Submission to the Productivity Commission's Issues Paper on The Social and Economic Benefits of Improving Mental Health

The role of incarceration in addressing inequalities for people with mental illness in Australia

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People in prison and youth detention in Australia

As of December 2018, the average daily number of people in prison in Australia was 42,779, a 3.7% increase over the previous year and a 33% increase over the previous five years.[1] Understanding prison throughput for key subgroups such as people with mental illness is likely critical for planning and resourcing effective transitions to the community, due to the high risk of acute negative health outcomes following release. However, to date, there are no reliable estimates of the prison throughput for people with mental illness in Australia. Prior to April 2016, the yearly prison throughput in Australia (defined as the annual number of admissions to, and discharges from, prison) was largely unknown. However, the number of prison admissions nationally is now reported by the Australian Bureau of Statistics. The prison throughput in Australia far exceeds estimates based on the average daily number, which is consistent with global estimates.[2] In 2017, there was an estimated 63,612 discharges from prisons in Australia, which is approximately 55% higher than the number of people in prison at any one time.[3] Importantly, the rate at which subgroups of people cycle through prison can differ substantially. For example, the number of female prison discharges annually is 176% higher than the average daily number, which is four-times higher than the equivalent prison discharges for men.[3] Although understanding prison throughput for key subgroups such as people with mental illness is likely critical for planning and resourcing effective transitions to the community. However, to date, there are no reliable estimates of the prison throughput for people with mental illness in Australia. Over time this rapid throughput of people involved in the criminal justice system has a large population-level impact; exposure to incarceration is estimated to exceed 385,000 adults or approximately 2.5% of all Australian adults.[4] Furthermore, the consequences of incarceration extend beyond the people incarcerated and the footprint and impact of incarceration on the families of those incarcerated can reach epidemic proportions. A recent study estimated that half of all adults in the United States had a family member who had spent at least one day incarcerated.[5]

The Australian Institute of Health and Welfare (AIHW) estimates there were 11,007 young people (aged 10-17 years) under youth justice supervision during the 2015-16 financial year.[6] Of the 5,482 youth under supervision on an average day, only 16% were in detention, although 44% were detained at some point during the year.[6] Indigenous youth account for 48% of youth under supervision, 59% of those in detention, and are over-represented in detention by a factor of 25.[6] Indigenous adults account for 28% of the prison population and are over-represented in prison by an age-adjusted factor of 13.[7] Thus, addressing the health, social, and economic inequalities experienced by justice-involved people is an integral part of closing the gap of Indigenous disadvantage.

The mental health of people in prison

Over a decade ago the World Health Organization issued an urgent call to action:

> *"Without urgent and comprehensive action, prisons will move closer to becoming twenty-first Century asylums for the mentally ill, full of those who most require treatment and care but who are held in unsuitable places with limited help and treatment available."*[8;p5]

Despite this, mental illness and substance use disorders continue to be highly prevalent among people in prison,[9-12] and in some jurisdictions, the prevalence of serious mental illness in prison is increasing rapidly.[13]

Similar to international prevalence estimates, mental illness is exceedingly common among people in prison in Australia. Approximately 1 out of 2 prison entrants (49%) report being told they have a mental illness by a medical professional.[14] The 12-month prevalence of mental illness has been estimated between 43-80% among people in prison,[9,15,16] with a higher prevalence among women compared to men in prison.[15] Among Indigenous Australians in prison, the 12-month prevalence of anxiety, depression, and psychotic disorders has been estimated at 25%, 14%, and 10%, respectively.[17] People in prison have a 3- to 11-times higher likelihood of having an affective, anxiety, personality, or psychotic disorder compared to the Australian general population.[9]

Substance use disorder is also very common among people in prison in Australia. Prevalence estimates of substance use disorder are between 55-76% among people in prison,[15,18] which compared to the Australian general population, represents an 8- to 11-times higher likelihood of having a substance use disorder.[9] Furthermore, between 37-75% of prison entrants report a history of injecting drug use and between 14-42% report injecting drugs while in prison.[19,20] However, the determinants of substance use disorder differ between Indigenous and non-Indigenous people in prison,[21] highlighting the need to develop culturally appropriate, targeted treatment strategies for Indigenous people in prison.

