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Creating HoPE: Mental Health in Western Australian Maximum Security Prisons

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Abstract

The status of prisoners' mental health has wide-reaching implications for prison inmates, prison authorities and institutions, and the general community. This paper presents the mental health findings from the 2008 Health of Prisoner Evaluation (HoPE) pilot project in which 146 maximum security prisoners were interviewed across two prisons in Western Australia. Results revealed significant discrepancies across gender and Indigenous status regarding the history and treatment of mental health complaints, use of prescribed psychiatric medication, and experience of psychosocial distress. Illicit drug use and dependency, as well as patterns of self-harm and suicide are also reported. These findings highlight that imprisonment is an opportune time to screen for mental health problems and provide appropriate evidence-based treatment. Although this process may initially increase government costs, it will reduce overall expenditure by improving prisoners' ability to cope with prison to community transitions, and reduce the high rate of recidivism.

Keywords: prisoners, prison, mental health, suicide, self harm, Indigenous, recidivism

Creating HoPE: Mental Health in Western Australian Maximum Security Prisons

Studies investigating the mental health/crime nexus have indicated that untreated mental health problems can result in criminal activity; however, abuse, homelessness, unemployment, substance use and poor social skills are compounding factors, and may bring people with untreated mental health problems into contact with the criminal justice system (e.g. Forsythe & Adams, 2009; Henderson, 2008; James & Glaze, 2006; Junginger, Claypoole, Laygo & Crisanti, 2006; Monahan, 1992; Mullen, 2001; Munetz, Grande & Chambers, 2001). Prisoners with mental illness often require assessment and treatment to break the cycle of recidivism; however, prisoner mental health assessment has been arguably inconsistent following intake. "No jurisdictions have any formal ongoing assessment or screening service that monitors prisoners' mental health status following admission to the correctional facility" (Ogloff, Davis, Rivers & Ross, 2007, p.3). Additionally, insufficient funding arrangements which equate to understaffing means funds for treatment are often only available for those at crisis point, or who have committed particularly violent or sexual crimes. This may result in other prisoners being denied parole because they have not addressed their offending behaviours as programs are unavailable. The effective management of mental health problems by screening all prisoners and providing evidence-based treatment programs, although initially increasing costs through staffing and service delivery, will reduce overall government expenditure through a reduced recidivism rate and increased eligibility for parole.

New South Wales (NSW) research has suggested that up to 67 percent of prisoners will reoffend within five years of release, with recidivism greatest for prisoners with co-morbid substance abuse and a non-substance mental health disorder (Smith & Trimboli, 2010). The study argued that treating mental disorders by investing in evidence-based programs is warranted and can reduce reoffending. Similarly, the Australian Bureau of

Statistics (ABS; 2009) linked untreated mental health issues to social isolation, less regular contact with family and friends, less confidence in the support given by family members, and higher rates of unemployment. Coupled with poor social skills, lack of education, substance abuse, and homelessness, released prisoners with untreated mental health issues have to overcome many obstacles in order to remain out of prison. These factors inevitably increase an offender's risk of recidivism; yet, can also be screened for, and treated, in prison.

There are extraordinary cost benefits to the community for providing screening and evidence-based programs (based on the best research evidence) for prisoners with mental health problems. Forsythe and Adams (2009) reported Australian police detainees who currently and/or previously experienced mental illness were more likely to have been arrested in the previous twelve months compared to detainees with no history of mental illness. In Western Australia (WA) in 2008-09, the rate of return for offenders within two years of custody release, or community-based order completion, was almost 40 percent (WA Department of Corrective Services (WA DCS; 2009). Considering imprisonment in WA cost $273.17 per prisoner per day during this one-year period, the annual cost of incarceration reaches approximately $400 million (WA DCS, 2009). Each offender who does not return to prison reduces the annual cost of incarceration by almost $100,000. Therefore, evidence-based programs that treat offenders with mental health problems will assist in reducing the risk of recidivism, and overall government costs, once prisoners leave custody.

Many studies have documented high rates of mental illness among prison inmates (e.g. Butler & Milner, 2003; Hockings, Young, Falconer & O'Rourke, 2002; Victoria Department of Justice, 2003), and some have compared these rates to mental illness in the community (e.g. Butler et al., 2006; Mullen, 2001). In 2007, one in five Australians aged 16–85 years currently had a diagnosed mental disorder and almost one in two had previously experienced a mental disorder (ABS, 2009). Butler and colleagues (2006) reported that the

prevalence of mental disorders in Australian prisoners far exceeded that of the community across all 18 diagnostic categories. The most recent Australian meta-review by Mullen (2001) suggested that prisoners experience major mental disorders at a rate of two to four times the expected rates in the community, with substance abuse and personality disorders being over-represented. In 2001 in NSW, the 12-month prevalence of a psychiatric illness was 80 percent in prisoners and 31 percent in the community (Butler et al., 2006). Similarly, the Australian Bureau of Statistics (ABS; 2008a) reported that, in 2007, individuals with a history of incarceration were more than twice as likely to report experiencing mental illness in the preceding twelve months than individuals who had never been to prison. Ex-prisoners also reported substance-use at almost five times the incidence of people who had never been incarcerated; affective disorder at more than three times; and anxiety disorders at twice the incidence of those people who have never been incarcerated (ABS, 2008a).

