

## Chapter 5: Improving health in NHSGGC's prison settings

Scotland has one of the highest rates of imprisonment in Europe and a rising prison population (Scottish Government 2011a). Most offenders are re-offenders, 78% have previously been on remand and 70% have served a prison sentence (Scottish Prison Service 2011). Most offenders come from areas of deprivation; the Greater Glasgow and Clyde region is disproportionately affected. 80% of prisoners are unemployed at the time of sentencing and under 10% gain employment after liberation (Marshall et al 2001). Females comprise 5% of the prison population but the female population has doubled in the past decade (Commission on Women Offenders 2012).

### Prisoner health

Physical and mental illness in the prison population is disproportionately high compared to the general population. This is due to socio-economic disadvantage, lifestyle and behavioural factors such as substance misuse, smoking and poor nutrition (SEU 2002; Graham 2007). Many of the prison population are a product of the care system and at some points in their lives have experienced physical, emotional or sexual abuse. Levels of educational attainment are low and unemployment levels are high amongst offenders. Imprisonment can contribute to poor health and exacerbate social exclusion (SEU 2002; Bradley 2009). Many prisoners experience mental illness (predominantly anxiety and depression) following incarceration, lose contact with families and are homeless, unemployed and socially isolated on liberation (Bradley 2009). The Better Health, Better Lives report (Brutus et al 2012) provides a national analysis of prisoner health needs. A more detailed regional health needs assessment for Greater Glasgow and Clyde (Gillies et al 2012) highlights several concerns:

- **Alcohol** misuse is linked to violent crime (MacLeod et al 2009). Half of prisoners were drunk whilst offending (Scottish Prison Service 2011). Prisoners with alcohol problems have complex needs including dual diagnoses (mental illness, substance misuse, physical health problems) and problems with housing,

employment and relationships. Overall, 44% of men and 48% of women in prison were found to have an alcohol problem compared to 13% of men and 9% of women in the general population and this is especially problematic amongst remand prisoners (Parkes et al 2010).

- **Drug misuse** is associated with psychiatric morbidity, alcohol dependence, blood borne viruses (BBV) and social exclusion including homelessness, unemployment and relationship breakdown (ISD 2012a). Problem drug users are at risk of premature death because these factors have a negative impact on life expectancy. The rate of drug related death in Scotland in 2010 was 9 per 100,000 population (GRO 2011). 70% of prisoners report use of illegal drugs in the 12 months before being in prison; over 40% said that they were under the influence of drugs at the time of their offence, often committed to get money for drugs (Scottish Prison Service 2011). Over ten thousand new clients access drug treatment services in Scotland each year and 20% funded their drug use by crime and 20% had been in prison (ISD 2012a).
- **Smoking** prevalence overall is 76% in the 2011 Scottish Prisoners Survey compared to a Scottish population reported rate of 26% men and 25% women. Local data suggest that the rate for females in HMP Greenock is over 90% (Scottish Government 2011b; ISD 2012b). Tobacco is used as a coping mechanism and also a currency in prisons, but many offenders do want to quit.
- **Oral health** is very poor compared to the general population. Whilst current data is not readily available, a major study in 2002 noted that 76% of men and 89% of women had unmet dental care needs (Jones et al 2004). It may not be viewed as a priority by prisoners who live complex and difficult lives (Bradnock et al 2001). Prisoners are less likely to engage with preventative health care and are less likely to attend a dentist unless they are experiencing dental pain (Bradnock et al 2001; Graham 2007).
- **Chronic diseases:** Although over 90% of those incarcerated are under 50 years of age (Scottish Government 2011a), prisoners are at increased risk of chronic

disease due to the high prevalence of risk factors for poor health among this group. In the 2011 Scottish Prisoners Survey 29% of participants in HMP Barlinnie and 28% in HMP Greenock reported having one or more long-term illness (Graham 2007; NHS Scotland 2010; Scottish Prison Service 2011).

- **Mental health problems** and co-morbidity of mental health and substance misuse problems are common. A 1998 Office of National Statistics study of 1437 prisoners in England and Wales found 90% of prisoners had one or more psychiatric disorder (Sirdifield et al 2009) and 80% of prisoners had two or more psychiatric disorders, most commonly a psychiatric illness and substance misuse. Around 15% of the prison population had severe and enduring mental illness. The Commission on Women Offenders (2012) reports a rate of 80% mental illness among female offenders in Scotland.
- **Blood borne viruses:** Offenders are at risk of BBV through high-risk sexual behaviour, drug and alcohol misuse (Green et al 2003a; Graham 2007). Prisoners and young offenders are more likely to have more lifetime sexual partners, higher risk partners (sex workers and/or intravenous drug users), and unprotected sex than the general population (Green et al 2003b; Buston 2008). Hepatitis C (HCV) is most commonly associated with a history of injecting drug use and approximately 90% of intravenous drug users have been imprisoned at some point during their injecting careers (Ball 1995). The prevalence of HIV and Hepatitis B is low in Scottish prisons but a significant proportion of prisoners are infected with HCV (Green et al 2003a; Champion et al 2004). A national study of HCV prevalence among Scottish prisoners found a prevalence of 24% in HMP Greenock and 29% in HMP Barlinnie (Taylor et al 2012) compared to 1% in the general population, and many of these infections remain undiagnosed.