Among people in prison, mental disorders (defined as having a mental illness or substance use disorder) seldom arise in isolation, such that complex mental health needs and multimorbidity are normative. Dual diagnosis (defined as the co-occurrence of mental illness and substance use disorder) is more prevalent among people in prison than in the general population.[22] The prevalence of dual diagnosis among people in prison has been estimated between 18% and 56%.[23-27] Among women and men with a mental illness in prison in Australia, the prevalence of co-occurring substance use disorder has been estimated at 46% and 25% , respectively,[15] which is higher than the equivalent general population estimates.[28] Furthermore, among Australians who access forensic mental health services, 90% had a lifetime history of substance use disorder.[29] However, prior to prison people with dual diagnosis report strikingly low levels of health service use, particularly for contact with mental health and alcohol and other drug treatment services.[30,31] Dual diagnosis has also been associated with increased injecting drug use and HIV infection among people in prison,[32] and poorer alcohol and other drug treatment retention in the community.[33]

Among people in prison, mental disorders are also associated with a higher prevalence of co-occurring chronic physical health conditions.[34-36] For example, multimorbidity (i.e., having at least two co-occurring chronic physical health conditions) among people in Australian prisons who have a history of injecting drug use has been associated with poorer mental health.[37] Co-occurring mental and physical disorders present challenges for service providers who aim to identify and manage these health conditions and complex needs effectively. For example, a study in the United Kingdom found that fewer than 20% of older adults with mental illness and co-occurring chronic physical health conditions was prescribed medication appropriate to their conditions.[38] Co-occurring mental and chronic physical health conditions is the strongest predictor of healthcare use in prison.[39] Consequently, people with multiple and complex health needs account for disproportionate forensic healthcare expenditure.[40] However, mental health service resourcing and provision in prison remains exceedingly inadequate in most jurisdictions,[41] including Australia.[42]

Co-occurring mental disorders are a substantial barrier to accessing treatment for,[43] and complicate the clinical course, management, and outcomes of communicable diseases.[44] For example, among adults in prison with HIV, a low rate of viral suppression has been observed in those with dual diagnosis.[45] If left

unidentified, untreated, or inadequately managed among people with mental disorders in prison and/or after release from prison, communicable diseases constitute a considerable public health concern.[46-48]

The social determinants of health and incarceration

The determinants of incarceration parallel the social determinants of health. In addition to complex, co-occurring physical and mental health needs, criminal justice-involved people come from backgrounds of entrenched disadvantage, often characterised by unemployment and poverty, low educational attainment, unstable housing and homelessness, healthcare inequities, isolation and a lack of social support, and structural stigma and discrimination.[49-52] For example, approximately one in three young people in prison in Australia report having concurrent socioeconomic disadvantage, poor physical health, harmful substance use, and mental health problems.[53]

Adverse childhood experiences including family violence; physical, sexual, and/or emotional abuse; and emotional and/or physical neglect have been associated with adult incarceration.[54-57] Furthermore, adverse childhood experiences have been associated with increased rates of mental illness, suicide attempts, and substance use disorder among adults in prison.[58-60] Adults who report adverse childhood experiences have higher rates of injecting drug use and, among those who report injecting, are more likely to share needles.[61]

The effect of incarceration on mental health

Prisons and youth detention centres are crucial settings for addressing health inequalities, and given the overrepresentation of mental disorders among people who cycle through the criminal justice system, incarceration is a regrettable yet critical opportunity to improve the mental health of a highly marginalised group.[62] Incarceration provides potential access to health services for people with substantial and often complex mental health needs, who may face barriers to accessing mental healthcare and/or alcohol and other drug treatment in the community. Likely due to a low threshold to accessing health services in prison, the vast majority of people discharged from prison in Australia report that their physical and mental health improved or remained the same during their prison sentence.[14] However, there is some evidence that, compared to those without a concurrent mental disorders, people in prison with dual diagnosis experience more severe disciplinary responses to misconduct by correctional authorities, which may worsen their mental health.[63] A systematic review highlighted the absence of robust evidence on the effect of incarceration on mental health and concluded that mental health tends to acutely worsen after entry to prison but often improves over time in prison.[64]

Incarceration is best conceived as a regrettable, yet critical public health opportunity to identify and commence treatment for unmet mental health needs. However, it remains an opportunity missed in many jurisdictions. Furthermore, poor transition planning and inadequate resourcing of transitional programs creates a risk that any health gains may be lost after release. Almost all research in this area samples exclusively from incarcerated populations, which limits the ability to compare outcomes between people with and without a history of incarceration and establish a potential causal effect of incarceration on health. These substantial gaps in our understanding of the effects of exposure to incarceration on health remain[62] and hinder our capacity to develop targeted, evidence-informed responses to the health needs of justice-involved people, both in prison and in the community.

