Cardiovascular Diseases in the Inmate and Released Prison Population

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Disclosures/Disclaimer

- Nothing to disclose.

- The views and opinions expressed in the following PowerPoint slides are those of the individual presenter and should not be attributed to the National Institutes of Health or the National Heart Lung and Blood Institute.
Objectives

- Provide background information on discussions related to cardiovascular disease prevalence in the general and prison population that led to a workshop.

- Discuss themes and recommendations from the NHLBI workshop held on January 5-6, 2016 on Cardiovascular Diseases in the Inmate and Released Prison Population.
Discussion about national databases excluding the prison population.
- Health information about prisoners is excluded from our **national databases**. Our national databases only represent the civilian population in the U.S. The lack of health information on prisoners reduces the estimate of true prevalence of diseases in this country. The impact of this also spills over into our communities and public healthcare system since nearly 95% of prisoners are eventually released to communities at a rate of 600,000 to 700,000 annually.

Discussion about prevalence and possible gap in knowledge.
- Without sufficient representation of the disease prevalence of both civilian and non-civilian populations, decisions are based on an underrepresentation of the true need.

Impact of the gap in knowledge.

The goals of a workshop:
- Review current literature on the prevalence of cardiovascular diseases in the prison population to define the gap in health and disease information between the civilian and prison populations.
- Propose possible solutions to capture relevant data on prisoners (inmates or released) that impact health care needs and public health.
Prison Environment

- Poor diet (12 minutes to eat meal).
- Poor air ventilation.
- Constant noise.
- High stress/anxiety.
- Deterrents to seeing a doctor (co-pay, loss of work, etc.).
- Low literacy.
- Self-management of health/diseases restricted.
- Prisons not built for overcrowding.
- Prisons not built to handle older adults.
- Privacy concerns – CO always present.
- Standards of Care challenges (e.g., increased disease burden, no access to OTC meds, long wait times to see MD and approval needed, no mandates that require accreditation, etc.).
- Data management/quality.
- 90-95% are men; 2030 prisoners over age 55 will account for 1/3 of all incarcerated people.
Gap in Knowledge
Where a Person Lives Determines Population Health

- Data on prisoners not included in national databases (e.g., household surveys).
- CDC does surveillance.
- Data collected through the DOJ/BJS survey is self-report only (problems include poor recall, low literacy, no previous health care, etc.).
- Subjective data collected and no objective data.
- Effects of prison exposure on cardiovascular diseases unknown.
- Effects on family members unknown.
- Impact of missing data on epidemiology, prevalence, risk factors unknown.
- 1.6 million people in prison not accounted for/invisible.
- Other ICs do research on mental health, drug abuse and HIV but do not look at cardiovascular effects of drugs to treat these diseases or added cardiovascular disease risks of these diseases.
- No longitudinal data on cardiovascular disease or risk factors in the prison population.
- Prison population is different from the poor or homeless (e.g., normative in some communities).
- Training of staff/researchers.
- Structural/behavioral changes.
- Benefits to CVD health unknown.
- Cost benefits unknown in and out of prison – to society.
Known risk factor for CVD, such as poor diet, lack of exercise, co-morbidities (HIV/AIDS and drug addiction), and stress.

Unknown risk factors for CVD, such as exposure to the prison environment.
Themes from Workshop

- Individual changes, such as behavioral and stress reduction.

- System changes, such as structural changes on how health care is delivered within a prison system to improve access to care and encourage self-management of chronic diseases such as hypertension.

- Attitude and awareness of CVD prevention and treatment for inmates, health care providers within a prison and other staff.
Themes from Workshop

- Care coordination challenges for long-term care of CVD.
- Barriers to CVD data access for research in the incarcerated population.
- Atmosphere of punitive vs. rehabilitative challenges to accomplish CVD prevention.
#1 Recommendation from Workshop

- Gather longitudinal data regarding prevalence of CVD and risk factors in people exposed to the criminal justice system (e.g., prison, jail, probation, parole, etc.) in a manner that is identical or similar to how information is collected for other national surveys of health for non-institutionalized populations (e.g. NHANES).
#1 Recommendation continued

- Characterize CVD burden in incarcerated populations by building on existing surveys conducted through the Bureau of Justice Statistics (BJS), focusing on incarcerated and released prisoners with CVD risk factors.

- Add survey questions on incarceration history and intensity onto existing and future national health survey and epidemiological studies.

- Include incarcerated populations in community-based surveys and interventions (which currently exclude incarcerated populations).

- Develop compatible surveys between the criminal justice system and general population.

- Establish new prospective epidemiological studies to understand the magnitude and etiology of CVD in populations exposed to the criminal justice system (e.g., prison, jail, probation, parole, etc.).

- Incorporate health information technology and common standards in data collection to allow for data-sharing for research purposes and for providing continuous care.

- Study the impact of incarceration on the health of family members, women in particular, who are bearing most of the health-care responsibility.
#2 Recommendation from Workshop

- Leverage existing NIH and other federal investment through collaborative work with other institutes and agencies to build infrastructure (training, resources, network), and share best practices.
#2 Recommendation continued

- Adapt community-based CVD prevention and reduction strategies to incarcerated and recently released populations, evaluate short-term and long-term effects, and ensure continuity of care across the transition.

- Organize a teleconference with stakeholders including BJS, Substance Abuse and Mental Health Services Administration (SAMHSA), NIH, and local health departments to discuss potential collaborations and sharing of resources.

- Develop resources and networks to facilitate the interaction of CVD investigators with the criminal justice (CJ) system.

- Provide training opportunities for CVD investigators to learn the CJ health care and health data management system.
#3 Recommendation from Workshop

- Work with regulatory bodies and Criminal Justice (CJ) staff to reduce or eliminate barriers to conducting research in the CJ population while continuing to ensure that this vulnerable population is adequately protected.
#3 Recommendation continued

- Intervene at the criminal justice system and clinical provider levels to improve the health service (for example, design and test educational-normative or knowledge sessions on “healthy heart” diet and lifestyle for correctional officers, and if successful, implement as a standard protocol for CJ system).

- Engage stakeholders, including inmates, staff, and administrators of the CJ system (for example, discuss how self-management of CVD can be tailored to the correctional health care service without compromising safety).

- Include economic measurements (e.g. cost-effectiveness) and public safety aspects in CVD studies in the incarcerated population to demonstrate potential benefits of CVD prevention/intervention for the CJ system.
Final Thoughts…

- CVD kills slowly, quietly, and takes more black men lives than anyone else.

- Individuals with history of incarceration have higher rates of chronic and infectious disease including hypertension, diabetes, and prior myocardial infarction.

- Proper care of prisoners help to preserve their physical function, which makes it possible for ex-inmate to reintegrate into society to embark on productive activities and avoid becoming a burden to all.

- The lack of proper mental and physical health care and abnormally high levels of stress and anxiety can make 50 y.o. prisoners' bodies seem 10-15 years older.

- Because legal, political, and social issues are more complicated in research involving the incarcerated population, a careful examination of these challenges in a systematic fashion is necessary before any large scale studies can be launched.

- Data suggests that certain social and demographic groups are over-represented in the prison populations and who already have a high CVD risk creating an unknown but suspected health disparity related to care and treatment.

- Eliminating health disparities is a priority of the DHHS/NIH. Besides the legal mandate, prisoners are a ward of the state and have no freedom or choices in health care and must rely on the criminal justice system to provide health care.
References


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