Are Intimate Partner Violence (IPV) risk assessment tools racially biased?

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Topics addressed:

- Emergence and meaning of risk societies
- Development of risk assessment tools
    - Relationship to bail reform and pre-trial detention
- Case law regarding risk assessment
- ProPublica's "Machine Bias" and critiques of risk assessment
- Analyses of positive predictive values, false positives, false negatives
- Risk assessment, ethics and fairness
- Risk assessments for IPV
- Larger questions about the social context of IPV

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Risk societies and the culture of control

- Desire for certainty in anxious times
- Growing regulatory networks
- Globalization, enhanced surveillance, polarization of wealth
- Economic style of decision making
- Return of the victim and victim rights

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Notion of "Risk"

- Risk societies - societies might reduce social harms by applying specialized knowledge for preventive purposes
- Cholesterol, # of steps, dangerous relationships
- Recent origin
- Predicting the future, deep desire for security in uncertain times
- Triaging in times of shrinking state resources?

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Development of risk assessment

- Early 1900s, attempt to classify offenders on basis of risk
- Algorithmic, actuarial risk assessments
- Increased use in 2000s to reduce subjective bias, jail populations without jeopardizing public safety
- Risk-Needs-Responsivity model (R-N-R)—rehabilitative ideal
- Critiques—assembly line justice; exacerbate social inequalities

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Three Types of Risk Assessment

- Clinical (professional opinion only – shamanistic, problematic)
- Actuarial – integrates statistical markers
- Structured professional judgment– uses clinical and actuarial. AKA: Structured decision making
- Emphasis on evidence-based frameworks, consistency, but also flexibility with individual cases

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Bail reform and pretrial detention

- US has one of highest rates of pretrial detention
  - Spend $14 billion/year
- Money bail unfairly penalizes poor
- Determining conditions of release, especially for IPV offenders?
- Statutory guidelines for judicial decision making
  - Inclusion of risk assessment results
  - Eg., Arizona Revised Statute 13-3967 B (5)
- Concerns re unfair confinement based on biased instruments

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State of Wisconsin v. Loomis, 881 N.W.2d 749 (WI 2016)

- Eric Loomis, drove car in a drive-by shooting; charged with "attempting to flee a traffic officer and operating a motor vehicle without the owner's consent."
- Presentence report referred to his COMPAS score
- Sentenced to 6 years in prison, 5 years extended supervision
- Appealed on grounds of violation of due process
- Wisconsin Supreme Court affirmed lower court decision, but issued warnings to judges using COMPAS risk assessment
- Cannot be used to determine incarceration or severity of sentence

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"Targeted skepticism"

1. The proprietary nature of the tool prevents disclosure of how risk scores were determined.

2. Scores are unable to identify particular high-risk individuals because they derive from group or population data.

3. The COMPAS algorithm is based on national datasets not from data specific to the state of Wisconsin

4. "Studies have raised questions about whether [COMPAS scores] disproportionately classify minority offenders as having a higher risk of recidivism." Here the court sought to instill a "targeted skepticism" regarding the matter of possible racial discrimination.

5. COMPAS was developed to help the Wisconsin Department of Corrections make post- sentencing determinations.

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Pro-Publica's "Machine Bias"

- Argued COMPAS is biased against African Americans
- Analyzed 7,214 cases of arrestees from Broward County, Florida
- Followed this group for two years and reviewed official arrest data
- COMPAS correctly identified recidivists 61% of the time and violent recidivists 20% of the time
- Black and White offenders were equally likely to receive correct predictions of recidivism, but Black offenders had a higher rate of actual recidivism
- Conclude COMPAS has low predictive validity

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Classification table

Actual	Predicted	
	Negative	Positive
Negative	True Negative	False Positive
Positive	False Negative	True Positive

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Equally wrong in different ways?

- ProPublica argued Black offenders were more likely to be wrongly classified as false positives—predicted to reoffend but didn't
  - White offenders more likely to be wrongly classified as false negatives—predicted not to reoffend but did
- Other analyses of same data found the opposite (Northpointe, Flores et al.)
- Skeem & Lowencamp, reviewed 34,794 federal offenders assessed with Post Conviction RA (PCRA) and found no evidence of racial bias

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Benefits and risks

- Benefits:
  - Majority of general population of offenders assessed as low risk
  - Reduces need for detention and the costs to offenders and society of incarceration
  - Reduces subjectivity & implicit bias

- Risks:
  - Incorrect classification (false negatives) endanger public safety
  - Incorrect classification (false positives) unfairly detains those who pose little threat
  - Bias introduced at earlier stages of the system are reproduced and result in unfair treatment of African Americans

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Ethics & Fairness

- Criminal history best predictor of future criminality
- African American men have higher rates of offending
- Selection bias or actual variation in rates, as reflected in self reports?
- If adjust scores to compensate for bias, reduce accuracy and violate notions of equity and fairness
- What are the costs of false positives? False negatives?
- Answers depend on human values and decisions, not statistics
- Requirements for racial impact statements for new policies

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Mary Douglas:

"Instead of isolating risk as a technical problem we should formulate it so as to include, however crudely, its moral and political implications… The experts on risk do not want to talk politics lest they become defiled with political dirt," and "Indeed, reading the texts on risk it is often hard to believe that any political issues are involved."