Mental disorders and the transition from prison to the community

Health improvements which are attained during incarceration are often rapidly lost after release from prison, and pre-incarceration levels of excess health burden return among people released from prison.[11,36,65-74] Perhaps the most striking example of this health impairment is that people released from prison are at dramatically increased risk of death compared to the general population,[75] and this risk is typically higher among women than men.[75] Indigenous men and women released from prison are at approximately 5 and 13 times higher risk of death, respectively, compared to their counterparts from the general population.[76] The risk of death from suicide among people release from prison is commonly an order of magnitude higher than in the general population.[77,78] In Australia, people released from prison also have been found to die from overdose at a rate 22 times higher than that observed in the general population.[79] However, this risk of death from overdose differs by Indigeneity and type of substance such that Indigenous people are less likely to die from other drug-related overdose and more likely to die from alcohol-related overdose than their non-Indigenous counterparts.[80] Another study in Australia found that the greatest excess risk for a non-external cause of death among Indigenous people released from prison was due to mental and behavioural disorders, when compared to the general population.[76]

Mental illness and substance use related factors predict death among people released from prison. Among people released from prison in Australia, mental illness and/or a risk of self-harm has been found to predict death from causes other than substance use, whereas heroin use, IDU, and recent drug withdrawal or detox has been associated with increased substance use-related death.[81] A psychiatric hospital admission during custody has also been associated increased risk of death from all-causes after release from prison.[82] Furthermore, a history of alcohol, heroin or other opioid use problems or being prescribed antidepressants in prison, has been associated with an elevated risk of death from external causes after release from prison.[83] There is strong evidence that, without a targeted, culturally appropriate response which is commensurate to their needs, people with mental illness and/or substance use disorders released from prison are increased risk of premature death.

Compared to the risk of death, our understanding of non-fatal health outcomes for people released from prison is limited. Compared to the general population, people released from prison are more likely to have an emergency department presentation for substance use disorder, mental illness, and other ambulatory care-sensitive conditions.[84] People released from prison also have higher rates of hospitalisation for mental disorders than people in the general population,[70] particularly for alcohol use disorders, depression, and schizophrenia.[85] Compared to non-Indigenous people released from prison, Indigenous Australians are at increased risk of hospitalisation, with mental disorders being the most common cause of these hospital admissions.[85] Prior research has observed high rates of hospital contact for injury among people with dual diagnosis or mental illness released from prison in Australia,[86] and injury accounts for the highest proportion of hours spent in the ED and hospital bed days among people released from prison.[87]

People released from prison account for disproportionate amount of healthcare expenditure. Annual health service costs among people released from prison are more than 1.7 times higher compared to the general population.[88] People released from prison with mental illness alone and dual diagnosis were 2.5 and 5 times more likely, respectively, to incur annual healthcare costs in the 90th percentile.[88] These high healthcare costs incurred by people released from prison, especially for those with mental illness alone and dual diagnosis, provide a strong economic argument for increased investment in health promotion

and prevention, and for increased integration between forensic and community service providers to ensure continuity of care and support.

The majority of individuals who are incarcerated in Australia spend a relatively short time in custody prior to returning to the community. The benefits of health services delivered in prison, and consequences of inadequate health service delivery, are often only realised after people are released from prison and return to their communities, thus the proposition that 'prisoner health is public health'.[89] However, given the deleterious health outcomes experienced by people released from prison, currently, the net effect of incarceration in Australia is health depleting, particularly among those who live with a mental disorder. Improving the quality of health services within prisons, and particularly improving continuity and integration of mental healthcare and alcohol and other drug treatment after release from prison, has the potential to deliver large health gains for a highly marginalised group in society and is likely to be highly cost-effective.

Health service use after release from prison

Reflecting the high prevalence of serious mental illness and co-occurring mental disorders among this vulnerable group,[11,22] people released from prison access ambulatory mental healthcare more often compared to the general population.[90] Given the increased risk of suicide and self-harm among people released from prison, ensuring effective mental health service engagement is likely critical to reduce suicide and self-harm in the community. However, even for individuals who have had contact with these services prior to their prison sentence, discontinuity of mental health service provision after release from prison is common.[91] Almost half of adults recently released from prison did not receive recommended mental healthcare within seven days of discharge from acute care following self-harm.[92] Furthermore, adults with dual diagnosis or substance use disorders were approximately half as likely to receive this recommended self-harm aftercare compared to those without a mental disorder.[92] Once mental healthcare is initiated after release from prison, the rate of mental health service disengagement is high, even among individuals who are experiencing very high levels of psychological distress.[93] Importantly, mental disorder diagnoses among Indigenous people has been observed to increase by almost 40% in prison medical settings.[94] This suggests that Indigenous people likely experience unique barriers to accessing psychiatric care in the community.