## **Female offenders**

Female offenders are an especially disadvantaged group. Many women have complex needs related to social circumstances, histories of abuse and gender based violence as well as addictions problems. Most women in prison have mental health problems. Their children have greater risk of physical and mental health problems and of becoming offenders. Prison is expensive for men and women and has little impact upon offending with 70% of women given short term sentences being reconvicted within 2 years (Commission on Women Offenders 2012).

## **Prisoner families**

Offending and incarceration affect the health of prisoners' families, creating inter-generational health inequalities. In the 2011 Scottish Prisoners Survey, 48% of those participating reported having one or more dependent child (Scottish Prison Service 2011). A third were caring for their children before being incarcerated and 42% will be caring for their children on liberation. This is greater for female offenders. Prisoner families can be victims of crime and frequently experience stigma, loss of income and housing uncertainty. Children are at greater risk of poor health. Approximately 30% of children with imprisoned parents go on to develop physical health, mental health and addictions problems and have substantially greater chance of offending (Commission on Women Offenders 2012).

## **National policy**

The health and welfare of prisoners and their families is highly linked to poverty. It has been a policy concern historically, through the prisons reform movements and, internationally, through the World Health Organisation (Moller et al 2007). Criminal justice policies developed by the Scottish Government focus upon reducing (re)offending and the personal, social and economic harm it creates, acknowledging the relationship between offending and health.

The strategic link between national and local policy is provided by Community Justice Authorities who include amongst their objectives the improvement of health and welfare of offenders in and leaving prison and their families in partnership with

the NHS. Several linked policies have shaped the public health approach to prisons and offenders:

- The transfer of responsibility for healthcare (including the employment of staff) from the Scottish Prison Service to NHS boards in 2011 to enhance provision and through-care connections with community health services. NHSGGC have taken responsibility for healthcare in HMP Barlinnie, HMP Greenock and HMP Low Moss. We currently have between 40 and 50 female offenders in HMP Greenock but will be responsible for delivering healthcare in the new national female prison that is being built in the NHSGGC area.
- The Scottish Government's Reducing Reoffending Programme (RRP) has several goals including reform of sentencing policy and an explicit aim of ensuring effective reintegration into the community by ensuring that employment, health, accommodation and other needs are met. This places a health focus upon through-care and rehabilitation.
- The Commission on Women Offenders (2012) has profoundly shaped Scottish Government policy. The NHS has an ongoing role in supporting the refocusing of provision to community justice centres with multi-disciplinary teams as alternatives to custody: appropriate health services in the new female prison and a series of community mental health initiatives.
- Better Health, Better Lives (Brutus et al 2012), the national framework for public health in prisons, builds upon substantial Scottish Prison Service (SPS) health promotion policies in areas ranging from nutrition to suicide prevention, and provides a framework for regional action in prisons.

Wider national health and social policies have also prioritised offending and prisons, for example, The Same as You Review (Scottish Government 2012a) focuses upon the needs of people with learning disabilities; The Mental Health Strategy (Scottish Government 2012b) focuses upon female offenders; The Road to Recovery (Scottish Government 2008) provides direction for addictions policy; and prisoners and ex-offenders are an important element of equalities in anticipatory care in the national Keep Well programme.

## Local Implementation and Practice

NHSGGC has responded to the national policy agenda with a robust strategy and programme in partnership with a number of statutory and community partner agencies. An Offenders and Prisons Health Improvement Group manage our strategic system-wide approaches and ensure that all parts of the system take account of the needs of prisoners and offenders. Some important actions to date include:

- Completing a health needs assessment (Gillies et al 2012) with the prisons that has informed the development of an evidence-based public health programme.
- Developing an ambitious health improvement programme with each prison for 2013-15. The programme has 30 objectives in health areas including mental health, drugs and alcohol, smoking cessation, physical activity, sexual health, BBV, parenting, health at work, anticipatory care and long term conditions, oral health and through-care.
- Ensuring strong strategic connections between policy and practice regionally and nationally. Our Glasgow City CHP Director chairs the national health and prisons network (HIS) and our Director of Public Health chairs the Glasgow Women's Justice Centre initiative.