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Rise of IPV Risk Assessments

- Different goal than RAs of general offender population
- Typically conducted with victim to determine level of future risk to that particular victim
- Emerged from growing research on antecedents to intimate partner homicides (IPH)
- Concern that many victims of homicide had prior system involvement that did not prevent homicide
- Need to triage, identify cases requiring more intensive support and response

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Jacquelyn Campbell's landmark 11 city study (2003)

- Compared 220 cases of IPH with cases of 343 abused women that formed a comparison or referent group
- Risk factors more often found in IPH group
  - Use of or threats with a weapon
  - Presence of guns
  - Forced sex
  - Beaten during pregnancy
  - Strangulation
  - Increasing frequency and severity of violence
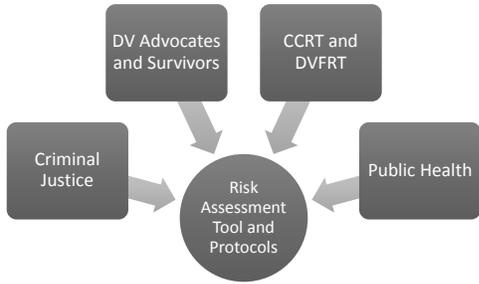 - Threats to kill

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Research on Use of IPV RAs

- Messing, et al.: Administering LAP increased victims' protective actions and decreased frequency & severity of future reassaults
  - RA educates victims on danger that leads to action
- Snider, et al.: 5 question DA; 3 of 5 yes answers = high risk; 25% of high risk victims were subsequently severely re-assaulted within 9 months
  - Low positive predictive value

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Yavapai Risk Assessment Project

DV Advocates and Survivors

CCRT and DVFRT

Criminal Justice

Public Health

Risk Assessment Tool and Protocols

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Questions are asked on the scene; Victim participation is voluntary	Yes	No	Decline
Tier 1			
1. Has physical violence **increased in frequency or severity** over the past six months? Alternate wording: Is the pushing, grabbing, hitting, or other violence happening more often			
2. Is he/she violently and constantly **jealous** of you?			
3. Do you believe he/she is **capable of killing** you?			
4. Have he/she ever beaten you while you were **pregnant**? (e.g. hit, kicked, shoved, pushed, thrown, or physically hurt with a weapon or object)			
5. Has he/she ever used a **weapon** or object to hurt or threaten you?			
6. Has he/she ever **tried to kill** you?			
7. Has he/she ever choked/strangled/suffocated you?			
7a. Has this happened more than once? ☐ Yes ☐ No ☐ Decline			

Yes to 2 or 3 Tier 1 questions = "Elevated Risk"
Yes to 4 or more Tier 1 questions = "High Risk"

Total Yes: _____

Elevated ☐ High ☐

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Tier 2		
8. Does he/she **control** most or all of your daily activities?		
9. Is he/she known to carry or possess a **gun**?		
10. Has he/she ever **forced you to have sex** when you did not wish to do so?		
11. Does he/she use **illegal drugs or misuse prescription drugs**? (e.g. meth, cocaine, painkillers)		
12. Has he/she threatened to **harm people you care about**?		
13. Did you **end your relationship** with him/her within the past six months?		
13a. If you answered "No" to Question 13, does he/she know or sense you are planning on ending your relationship?		
14. Has he/she experienced **significant financial loss** in the last six months?		
15. Is he/she **unemployed**?		
16. Has he/she ever threatened or tried to commit **suicide**?		
17. Has he/she **threatened to kill** you?		
18. Has he/she threatened or abused your **pets**?		

"Yes" to 2 or 3 Tier 1 questions = "Elevated Risk" / "Yes" to 4 or more Tier 1 questions = "High Risk"
"Elevated Risk" and "High Risk" scores trigger law enforcement officers to offer follow up responses in the form of providing or connecting victims to supportive resources or resource information.

Action: ☐ Victim referred for follow-up based on responses to the assessment
☐ Victim referred for follow-up based on the officer's professional judgment
☐ No referral

* To be considered at Initial Appearance. See A.R.S. § 13-3967(B)

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Arizona intimate Partner Risk Assessment Instrument System (APRAIS)

- Community and research informed RA
- Yes to 4 of 7 questions = "high risk"
- High risk victims 10.5 X more likely to experience severe re-assault than low risk within 7 months (relative risk)
- 15% of high risk victims will experience severe re-assault (absolute risk)
- Victims and responders report value of APRAIS
- No data on racial bias

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IPV RAs at Pretrial

- No validated RA for pretrial purposes
- Judges consider numerous factors at initial appearances
  - Eg., ARS 13-3967 B, lists 15 factors to consider
  - Often cannot articulate basis for decision
- How would we determine racial bias in pretrial decisions?

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Other potential uses for IPV RAs in Court

- At trial
- Sentencing
- Orders of Protection
- Family Court
- Questions about due process and equal treatment

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Other uses of IPV RA

- Risk assessment is not just for classifying later severe re-assault
- It is viewed as a tool to educate victims about danger (Messing et al.)
- Can change victim's perceptions of danger (Campbell et al.)
- Can ensure services are offered to those experiencing higher and/or escalating levels of violence

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Beyond Risk

- Danger of diverting attention from structural issues to individual risk
- What if risk were 100% predictable? What would we do?
- Initial results indicate between 40% and 60% of victims score as high risk
- Why are so many women facing extreme forms of abuse and violence?
- Why are African American, American Indian, and biracial women facing alarmingly high rates of violence and homicide?

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Conclusion

- We have no data on whether IPV RAs are racially biased
- Making that determination would be complex and uncertain
- IPV RAs have potential for communicating danger to victims, service providers and courts in a shared language
- Responding to high levels of risk requires investment of resources
- IPV RAs have potential to contribute to reduction of resources for individuals and to remedy larger societal issues generating high levels of violence and despair

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Questions

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