Common reasons for the over-representation of mental disorders in prisoners include the deinstitutionalisation of mentally ill people resulting in them ending up on the streets without necessary services and a target for arrest, an increase in the use and misuse of drugs and alcohol, and changes in laws which preclude offenders with a serious mental illness from avoiding a prison sentence (Kupers, 2005; Ogloff et al., 2007). It is assumed that these factors increase the likelihood of an individual becoming imprisoned and result in the high prevalence of mental disorders in the prisons. Given these findings, screening for undiagnosed mental disorders for all prisoners presents an opportunity to identify those with mental health problems and provide evidence-based treatment. This will assist affected prisoners to cope more effectively both in prison, and with the transition from prison to the community.

Mental health screening and the provision of evidence-based treatment is imperative particularly in female prisons as there is general consensus that mental health problems are

more common amongst female prisoners than males (e.g. Byrne & Howells, 2000). Females are more likely to present with mood disorders, anxiety/phobias, post traumatic stress disorder and obsessive compulsive disorder, and males are more likely to present with conduct disorders, attention-deficit/hyperactivity disorder, substance abuse, and learning disorders (Alexander & Peterson, 2001). In contrast to females, males are also less likely to disclose their needs and pains, and may not seek mental health care or other programs that assist with skills needed to remain out of prison (Kupers, 2005). Therefore, screening for mental health problems in prison is imperative to ensure those requiring treatment receive the necessary care and are not overlooked within the prison system.

There are also large discrepancies in the mental health and emotional wellbeing of Indigenous Australians compared with non-Indigenous peoples (AIHW, 2006). The overrepresentation of Indigenous people in prison is well established. Indigenous people comprise 24 percent of the total prison population (ABS, 2008b), despite representing only 2.3 percent of the Australian population at the last census (ABS, 2006). WA has the highest ratio of Indigenous to non-Indigenous rates of incarceration in Australia, with Indigenous persons being 20 times more likely to be in prison than non-Indigenous persons (ABS, 2008b). Despite representing 3 percent of the WA population, Indigenous people make up 41.2 percent of the WA prison population (ABS, 2008b). Adult Indigenous prisoners are more likely than their non-Indigenous counterparts to have previously served time in prison, and are also more likely to be serving shorter sentences (Gilbert & Wilson, 2009; Putt, Payne & Milner, 2005). This indicates that despite spending more frequent but shorter periods in prison, incarceration alone is not a deterrent and the reasons for their offending are not effectively being addressed.

The National Inquiry into the Human Rights of People with Mental Illness ascertained that mental illness in the Indigenous population was multi-dimensional, being divided

between those people experiencing a psychiatric disorder, and those experiencing mental distress as reflected in substance abuse, depressive symptoms and suicidal behaviour (Human Rights and Equal Opportunity Council [HREOC], 1993). In the general community, although data pertaining to rates of mental illness are scarce, "mental illness amongst Aboriginal and Torres Strait Islander people is a common and crippling problem which goes undiagnosed, unnoticed and untreated" (HREOC, 1993, p.695). The HREOC reported that there appeared to be a relationship between socioeconomic status and the undiagnosed mental and social distress of Indigenous people resulting in their anti-social and self-destructive behaviour, and consequential entanglement with the criminal justice system. Specifically, Aboriginal offenders demonstrate higher rates of mental health problems and alcohol and drug dependency (Kariminia, Butler & Levy, 2007; Krieg, 2006) and may not request help until reaching crisis point. With research suggesting comorbid mental illness and substance abuse greatly increase recidivism (Smith & Trimboli, 2010), it is not surprising that these offenders continue to return to prison. Screening Indigenous prisoners for mental health problems and providing appropriate evidence-based treatment may reduce this over-representation.

It is important to consider not only the health issues of the prisoners, but also the effects of releasing offenders with untreated mental health problems into the community. Particularly with problematic prison overcrowding, the mental wellbeing of prisoners will only worsen as living conditions become more cramped, cell temperatures reach extremes, and interpersonal difficulties inevitably occur. Overcrowding also increases the pressure on prison health services, unavoidably resulting in prisoners with undetected and untreated mental health problems. As these prisoners complete their sentences and are released, potentially without parole, the impact is felt on the public health system as they start accessing public health resources. Imprisonment is an opportune time to screen for mental health problems and provide appropriate treatment, which may then reduce repeat offending,

brought about by undetected mental illness and/or substance abuse (White & Whiteford, 2006). Thus, prisoner mental health must be screened for and treated, with data provided to health organisations and government agencies to ensure programs are effective, and the health of prisoners meets standards expected in the general community.

