

Changing Risk Trajectories and Health Outcomes for Vulnerable Adolescents: Reclaiming the Future

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Adolescents in the juvenile justice system are underserved and understudied even though they are disproportionately affected by myriad health risks and comorbidities.¹ Less well understood is whether duration of incarceration is associated with poorer long-term health outcomes and whether risk behaviors persist into adulthood. This issue of *Pediatrics* provides 2 studies addressing these questions.

Barnert et al² analyzed data from the National Longitudinal Study of Adolescent to Adult Health and observed that incarceration duration in adolescence and early adulthood is independently predictive of poorer physical and mental health in adulthood. Relative to adolescents without an incarceration history, incarceration duration of <1 month predicted adult depressive symptoms, incarceration duration of 1 to 12 months predicted worse adult general health, and duration of incarceration of >1 year predicted adult functional limitations, adult depressive symptoms, and adult suicidality. In a related study, Abrams et al³ examined changes in adolescents' HIV and AIDS sex- and drug-risk behaviors during the 14 years after incarceration. Although risk behaviors decreased, the prevalence of sexual risk behaviors remained higher than in the general population, with marked racial differences. As adolescents traverse the developmental trajectory to adulthood, we need to marshal new initiatives to

reduce risk behaviors and improve proximal and distal health outcomes.

There has been an important paradigm shift in the conceptualization of adolescent health. Although it was once considered an individual-level phenomenon, current thinking reconceptualizes adolescent health within an ecological framework that is broader in scope and more comprehensive, permitting more precisely targeted interventions. The ecological framework provides a greater understanding of the influences that affect adolescents' risk and health and guides development of multifaceted solutions that systematically target different ecological levels, optimizing programmatic complementarity, efficiency, and effectiveness.⁴ The social ecological framework can be operationalized to reduce risk exposures and behaviors that increase the likelihood of poor health outcomes, over the course of adolescence and into young adulthood. Below we articulate some opportunities to improve health in this population.

The potential to improve health care in the justice system is gaining traction as support for integration of health care in correctional settings increases.^{5,6} This reconfiguration of services makes the juvenile justice system a catalyst for health promotion, expanding its purview and adopting new roles and responsibilities, such as implementing evidence-based screening, assessment, prevention, and treatment. Thus, incarceration provides a window of

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opportunity to assess adolescents' risk behaviors and health and to intervene. Complex medical and psychosocial needs can be addressed through facilitated linkage to community-based specialized prevention and treatment services.

Intervening in the juvenile justice system, though important, is not sufficient alone to alter risk trajectories and reduce adverse health outcomes. There is a need to mobilize partnerships between medical, juvenile justice, and community organizations to provide a continuum of adolescent-friendly crosslinked prevention and health care services that are accessible, affordable, and acceptable after incarceration, when adolescents transition from detention to the community. This continuum is critical because adolescents often confront pervasive countervailing social or environmental pressures in communities that are experiencing social disparities, are medically underserved, and have a high prevalence of risk behaviors and adverse health outcomes.

Although developing effective prevention and treatment programs is important, ultimately, it is imperative that programs be adopted, integrated, and sustained by juvenile justice systems and community-based health partners. Implementation science can be valuable in identifying effective dissemination strategies that increase adoption of information and programs by clinicians, other health practitioners, juvenile justice systems, social service providers, and program managers in community-based organizations. One example of this research is a multisite cooperative initiative by the National Institute on Drug Abuse, called Juvenile Justice Translational Research on Interventions for Adolescents in the Legal System.⁷ This study tests 2 innovative theory-driven models to promote

the adoption and continuation of evidence-based practices for screening, assessing, and linking adolescents to substance use treatment services in the juvenile justice system and, upon reentry to the community, in behavioral health agencies.

Although programs can affect health trajectories, they often require skilled personnel, are labor- and time-intensive, and therefore are costly. Harnessing the power of technology can lessen labor and time demands while still yielding changes in risk behaviors and health outcomes. Recent research suggests that the use of electronic media, such as computers and, more specifically, mobile devices, such as mobile phones delivering text messages or counseling interventions by health advocates or coaches, can reduce health risks and adverse health outcomes through brief telephone contacts, even over protracted time periods.⁸

Finally, system-level reform must be a priority. The governor of Georgia has been an ardent supporter of system-level reform, and Georgia is implementing an initiative of the Annie E. Casey Foundation called the Juvenile Detention Alternatives Initiative. Findings indicate that communities implementing this initiative have lowered the number of adolescents in detention by 44%. One Georgia county observed an 80% decrease in average daily detention population, with low recidivism; <1% of felony offenders who benefit from detention alternatives are rearrested for a felony charge.

Adolescents involved in the juvenile justice system experience diverse health risks and adverse health outcomes, exacting a significant toll on them and, ultimately, on society. Prioritizing the integration of risk reduction and health care services in juvenile justice systems, facilitating partnerships with medical and community-based

resources, optimizing program effectiveness, and facilitating efficient dissemination of these programs can be instrumental in reducing health disparities, risk behaviors, and adverse health outcomes.

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