

## Unhappy co-occurrence. Mental health and prisons

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In Alice Springs, in the heart of Australia, the Supreme Court of the Northern Territory looms over the town. With good reason. The incarceration rate of indigenous Australians in the Northern Territory is 2800 per 100,000 – 14 times that of the non-indigenous population at 198 per 100,000. ([https://justice.nt.gov.au/\\_\\_data/assets/pdf\\_file/0004/599107/2016-17-ntcs-annual-statistics.pdf](https://justice.nt.gov.au/__data/assets/pdf_file/0004/599107/2016-17-ntcs-annual-statistics.pdf)). Of the prison population in the Northern Territory 84% is Indigenous compared to 30% of the general population. It is possible to see this as a pure and simple case of discrimination and social disadvantage coming together, to the detriment of Australian Aborigines and Torres Strait Islanders. It is neither pure nor simple, as made clear by examination of mental illness: a study in Queensland showed that 73% of male Indigenous prisoners and 86% of females have a diagnosed mental illness.(1)

Indigenous Australians present an egregious example of the problem. But this unhappy association of social disadvantage, mental illness and prison is widely seen, as made clear in review by Hughes and colleagues (. ) There are at least four ways it could come about. First, common causation: social disadvantage, social determinants of health, increases risk both of mental illness, or more generally neurodevelopmental difficulties, *and* of getting into trouble with the criminal justice system. Second, having neurodevelopmental disabilities or mental illness increases likelihood of disturbed behaviours that lead to getting mixed up in the criminal justice system and, once in it, of having difficulties in negotiating a way through it. Hence prison is more likely. Third, social disadvantage makes the second process worse – for a person with mental illness social disadvantage makes it more likely that the individual will end up in prison. And, fourth, prison can make you ill. In Australia they speak of deaths in custody and it is sometimes unclear whether these are suicide, neglect or abuse gone wrong, or a combination. While it is hardly surprising that putting a depressed, or otherwise disturbed adolescent in prison could have disastrous mental health consequences, this is not a focus of the reviews here.

A particularly dramatic illustration of the link between social disadvantage and being incarcerated comes from the US. Among males and females, black and white, the lower the family income the higher the likelihood of being incarcerated. But among young black men, at every level of family income, the imprisonment rate is higher than in young white men. There is, here, an intersection of low family income, race/ethnicity and male gender. Mass incarceration is a social policy.(2) Hughes and colleagues did not independently review the evidence for social disadvantage and crime, but they point to ample research in criminology that shows crime in young people is linked to: family poverty, community deprivation, educational disengagement and parental incarceration. The research on adverse child experiences shows that, in addition, these all have adverse impact on children's development and subsequent health. More generally, several forms of social disadvantage are all determinants of mental illness in children.(3) Common causation, social determinants affecting both crime and neurodevelopmental disability, is highly likely.

Whatever the 'direct' influence of social disadvantage on risk of incarceration, the evidence shows that there is a strong indirect causal pathway through the effect of social determinants on neurodevelopmental disability and mental illness, and through amplifying the risk of imprisonment – pathways two and three above. As Hughes et al write, "toxic stress can disrupt brain development and functioning, reduce the ability to regulate impulses, intensify physiological responses to stress,

and ultimately increase the likelihood that one will engage in maladaptive behaviours, such as aggression and delinquency”.

One issue that bedevils global health is that most of the research on health inequalities has been done in a select few, high income countries, raising questions of generalisability. Hughes and colleagues show that maltreatment of children is associated with multiple family disadvantage in East Asia, South Asia, Africa, Latin America, North America and Europe. A remarkably general finding.

This group of papers makes clear that it is insufficient to see the problem as one of at risk individuals that could be treated early. It is important to look at upstream at social causes.

Here’s a thought. Evidence on social determinants of mental illness and incarceration could influence policy. Philosopher Martha Nussbaum quotes a figure that it costs \$167,731 a year per inmate in New York City’s prisons.(4) She suggests that money could be put into prevention of crime: early child development, nutrition, social welfare, education and employment. Spending on these areas would lead not just to lower crime rates but to better health and narrower health inequalities. Use the evidence to create more just societies.

1. Heffernan E, B; Andersen, K,C; Dev, A; Kinner, S. Prevalence of mental illness among Aboriginal and Torres Strait Islander people in Queensland prisons. *MJA*. 2012;197(1):37-41.
2. Nosrati E, Marmot, M. Punitive social policy: an upstream determinant of health. *Lancet*. 2019;394:376-7.
3. Champion J. *Public mental health: Evidence, practice and commissioning*. London: Royal Society for Public Health; 2019.
4. Nussbaum M. *Anger and Forgiveness: Resentment, Generosity, and Justice*. NY: Oxford University Press; 2016.