The current study examined the mental health findings of the WA Health of Prisoner Evaluation (HoPE) pilot project conducted in 2008. The project's major aim was to evaluate a survey instrument, capable of being routinely administered on a regular basis across Australia, and to provide a baseline dataset to assist governments in developing policy and evaluations around prisoner and community health. The project additionally provided previously unavailable information pertinent to the health of prisoners in WA. This article presents a preliminary mental health profile of metropolitan maximum security prisoners in WA, examining their history of mental health treatment, illicit substance use and dependency, self harm and suicide, and mental distress. Differences between male and female, Indigenous and non-Indigenous prisoners are identified. The findings add to the growing international literature that prisoner mental health is a serious, and often overlooked, concern.

Method

Participants

One hundred and forty six participants (see Table 1) across two maximum security prisons participated in this study. They represented approximately 18% of the combined prison population in these two prisons, and approximately 4% of the total WA prison population. No monetary incentives were offered for participation; however, prisoners did not lose income due to their time away from their work responsibilities.

The participants' ethnic status was identified given the documented health differences between Indigenous and non-Indigenous people, and the extreme overrepresentation of

Indigenous people in WA prisons. The majority of Indigenous prisoners (67.44%) were from regional areas.

Table 1. Number of HoPE participants by gender and Indigenous status

	Female	Male	Total
Indigenous	21	22	43 (29.45%)
Non-Indigenous	34	69	103 (70.55%)
Total	55 (37.67%)	91 (62.33%)	146 (100%)

The average length of time the prisoners had served of their current sentence was 3.5 years (median = 1.5 years; minimum = < 1 month; maximum = 22 years). The average total sentence length was 7.4 years (median = 5 years; minimum = 6 months; maximum = 25 years (life); excluding one outlier of 66 years or 3 consecutive life sentences). Twelve prisoners were unsentenced. Participants were most likely to be imprisoned for violent offences (females 41.8%; males 53.8%), drug offences (females 21.8%; males 5.5%), or property offences (females 12.7%; males 8.8%).

Procedure

Ethics clearance was gained from the Edith Cowan University Human Research Ethics Committee, the Department of Corrective Services Research and Review Committee, and the WA Aboriginal Health Information Ethics Committee. The project was then initiated through detailed communication with peer support prisoners (who act as mentors to other prisoners) and prisoner support staff at each prison. Information flyers describing the project were distributed to prisoners by the peer support prisoners. Interested prisoners nominated themselves on the flyer that was then returned either to the peer support prisoners or to their unit prison officer. Flyers were held by prison staff until the data collection phase of the project.

All prisoner volunteers were screened by the prison mental health staff to ensure neither the interviewer nor the participant (due to high predatory nature or acutely fragile mental health status) would be at risk by their participation. Prisoners who were not screened out were called to participate and had the research purpose, goals, content and procedure explained to them. Verbal consent was obtained before proceeding with the interview. All participants were regularly reminded that they were free to decline to answer any questions, and were able to withdraw from the interview at any time.

The interview team, which was experienced in interviewing forensic populations, was selected from the Australian Institute of Criminology's Drug Use Monitoring in Australia (DUMA) project in WA. Training in Indigenous cultural sensitivity and awareness was provided by a Community Liaison Officer at the Office of the Inspector of Custodial Services, and the advice from the Indigenous Peer Support Officers at each prison was followed. The interviews averaged 75 minutes in length and all participants were offered refreshments. As a requirement of the ethics clearance, following every interview participants were debriefed immediately by a mental health worker (provided by the Department of Corrective Services, Health Services) to ensure the interview had not distressed them. The participants were also asked whether, in future, they would prefer a telephone interview. Without exception, all indicted that they preferred and had enjoyed the experience of participating face to face, despite the sensitive nature of some questions. Many participants commented that they would not have been as forthcoming in a telephone interview as they did not trust the confidentiality of prison telephones.

Materials

The HoPE instrument was a self-report questionnaire investigating a broad range of mental, physical and sexual health behaviours and outcomes (for a detailed outline, see Kraemer et al., 2009). It was designed to gather both quantitative and qualitative data.

Individual, step-by-step question specifications were developed to train and assist the interviewers, to ensure they administered the questionnaire consistently.

