prescriptions for antipsychotics (Correll et al. 2009; Zito et al. 2013)
- White youth up to nine times more likely to fill stimulant prescriptions (Zuvekas Vitiello 2012)
- White youth four times as likely to fill antidepressant prescriptions compared to Black and Latino youth (Kirby et al. 2010).
Study objectives

- Update study of appropriate and inappropriate use of psychotropic medications for youth
- Identify whether disparities are driven by over-prescribing among white youth, under-prescribing among minority youth, or both.

- Capitalizes upon a recent nationally representative community survey measuring psychototropic medication and psychological impairment.
Two-year medication use of 5-17 year olds from the 2004-2011 Medical Expenditure Panel Survey (MEPS) longitudinal panel data

- Measures of psychotropic medication “fills”, psychological impairment, socio-demographics

Two-year panel data, allows us to create variables that account for differential sequencing of psychological impairment and medication prescription

- e.g., impairment in year 1 or year 2, and a psychotropic medication fill in year 2
<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Criteria</th>
<th>Psychological Impairment</th>
<th>Filled Medication in Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicated Use</td>
<td></td>
<td>Yes (either year 1 or 2)</td>
<td>Yes</td>
</tr>
<tr>
<td>Non-indicated Use</td>
<td></td>
<td>No (Years 1 and 2)</td>
<td>Yes</td>
</tr>
<tr>
<td>Non-Use</td>
<td></td>
<td>Yes (Year 2)</td>
<td>No</td>
</tr>
</tbody>
</table>
Methods (Statistical Analysis)

- Estimated overall indicated use, non-indicated use, and non-use (weighted to be nationally representative)
- Assessed differences between whites, Latinos, and Blacks
  - Unadjusted comparisons
  - Logistic regression models adjusting for:
    - Family income
    - Region, Urbanicity
    - Insurance coverage
    - Parent-assessed mental and physical health,
    - Gender
    - Age
Results

- Over 50% of psychotropic medication use was non-indicated (overuse)
  - Of the 8.6% of whites with medication use in year 2, only 4.8% ever had psychological impairment
    \( \frac{4.8}{8.6} = 56\% \)
  - Blacks \( \frac{2.8}{4.6} = 57\% \)
  - Latinos \( \frac{2.2}{3.7} = 58\% \)
Results (unadjusted)

Disparities due to both indicated and non-indicated use

Any psychotropic medication use

Whites
Blacks
Latinos

Ø
**
Results (unadjusted)

- Significant underuse among all groups

**Any psychotropic medication use**

- Whites
- Blacks
- Latinos

**Significant underuse among all groups**
Multivariate regression results

- **Non-indicated use (overuse):** White youth *without* impairment were significantly more likely than their Black and Latino counterparts to fill a psychotropic medication.

- **Indicated use:** White youth *with* impairment were significantly more likely than Black and Latino counterparts to fill psychotropic med.

- **Non-use:** Black youth with psychological impairment more likely than whites to *not* fill psychotropic.
Limitations

- Columbia impairment scale (CIS), though predictive of disorder, is not a DSM-based diagnostic measure
- Small percentage of the population receiving sustained and successful psychototropic medication treatment across the panel may be mis-classified as having non-indicated use (overuse)
Among those with psychotropic fills, overuse >50%
Among those without impairment, ~4.5% filled a psychotropic (Merikangas et al. reported among those without mental illness, 2.5% prescribed psychotropic)
- More recent time frame (2004-11 not 2001-04)
- CIS compared to DSM-IV based instruments
- 5-17 year olds compared to 13-18 year olds
Results suggest poor medication targeting across racial/ethnic groups.
Need for accurate targeting of prescribing patterns, especially given recent risk warnings and concerns over increases in psychotropic medication use.
Are Racial/Ethnic Disparities in Youth Psychotropic Medication Due to *Overuse* by Whites?

- Yes, but also due to more *indicated use* among Whites compared to Black and Latino youth

- Also identified greater *non-use* among Blacks

- Expands prior findings of disparities in access to youth outpatient mental health visits and psychotropic medication use (Cook et al. 2013), and appropriate care management (Smedley et al. 2003).
Thank you

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