The high prevalence of substance use disorders among people in prison,[12] the high rates of overdose death among people released from prison,[95] and the criminalisation of drug use in the community means that access to alcohol and other drug treatment is essential to prevent poor health and criminal justice outcomes after release from prison. Outpatient alcohol and other drug treatment has been associated with lower rates of relapse to substance use among adults released from prison.[96] However, justice-involved people report low levels of access to alcohol and other drug treatment prior to arrest,[31] and this pattern appears to remain after release from custody.

The consequences of acute drug-related harms after release can be severe and long-lasting, for example acquired brain injury after opioid overdose. In addition to the health consequences of these preventable events, the long-term disability which can result has substantial economic and productivity impact. Some interventions for substance use disorders are relatively low cost and highly cost-effective. For example, opioid substitution therapy, for which there is strong evidence that it reduces morbidity and mortality after release from prison.[97] Continuous engagement with opioid substation therapy has been shown to

reduce drug-related mortality among people released from prison by up to 75%.[98,99] Medication assisted treatment (i.e., combined psychosocial treatment and pharmacotherapy for substance use disorders) has been associated with decreased emergency department presentations psychiatric hospitalisations, and increased medication adherence among people with a history of incarceration, compared with other forms of alcohol and other drug treatment modalities.[100] However, coverage for these interventions across Australian jurisdictions is highly variable,[101] and transitional services in particular are persistently under-resourced.

Research on the impact of engagement with alcohol and other drug treatment after release from prison has focused on re-incarceration. For example, among people with serious mental illness and co-occurring substance use disorders, consistent engagement in alcohol and other drug treatment has been associated with lower rates of recidivism.[102,103] However, beyond opioid substitution therapy and recidivism, the patterns, predictors, and socio-economic and health outcomes related to engagement with alcohol and other drug treatment services are still not well understood for people involved in the criminal justice system.

Given the poor health profile of people in prison, and the challenges in accessing ambulatory or tertiary care after release from prison, it is not unexpected that the rates of contact with acute services is higher among people released from prison than the general population.[90,104,105] The 12-month prevalence of emergency department presentation and hospitalisation between 35-81% and 21-26%, respectively, for people with recent criminal justice system involvement, compared to the general population.[104] Furthermore, the rate of psychiatric hospitalisation for people with recent criminal justice involvement is over 12 times higher than those without criminal justice involvement.[90] Hospitalisation for ambulatory care-sensitive conditions is more common among people released from prison than their counterparts from the general population, which implies that a proportion of these hospitalisations are potentially preventable.[105] However, the patterns of primary and tertiary healthcare which are effective in preventing acute care contact for people involved in the criminal justice system are not well elucidated.

Important considerations for policy and practice

The World Health Organization's Moscow Declaration situates prison health as a fundamental component of public health.[106] Incorporating this principle, the United Nations Standard Minimum Rules for the Treatment of Prisoners (the Mandela Rules)[107] mandates continuity of care and support for people who transition to and from prison (Rule 24.2):

> *"Health-care services should be organized in close relationship to the general public health administration and in a way that ensures continuity of treatment and care…"*[107;p.8]

The Mandela Rules were adopted unanimously by Australia and all other members of the United Nations General Assembly in December 2015.[107] Therefore, providing optimal throughcare for people in custody is requisite to achieve a human rights compliant criminal justice system in Australia.[108,109]

Continuous and coordinated care prevents poor health outcomes[110] and reduces costly acute healthcare contact after release from prison.[111] However, the care and support that people released from prison receive is neither coordinated and nor continuous.[112-114] A profound lack of evidence on the health outcomes and support needs of justice-involved people with complex, co-occurring mental disorders has been repeatedly identified as a key barrier to effective care coordination during the transition between

forensic and community service providers.[115-117] This was recently echoed in the Joint Standing Committee's report on the National Disability Insurance Scheme's (NDIS) provision of services for people with psychosocial disability.[118]

Incarceration provides a unique opportunity to address the health needs of a highly vulnerable group which is often underserved in the community. However, despite the fact that Australian correctional policy has for many years articulated a commitment to 'throughcare' to improve the continuity of care as people transition from prison to the community,[119,120] little is done to maintain or build upon the success of custodial health services, after release from custody, such that the net effect of incarceration is health depleting.[121-123] The impact of this poor health and premature death among justice-involved people has been shown to reduce life expectancy on a whole-population level.[124]

In the current legislative environment, improving the health, social and economic outcomes for people with mental disorders released from prison will demand efforts to increase capacity among correctional service providers to systematically identify and target mental health needs among people involved in the criminal justice system; initiate mental healthcare, alcohol and other drug treatment, and social support commensurate to these needs; and ensure integration between the health, social, and criminal justice systems. Otherwise, meaningful throughcare for people with mental disorders involved in the criminal justice system will remain merely aspirational, compounding the health, social, and economic disparities experience by this highly vulnerable group in society.

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