Analysis

Analysis of the mental health data from the initial HoPE report (see Kraemer et al., 2009) was conducted using SPSS version 17.0. Specifically, 2x2 Chi Square analyses were used to compare results across gender and Indigenous status. Pearson Chi-Square statistic has been reported in all cases where there was an expected count greater than five in all cells. As Chi-Square analyses only indicate whether significant associations exist rather than exactly where they exist, the odds ratio for all significant associations has been included and explained (Field, 2005). An alpha level of .05 was used for all analyses.

Results

Previous mental health treatment

Overall, 54.11% of prisoners (n=79) reported receiving treatment for an emotional or mental health problem in the past (see Table 2). Emotional or mental health problems were defined as any psychological concern or disorder resulting in the attendance to a medical profession (doctor, nurse, psychiatrist or psychologist). Treatment was defined as attending a medical professional for help with a mental health problem, and was not defined by the outcome of the attendance or the length of time attended.

Table 2. Participant response to question on having received treatment for an emotional or mental health problem

	Indigenous				Non-Indigenous				Total	
	Female	%	Male	%	Female	%	Male	%	Total	%
Yes	12	57.1	5	22.7	24	70.6	38	55.1	79	54.1
No	9	42.9	17	77.3	10	29.4	31	44.9	67	45.9
Total	21	100	22	100	34	100	69	100	146	100

Chi Square analyses indicated a significant association between gender and having received treatment for a mental health problem, $\chi^2(1) = 4.57$, $p < .05$, and Indigenous status and previous treatment $\chi^2(1) = 5.21$, $p < .05$. The odds ratio for gender and treatment was 2.10, suggesting females were more than twice as likely as males to have received mental health treatment. The odds ratio for Indigenous status and treatment indicated that non-Indigenous people were 2.32 times more likely to have received treatment or assessment than Indigenous people. Further Chi Square analyses indicated no significant association between non-Indigenous male and female treatment history, $p > .05$, but a significant association between Indigenous male and female treatment history, $\chi^2(1) = 5.32$, $p < .05$. Based on the odds ratio, Indigenous females were 4.59 times more likely to have received mental health treatment than Indigenous males.

Reasons for previous treatment

Some participants cited multiple reasons for receiving treatment for mental health problems; therefore percentages may exceed 100%. Depression was cited by 75% (non-Indigenous n=19; Indigenous n=8) of female prisoners as the reason for receiving treatment, followed by anxiety (33.34%; non-Indigenous n=10; Indigenous n=2), and schizophrenia (5.56%, n=2). Males also most commonly reported depression (41.86%; non-Indigenous n=16; Indigenous n=2), followed by stress, anxiety or coping problems (20.93%, non-Indigenous n=8; Indigenous n=1), schizophrenia, other hallucinations, delusions or paranoia, and post-traumatic stress disorder (each 6.98%, n=3), and bipolar disorder, suicidal ideation/tendencies, anger, and grief (each 4.65%, n=2).

Chi Square analyses could only be conducted examining gender with depression and anxiety because cell counts were greater than five. Too few male Indigenous participants reported experiencing depression and anxiety to conduct tests based on Indigenous status. Chi Square analyses between gender and experiencing depression revealed a significant

association, $\chi^2(1) = 13.81$, $p < .05$, with the odds ratio indicating female prisoners had been treated for depression at a rate of 3.84 times that of male prisoners. Analyses also indicated a significant association between non-Indigenous prisoners and depression, $\chi^2(1) = 10.22$, $p < .05$, with the odds ratio indicating non-Indigenous females were 5.21 times more likely than non-Indigenous males to have been treated for depression.

Chi Square analyses also found a significant association between gender and anxiety, $\chi^2(1) = 3.96$, $p < .05$, with the odds ratio indicating female prisoners experienced anxiety at a rate of 2.55 times that of male prisoners. Analyses also indicated a significant association between non-Indigenous prisoners and anxiety, $\chi^2(1) = 4.14$, $p < .05$, with the odds ratio indicating non-Indigenous females were 3 times more likely than non-Indigenous males to have been treated for anxiety.

Current Treatment

Of the 79 participants who reported previous treatment for a mental health problem, 37.97% (n=30) reported currently taking prescribed psychiatric medication. Of these, 43.33% (n=13) were non-Indigenous females, 16.67% (n=5) were Indigenous females, and 40% (n=12) were non-Indigenous males. No Indigenous males reported taking prescribed psychiatric medication. Chi Square analyses revealed a significant association between gender and taking prescribed psychiatric medication, $\chi^2(1) = 4.061$, $p < .05$. The odds ratio indicates that females were 2.56 times more likely to be taking psychiatric medication than males.

