

Racial differences in child psychiatric hospitalization referral: The role of community factors

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Overview

- Child behavioral health service utilization differs by race¹⁻⁷
- Eliminating these differences is a critical goal⁸⁻¹⁰
- Underlying causes are unknown
- Community factors may play a role¹¹⁻¹⁶
- Referral rates are good estimate of utilization

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Study Objectives

- Test if there are different child psychiatric hospitalization referral rates by race
- Evaluate whether observed differences persist after adjustment for confounding variables
- Examine whether differences in referral rates by race are explained by community factors

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Illinois Screening, Assessment and Support Services (SASS) Program

- Established in 1992 by the Illinois Department of Children and Family Services (DCFS)
 - Gatekeepers for youth in state custody
- Expanded in 2003
 - Jointly operated by DCFS, Department of Human Services (DHS), and Healthcare and Family Services (HFS)
 - Includes all children and adolescents

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SASS Program Structure

- How does SASS work?
 - Statewide crisis phone line
 - Crisis calls are routed to local agencies
 - Local agencies provide crisis screening
 - Decide how to best stabilize child's mental health crisis
- Crisis screening
 - Face to face
 - Conducted by social workers
 - Standardized screening tool
 - Childhood Severity of Psychiatric Illness (CSPI)¹⁹

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Methods

- Data source 1
 - SASS program administrative data
 - Inclusions (N = 6130)
 - First screen for all children from 12/01/05 – 08/31/06
 - Age 5 – 18 years
 - Exclusions (n = 1014)
 - Incomplete screening data

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Methods (cont'd)

- Data source 2
 - 2000 Census zip code level data
 - 3 community factors
 - Poverty, Urbanicity, Racial Diversity
 - Example: Poverty
 - Proportion of families with children living below federal poverty level out of all families with children in a zip code
 - If Observed / Expected > 1, then community was categorized as "poor"

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Methods (cont'd)

- Final Sample (N = 5116)
- Dependent variable
 - Psychiatric hospitalization referral
- Predictor variables
 - Race, Community factors
- Covariates
 - Gender, Age, State custody status, behavioral health need

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Sample Description

| | N = 5116 | % |
|------------------------------|----------|----|
| Male | 2638 | 52 |
| Age 13-18 years | 3329 | 69 |
| Caucasian | 2447 | 48 |
| In State Custody | 476 | 13 |
| Diverse Community | 2208 | 43 |
| Poor Community | 2701 | 53 |
| Urban Community | 3944 | 77 |
| Referred for hospitalization | 3076 | 60 |

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Likelihood of referral to psychiatric hospitalization

| | Model 1 | Model 2* | Model 3** |
|----------------------------------|---------------------------|---------------------------|---------------------------|
| | OR (95% CI) | AOR (95% CI) | AOR (95% CI) |
| Race (Caucasian) | 1.00 | 1.00 | 1.00 |
| African-American | 1.19 (1.05 – 1.34) | 1.43 (1.24 – 1.66) | 1.05 (0.82 – 1.36) |
| Hispanic, Asian, Bi-racial, etc. | 1.043 (0.88 – 1.24) | 1.40 (1.14 – 1.72) | 1.02 (0.73 – 1.44) |
| Racially diverse community | - | - | 1.03 (0.84 – 1.25) |
| Poor Community | - | - | 0.65 (0.55 – 0.79) |
| Urban Community | - | - | 2.60 (1.98 – 3.36) |
| Racially diverse x Afr-American | - | - | 0.90 (0.59 – 1.35) |
| Racially diverse x Other | - | - | 0.94 (0.56 – 1.58) |
| Poor x African-American | - | - | 1.07 (0.75 – 1.53) |
| Poor x Other | - | - | 1.09 (0.68 – 1.74) |
| Urban x African-American | - | - | 1.49 (0.91 – 2.42) |
| Urban x Other | - | - | 1.39 (0.73 – 2.66) |

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Summary

- African-Americans had higher referral rates than Caucasians
- This difference increases after adjustment for covariates
- This difference appears to be explained by community poverty and urbanicity
 - Poverty reduces the odds of referral by 35%
 - Urbanicity increases the odds of referral by 160%

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Limitations

- Ability to generalize results
- Missing data
- Hospital bed capacity
- Referral as proxy for utilization

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Implications

- Community factors are associated with access to services
- Community factors appear to explain racial differences in psychiatric hospitalization referral
- Improving access to services may be critical to ensure racial differences are not observed

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