NHSGGC support several multi-agency initiatives which aim to improve health in community settings that link closely to offending. This includes supporting policies to reduce offending and the health problems it creates, for example, violence reduction schemes. In addition, NHSGGC are a partner in the One Glasgow initiative with Strathclyde Police to reduce offending amongst young people whilst addressing health needs. We support the process to develop a pilot community justice centre for female offenders in Glasgow. We are reviewing through-care for those leaving prisons in line with a current national development framework. Core partners in developing our strategic approach are North Strathclyde and Glasgow City Community Justice Authorities. Together we are jointly developing a model to inform our public health beyond the prisons walls to: support the health of victims of crime; support the families of those sent to prison; prevent crime; intervene early for those at risk; and support health through-care and rehabilitation for those leaving prisons.

## Local Practice

In partnership with our colleagues in SPS, we are enhancing the delivery of health services and public health interventions in our prisons and key achievements are:

- A prison-based team are delivering the Keep Well programme of anticipatory health care checks in each prison. They have completed over 300 health checks this year. In addition, prison-based NHS staff have continued to deliver broad based health checks called well man and well woman to prisoners of all ages.
- We are training and mentoring staff in each prison in smoking cessation approaches that match our community services and are working to increase significantly the provision of smoking cessation groups to meet need.
- We are piloting an activity on referral project for the most vulnerable prisoners including those with disabilities, mental health problems and older prisoners. This scheme builds upon the live active programme in the community and offers a range of physical activities and health education sessions. Prisoners are referred through our Keep Well health reviews based upon need.
- We are supporting the implementation of parenting programmes for offenders and their families in HMP Barlinnie and we are developing plans to scale up parenting programmes across the three prisons in partnership with SPS staff in prisons and at SPS HQ.
- We are developing a health education programme to cover key health issues including mental wellbeing and relationships. We will explore the role of peer educators.
- We are supporting prisons to complete health promotion initiatives and policy developments to retain or achieve Healthy Working Lives Awards. HMP Barlinnie and HMP Greenock undertake health activities for both staff and prisoners as part of their schemes.
- We are reviewing the sexual health and blood borne virus pathways for all prisoners with the Sandyford Initiative and the Brownlee Centre for Infectious Diseases which provides a range of adult treatment services. We have improved the sexual health service provision for female offenders through the development of an in reach service at HMP Greenock.

- The healthcare team is developing a new recovery-focused model of provision to support those offenders with addictions problems. This is supplemented by the recruitment of dedicated staffing resource to identify and support those with alcohol problems, including those on remand.
- We are increased the capacity to deliver alcohol brief interventions in the prison setting by training NHS and SPS staff and we have recently recruited alcohol brief intervention nurses to support offenders including those on remand sentences.
- We have invested in improved facilities for dental services and recruited more dentists to meet need. We are currently developing an approach to improve oral health promotion.
- We have contributed to a national work stream which is proposing the development a stepped model of care for mental health incorporating mental health promotion, prevention and early intervention. This model will include staff training in mental health.
- We are undertaking a project to establish the levels of learning disabilities amongst our prison population and to identify their health needs.
- We are supporting the development and evaluation of a pilot Women's Justice Centre in Glasgow.

## **Key Issues**

A number of key issues make this public health topic especially important and will shape our work in future years:

- Potential restrictions on public finances, welfare benefits and employment opportunities, combined with relatively high socio-economic disparities in NHSGGC, may result in an increase in offending with consequent impact on health of offenders, families and victims. This makes public health interventions especially important.
- National policy is recognising that incarceration generally does not achieve the objective of reducing reoffending and the health service has an important role, with partners, in supporting alternatives to prison.

- Public health has a role in upstream prevention of offending through our work on social conditions and circumstances. For example, given that most offenders come from and return to areas of deprivation, an increasing focus upon these areas in partnership with community planning, may reduce offending and health inequalities. Equally, public health has an important role in supporting legislation and policy that reduces crime, for example, policies on minimum alcohol pricing.
- The increasing recognition of the needs of female offenders. By adopting an inequalities lens, we know most of these women are extremely vulnerable. The NHS has a role in creating a paradigm shift in the way we view and respond to female offenders.
- Short-term prisoners and remand prisoners can often miss out on health and social care interventions. Yet these are very often the individuals with high and complex needs and they should be a priority group for public health.
- A major barrier to re-integration for many offenders is not just addiction and poverty but wider social stigma. This can be a barrier to developing supportive social networks and relationships and to gaining employment and income. NHSGGC has experience of addressing stigma and discrimination, and promoting recovery, peer support models and citizenship for those with addictions and mental health issues and can assist in promoting wider social changes in the longer term.
- The prison population is changing. It is slowly becoming older overall (Graham 2007) and there has been a significant increase in female prisoners over 30 years (Commission on Women Offenders 2012). It is therefore necessary to plan ahead to meet the needs of older prisoners who will have greater levels of physical illness, disability and chronic conditions. It is also important to more clearly establish the levels of learning disabilities and of mental illness amongst our offenders in order to shape services and through-care more effectively for them.