Twenty percent of all participants (n=29) also reported receiving other forms of treatment or support for a current emotional or mental health problem, including structured support (e.g. counselling/psychotherapy, prison support programs, community support services) and unstructured support (e.g. peers). Chi Square analyses revealed a significant association between gender and current engagement in treatment/support, ($\chi^2(1) = 18.585$, p

< .05, with females being 1.5 times more likely than males to be receiving treatment or support for emotional or mental health problems. There was no significant association between Indigeneity and current engagement in treatment/support.

Illicit Substance Use

The majority of participants (83.56%; n=122) reported previously using illicit drugs with no significant association between drug use or dependency and gender or Indigenous status. Two-fifths of participants (41.78%; n=61) reported feeling dependent on one illicit substance; and 22.60% (n=33) reported dependence on 2 or more illicit substances. Of the 79 participants who reported previous mental health treatment, 88.61% (n=70) had previously used drugs, 39.24% (n=31) felt dependent on one illicit substance, and 22.78% (n=18) felt dependent on 2 or more illicit substances. There was no significant association between previous mental health treatment and illicit substance use or dependency.

Kessler-10

The Kessler-10 (K-10) measure is a 10-item self-report questionnaire intended to yield a global measure of 'psychosocial distress' based on questions about the level of anxiety and depressive symptoms in the most recent four-week period (Kessler et al., 2003; NSW Department of Health, 2002). Research has supported the reliability and validity of the K-10 as a measure of psychological distress (Andrews & Slade, 2001; Dal Grande, Taylor & Wilson, 2000; Furukawa, Kessler, Slade & Andrews, 2003; Ware, Kosinski & Keller, 1996).

Within the current sample, distress was predicted to be affected by the length of time spent in prison, with the assumption that people who have been recently sentenced to imprisonment will be more distressed than people who have 'settled' into the prison environment. However, contrary to this prediction, correlation analyses found no relationship between distress and amount of time served, or distress and total sentence length.

The majority of participants (60.96%) met the criteria for experiencing no significant feelings of distress. One-fifth of participants (21.92%) met criteria for experiencing mild or moderate levels of distress, consistent with a diagnosis of mild or moderate depression or anxiety disorder, and 17.12% met criteria for severe levels (see Figure 1 for differences across gender and Indigenous status).

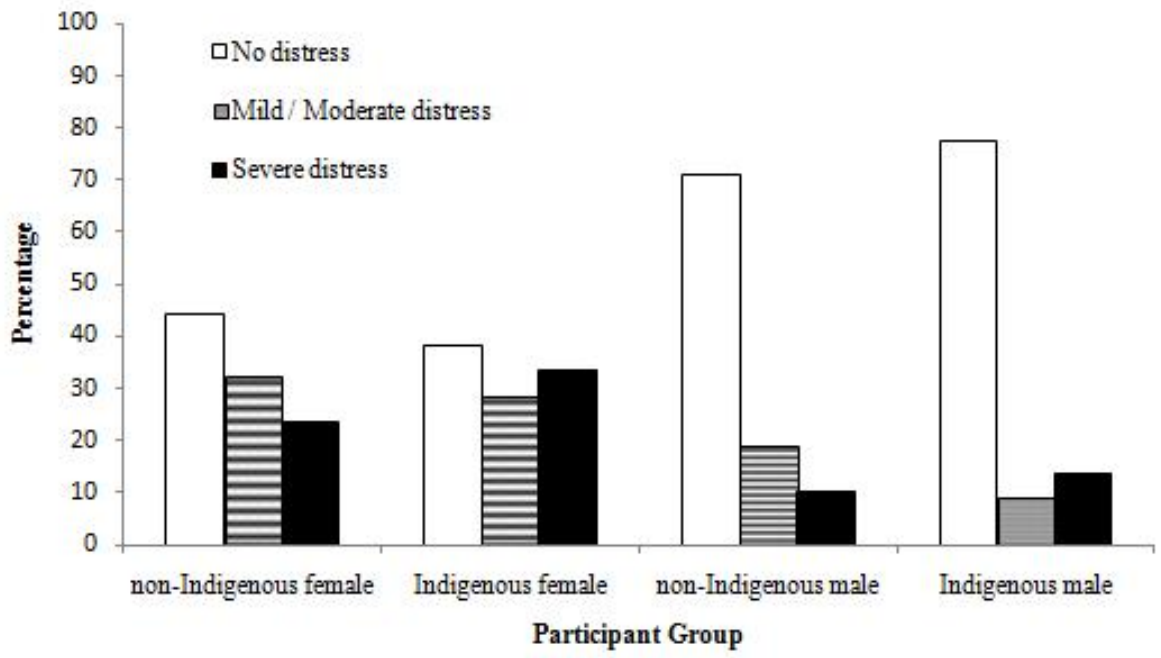

Figure 1. K-10 classifications across gender and Indigenous status

Chi Square analyses indicated a significant association between gender and level of distress, $\chi^2(1) = 13.867$, $p < .05$. Further analyses determined gender to be significant for no distress, $\chi^2(1) = 13.584$, $p < .05$, and for severe distress, $\chi^2(1) = 6.405$, $p = .05$. The odds ratio suggested that males were 3.7 times more likely than females to experience 'no distress' based on their responses to the K-10. Further, females were 3 times more likely than males to experience 'severe distress'. There was no significant association between Indigeneity and any distress rating or between gender and mild or moderate distress.

