Associations between experiences of police contact and discrimination by the police and courts and health outcomes in a representative sample of adults in NYC

Azure Thompson, María Baquero, Devin English, Michele Calvo, Simone Martin-Howard, Tawanda Rowell-Cunsolo, Marné Garretson, Diksha Brahmbhatt

NYC DOHMH Epi Grand Rounds
October 25, 2021
Motivation and framing of the study

High profile killings of Black Americans by police → increased attention to police reforms

Aggressive policing practices racially discriminatory

Link between police contact & health; yet, limitations to research

Ecosocial Theory¹

Current study examines individual police contact and health outcomes

Research Aim

To examine the associations of self-reported police stops, police abuse, and discrimination by the police and courts, with poor physical, mental and behavioral health outcomes in a representative sample of New Yorkers.
Data Source

- 2017 Social Determinants of Health Survey (n=2235)
- Unique among DOHMH surveys
  - Collecting a broader range of self-reported SDoH measures, more in-depth
  - Questions covered: material hardship, discrimination, violence, incarceration, concerns about deportation
## Exposures of interest

<table>
<thead>
<tr>
<th>Stopped by police</th>
<th>Abused by police</th>
<th>Discrimination by police/courts</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Have you ever been stopped, searched, or questioned by the police?”</td>
<td>“Have you ever been physically threatened or abused by the police?”</td>
<td>“Have you ever experienced discrimination, been prevented from doing something or been hassled or made to feel inferior because of your race, ethnicity, or color from the police or in the courts?”</td>
</tr>
</tbody>
</table>
## Outcomes of interest

<table>
<thead>
<tr>
<th>Physical health</th>
<th>Mental health</th>
<th>Serious psychological distress</th>
<th>Binge drinking</th>
</tr>
</thead>
<tbody>
<tr>
<td># days physical health not good</td>
<td># days mental health not good</td>
<td>Kessler Scale (K6)&lt;sup&gt;1&lt;/sup&gt;</td>
<td>5+ drinks-men &amp; 4+/women on one occasion</td>
</tr>
<tr>
<td>Poor: 14+ days</td>
<td>Poor: 14+ days</td>
<td>SPD: Score 13+</td>
<td></td>
</tr>
</tbody>
</table>

Statistical Analysis

- Age-adjusted prevalence estimates
- Multivariable logistic regression to assess relationship between exposures and outcomes of interest
- Adjustment for potential confounders
  - Nativity status, household income, education
- Effect modification
  - Race and ethnicity, age, sex
Prevalence estimates

Among adult New Yorkers:

- **29.3%** ever *stopped* by police
- **14.6%** ever *experienced* police abuse
- **8.7%** ever *experienced* discrimination by police or in courts

*Males* and those *born in the U.S.* were more likely to report experiencing stops, abuse, and discrimination by police and in the courts.
Risk of adverse health outcomes

Among those *stopped by the police*, there was a higher adjusted relative risk (ARR) of:

- **Poor physical health**
  
  ARR: 1.74 (CI: 1.27, 2.38)

- **Poor mental health**
  
  ARR: 1.68 (CI: 1.23, 2.30)

- **Binge drinking**
  
  ARR: 1.47 (CI: 1.16, 1.86)
Risk of adverse health outcomes

Among those *abused by the police*, there was a higher adjusted relative risk (ARR) of:

- **Poor physical health**
  - ARR: 2.27 (CI: 1.51, 3.40)

- **Poor mental health**
  - ARR: 1.67 (CI: 1.07, 2.60)

- **Serious psychological distress**
  - ARR: 2.27 (CI: 1.31, 3.92)
Risk of adverse health outcomes

Among those experiencing racial discrimination by the police/courts, there was a higher adjusted relative risk (ARR) of:

- Poor mental health
  ARR: 1.52 (CI: 1.02, 2.27)

- Binge drinking
  ARR: 1.39 (CI: 1.05, 1.85)
Stratified analyses

Associations between police contact and poor health were strongest among Black New Yorkers

Among those stopped by police...
- Serious psychological stress
  ARR: 3.48 (CI: 1.24, 9.71)

Among those abused by police...
- Poor physical health
  ARR: 3.12 (CI: 1.32, 7.02)

Among those discriminated by police/courts...
- Serious psychological distress
  ARR: 3.47 (CI: 1.28, 9.41)
Stratified analyses

Associations between police contact and poor health were strongest among New Yorkers ages 24-44

Among those stopped by police...

- Poor physical health
  ARR: 3.14 (CI: 1.78, 5.56)

- Poor mental health
  ARR: 3.14 (CI: 1.78, 5.56)

Among those abused by police...

- Poor physical health
  ARR: 4.17 (CI: 2.32, 7.49)

- Serious psychological distress
  ARR: 2.27 (CI: 1.31, 3.92)
Conclusion

Research builds on existing literature on the relationship between police contact and poor health outcomes using self-reported measures among a representative sample of New Yorkers.
Implications for policy and future directions

Stakeholder engagement
Continue & deepen stakeholder engagement

Analyses
Neighborhood policing environment & health

Policy translation
Explore implications for policy change & produce educational materials
Thanks and acknowledgements

Diksha Brahmbhatt, Weill Cornell Medical College
Michele Calvo, NYAM
Devin English, Rutgers University
Marné Garretson, DOHMH (former)
Simone Martin-Howard, Long Island University
Tawandra Rowell-Cunsolo, University of Wisconsin

Marivel Davila, DOHMH
Francesca Gany, Memorial Sloan Kettering
From Punishment to Public Health, John Jay College of Criminal Justice
Karolyn Le, DOHMH
Nneka Lundy De La Cruz, DOHMH
HD4NYC Leadership: DOHMH & NYAM
THANK YOU!

Contact information:

María Baquero, PhD, MPH
Senior Social Epidemiologist
NYC Department of Health and Mental Hygiene
mbaquero@health.nyc.gov

Azure B. Thompson, DrPH, MPH
Assistant Professor
SUNY Downstate Health Sciences University
azure.thompson@downstate.edu