Self Harm

Results on self harm did not show significant differences based on gender or Indigenous status. However 29.09% of females (non-Indigenous n=10; Indigenous n=6) and 20.88% of males (non-Indigenous n=15; Indigenous n=4) reported deliberately harming or injuring themselves. The most common method was cutting/slashing (68.75% of females, 63.16% of males). Other methods cited across both genders included burning (n=2), blunt force injuries (n=4), strangulation (n=1) and refusing food or water or binge-eating (n=2). Females were more likely than males to report self harming in prison on their current sentence than in the community (50% and 26.32% respectively); however, this was not significant. Females reported self harming mainly to relieve tension or pain (68.75%%, n=11), with other reasons including anger, frustration, not liking themselves, grief, to feel something, to make themselves feel better or to hurt themselves so others could not. Males reported self-harming to relieve tension (26.32%, n=5) anger, frustration, to get back at family members, to regain self-control, to move to another prison, jealousy, experimentation, worry and to stop a friend self-harming. Self harming was significantly associated with previous treatment for depression, $\chi^2(1) = 12.51$, $p < .05$, but not anxiety or history of sexual abuse.

Suicide

Results on suicide did not show significant differences between male and female prisoners; however, the descriptive statistics show a concerning level of mental distress. About half of all prisoners (56.36% of females, n=31; 47.25% of males, n=43) had thought about suicide at some point during their life. Of these, female prisoners tended to report their thoughts on suicide had increased since imprisonment, whereas male prisoners reported decreased suicidal thoughts (see Figure 2).

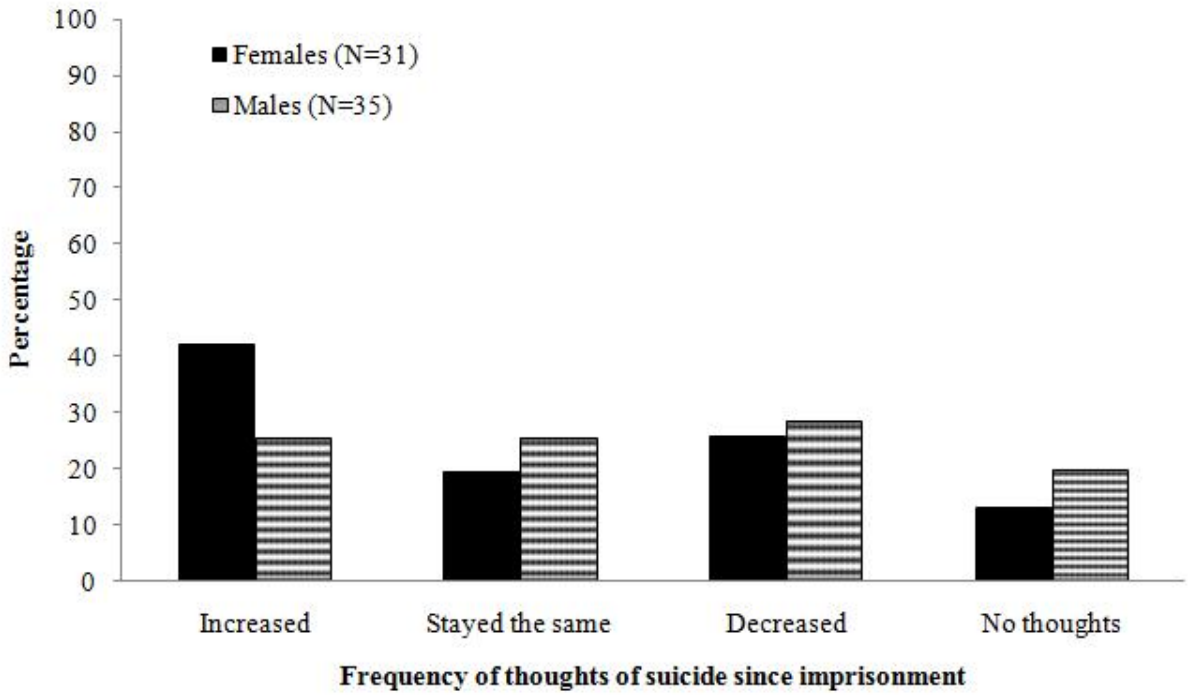

Figure 2. Changes in frequency of suicidal thoughts since imprisonment

When asked about previous suicide attempts, 53 females and 88 males responded. Worryingly, 35.85% of females (n=19) and 29.55% of males (n=26) had previously attempted suicide. Females most commonly reporting trying to hang themselves (36.84%, n=7), cutting or stabbing themselves (31.58%, n=6) or overdosing on tablets (21.05%, n=4). Males most commonly reported cutting or stabbing themselves (34.62%, n=9), followed equally by hanging or overdosing on tablets (23.08%, n=6). The majority of suicide attempts were reported to have occurred in prison (63.16% of females, n=12; 69.23% of males, n=18). The length of time between the survey and the last suicide attempt was not ascertained.

Discussion

The analyses on mental health reported here support previous research indicating the prevalence of mental health problems is high within the maximum security prisons. One in five participants was currently receiving mental health treatment and over half of the prisoners had previously received treatment for a mental health problem. Females were more

than twice as likely as males to have a history of mental health treatment. Non-Indigenous prisoners were also more than twice as likely as Indigenous prisoners to have previously received mental health treatment. Of particular interest, Indigenous females were more than four times more likely to have received treatment than Indigenous males.

Depression, anxiety and, to a lesser extent, schizophrenia were the most cited reasons for previously receiving treatment. Female prisoners reported depression at almost four times, and anxiety at two-and-a-half times, the rate of males. These findings explain the increased rate of female prisoners taking prescribed psychiatric medication compared to males. More notably, Indigenous female prisoners reported receiving treatment for depression at more than five times the rate of Indigenous males, and anxiety at three times the rate. This indicates a possibility of unwillingness or restricted ability of the Indigenous male population to seek and receive help or treatment, or may indicate that current screening tools and programs are culturally inappropriate and may not pick up the mental health issues of Indigenous people, especially those from remote areas. This presents a challenge to mental health workers in screening and treating Indigenous prisoners, particularly Indigenous male prisoners. Failure to successfully screen and treat such prisoners will result in undetected mental health problems in this group which may increase their risk of recidivism.

In the 2007 National Survey of Mental Health and Wellbeing (NSMHW; ABS, 2008a), almost one in two general community members reported experiencing a mental disorder at some point during their life. Females were also more likely to report experiencing an anxiety or affective disorder than males. This suggests that the prevalence of experiencing a mental disorder in this sample of prisoners was no different from the prevalence in the general community, and that depression and anxiety are reported more often by females in the general community than males. The NSMHW report also indicated that community respondents who had been incarcerated at some point reported anxiety disorders at twice, and

affective disorders at three times, the rate of respondents who had never been imprisoned (ABS, 2008a). The current study made similar findings although additionally suggests this may be due to the under-detection of mental disorder in male prisoners.

Four out of five participants reported using illicit drugs, and although there was no significant association between mental health treatment and substance use or dependence, one-third of participants who had received mental health treatment reported dependence on at least one illicit drug. This indicates that there may be a high incidence of comorbidity of mental health issues and substance abuse in this prison population, and suggests that up to thirty percent of this cohort may be at an increased risk of reoffending. It highlights the need for screening and treatment of mental health problems, including substance abuse, in the prisoner population.

Successful suicide in prison is a rare occurrence, with one-quarter of suicides occurring within the first week of imprisonment, and 15 months being the mean period of time served (Suicide Prevention Taskforce, 2002). Nationally in 2007, nine prisoners (one Indigenous) died due to self-inflicted means, with hanging the cause of seven deaths (Curnow & Larson, 2009). The WA Department of Corrective Services website assures that "prisoners who are at risk of self harm or suicide are placed on the At-Risk Management System (ARMS) - a suicide prevention strategy for people in custody. They are offered counselling and are closely watched while on the system."

In the general community, males tend to commit suicide at a greater rate than females, with research suggesting Indigenous males commit suicide at a greater rate than non-Indigenous males (Steering Committee for the Review of Government Service Provision [SCRGSP], 2007). We found about half of all prisoners had previously had suicidal thoughts with little difference in rate across gender. However, as indicated in Figure 2, female prisoners tended to report increased thoughts on suicide since imprisonment, although one in

five females reported their suicidal thoughts had decreased since imprisonment. Male prisoners tended to report decreased suicidal thoughts since imprisonment and an equal number reported an increase in thoughts and a stabilisation in thoughts. One in three female prisoners and one in four male prisoners had attempted suicide before, with two-thirds of these prisoners reporting their last attempt was in prison. The Suicide Prevention Taskforce (2002) suggested that maximum security prisoners and those on remand are at greater risk of suicide, possibly explaining why this sample had high rates of previous suicide attempts. A review of Australian suicide statistics indicated that in 2008, suicide comprised 1.5% of recorded deaths (ABS, 2010). Attempts at suicide tend not to be recorded; therefore, comparisons between suicide attempts in prison and successful suicide in the community should not be made. However, understanding reasons behind suicide attempts, and identifying methods for such extreme behaviours can assist prison staff screen and offer assistance to at-risk prisoners.

The most common method of attempted suicide by females was hanging, followed by cutting or stabbing themselves; and for males, cutting or stabbing themselves, followed by hanging or overdosing on tablets. In 2008, successful suicide by males in the community was most commonly committed by hanging, followed by poisoning by substances other than drugs and firearms (ABS, 2010). Successful suicide by females was also most commonly committed by hanging, followed by poisoning by drugs, and poisoning by other substances (ABS, 2010). Contact with sharp objects (e.g. cutting or stabbing) was the method least cited as a cause of death in the community. Cutting or stabbing as a method of suicide may be overrepresented in this sample of prisoners because two precursors to successful suicide are not met. Mann (2002) suggested suicide has two dimensions: “the degree of medical lethality or damage resulting from the suicide attempt”, and a dimension that “relates to suicidal intent and measures the degree of preparation, the desire to die versus the desire to live, and the

chances of discovery" (p.303). Prisoners attempting suicide in prison are less likely to have access to lethal objects thus reducing the degree of damage than can be inflicted, and are more likely to be discovered before their attempt is successful.

Self-harm has been cited as having many survival functions including: coping with sexual, physical and emotional abuse, and regulating emotions including depressive symptoms, anxiety, and tension (Liebling, Chipchase & Velangi, 1997; Jeglic, Vanderhoff & Donovick, 2005). Self-harm has also been cited as a method of solving problems, manipulating the environment (e.g. changing prison placements), gaining attention, intimidating others, or achieving other secondary gains (Jeglic et al., 2005). In the current study, almost one-third of female, and one-fifth of male prisoners had a history of self-harming, supporting previous research that indicated approximately 30 percent of offenders have engaged in self-injurious behaviour (Brooker, Repper, Beverley, Ferriter & Brewer, 2002). Females were more likely than males to self-harm in prison.

Both male and female prisoners claimed they self-harmed mainly to relieve pain or tension. To explore possible reasons for this, further analyses discovered that even though self harm and history of sexual abuse were not significantly associated, 68.75 percent of female and 31.58 percent of male prisoners who self-harmed, reported a history of sexual abuse. After controlling for sexual abuse, female prisoners were still almost one-and-a-half times more likely to report self-harming behaviours. Previous treatment for depression (indicative of depressive symptomatology) was significantly associated with self-harming behaviours, and as females reported receiving treatment for depression at a greater rate than males, this may explain the higher rates of self harm. No association was found between self harm and Indigenous status. In contrast, the 2004-05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) reported Indigenous people were twice as likely to be hospitalised for intentional self-harm as non-Indigenous people (AIHW, 2009).

In regards to psychosocial distress, female prisoners were three times more likely than male prisoners to be experiencing severe distress at the time of interview. Female prisoners also commented feeling 'stressed' about their children outside prison and their finances. Female prisoners with 'severe distress' outcomes were twice as likely to have previously received treatment for depression as males, and more likely to have been treated for anxiety (one-third compared to one-fifth). The NSMHW reported females in the general population experienced high or very high distress at a greater rate than males (11.57% compared to 7.22%) and indicated "a strong association between high scores on the K10 and the diagnosis of anxiety and affective disorders" (ABS, 2008a, p.19), which may help explain these findings. Analyses also confirmed that prisoner sentence length and amount of time already served were not correlated with reported level of distress. Interestingly, the 2004-05 NATSIHS found Indigenous people were twice as likely as non-Indigenous people to report high or very high distress (AIHW, 2009). The current study did not find any significant association between distress and Indigenous status. This may be explained by the stability and structure of imprisonment, and the absence of drugs and alcohol.

Limitations

The sample size of the HoPE project was appropriate for piloting the instrument and providing snapshot data on mental health; however, the results are not generalisable to the WA prison population. Indigenous prisoners were also under-represented. Work is currently in place to replicate the HoPE study on a state-wide basis, representative of prisoners in WA.

Conclusions & Recommendations

The mental health of prisoner populations is an under-researched area in Western Australia and nationally. Our HoPE pilot study indicated mental health patterns in prison are similar to patterns in the community, although suicide attempts and self-harming rates are escalated. It is critically important that prisoner mental health data is collected as a basis for

policy development to ensure evidence-based treatment is provided in the prison, and following release. Specifically screening Indigenous and male prisoners to detect undiagnosed mental health problems is necessary. It is, therefore, recommended that mental health services continually be updated with information pertaining to the population they are managing and effective strategies to improve the mental health of maximum security prisoners are implemented.

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