## **Priorities for Action**

### **Priority 1: Develop a 'whole prison' approach to health improvement**

We need to:

- Implement and evaluate the agreed programme of service development and health improvement objectives in Low Moss, Barlinnie and Greenock Prisons between 2013 and 2015.

### **Priority 2: Reduce potential for adverse impact of imprisonment on the health of prisoners and their families**

We need to:

- Work with partners including the Community Justice Authorities, Scottish Prison Service, nationally funded project by Sacro and Wise group to promote health in through-care and social inclusion of those leaving prison.
- Support prisoners' families, alongside Families Outside, by increasing their access to support services and parenting programmes in the community, by increasing the number of health and parenting programmes for those in prison, and by developing practitioners training.
- Evidence based-parenting programmes should be more widely available in Barlinnie, Greenock and Low Moss prisons, building on the successful use of Triple P in Barlinnie and linked to enablement of family contact.

### **Priority 3: Ensure that the needs of specific subgroups of prisoners are understood and met**

We need to:

- Work with partners to address the physical health, mental health and addictions needs of female offenders and their families within the new national prison service in NHSGGC and through the new Community Justice Centre, in line with recommendations from the Commission on Women Offenders (2012).

- Focus upon providing evidence-based supports to those with alcohol addiction, as prison provides an opportunity to support abstinence. This includes alcohol screening and brief interventions.
- Ensure consistent approaches to BBV vaccination, testing and treatment are in place across local prisons, reduce the number of undiagnosed HCV infections, and increase the proportion of diagnosed cases accessing in-reach treatment.

## Glossary of Terms

<b>BBV</b>	<b>Blood Borne Virus</b>
<b>Brief Intervention</b>	<b>A brief intervention is the provision of information, advice and encouragement to a person to consider the positive and negative impact of their behaviour. Help is then provided if the person decides to make changes</b>
<b>GRO(S)</b>	<b>General Register for Scotland</b>
<b>HCV</b>	<b>Hepatitis C Virus</b>
<b>Healthy Working Lives Award</b>	<b>The Healthy Working Lives Award programme supports employers and employees to develop health promotion and safety themes in the workplace in a practical and logical way, that's beneficial to all</b>
<b>HIV</b>	<b>Human Immunodeficiency Virus</b>
<b>HMP</b>	<b>Her Majesty's Prison Service</b>

<b>Morbidity</b>	The presence of disease or medical conditions
<b>NHSGGC</b>	NHS Greater Glasgow and Clyde
<b>Needs Assessment</b>	A formal process undertaken to assess the health and social care needs of a given population
<b>Socio-economic</b>	Involving a combination of social and economic matters
<b>Social Exclusion</b>	A situation in which some members of a society do not feel part of that society because they are poor or do not have a job
<b>SPS</b>	Scottish Prison Service

## Acknowledgements

<b>Catriona Carson</b>	<b>Project Manager</b>	<b>Public Health Directorate, NHSGGC</b>
<b>Rona Dougall</b>	<b>Public Health Researcher</b>	<b>Public Health Directorate, NHSGGC</b>
<b>Michelle Gillies</b>	<b>Clinical Lecturer</b>	<b>Department of Public Health, University of Glasgow</b>
<b>Lee Knifton</b>	<b>Health Improvement Lead</b>	<b>Glasgow City CHP, North East Sector</b>
<b>Gillian Penrice</b>	<b>Consultant Public Health Medicine</b>	<b>Public Health Directorate, NHSGGC</b>
<b>Janet Tobin</b>	<b>Health Improvement Lead</b>	<b>Glasgow City CHP, North East Sector</b>
<b>Joe Schofield</b>	<b>Programme Manager, Hepatitis C</b>	<b>Public Health Directorate, NHSGGC</b>

## References

Ball, A (1995) Multi-centre study on drug injecting and risk of HIV infection: a report prepared on behalf of the international collaborative group for World Health Organization Programme on Substance Abuse. Geneva: WHO

Bradley, K (2009) *Lord Bradley's review of people with mental health problems or learning disabilities in the criminal justice system*. Department of Health: London.

Bradnock G , White DA , Nuttal NM , Morris AJ , Treasure ET , Pine CM (2001) Dental attitudes and behaviours in 1998 and implications for the future. *British Dental Journal*, 190: 228–232.

Brutus L, Mackie P, Millard A, Fraser A, Conacher A, Hardie S, McDowall L and Meechan H (2012) *Better health, better lives for prisoners: A framework for improving the health of Scotland's prisoners*. Scottish Public Health Network: Edinburgh.

Buston K (2008) *Young offenders talk about sex and relationships*. MRC Social and Public Health Sciences Unit: Glasgow.

Champion JK, Taylor A, Hutchinson SJ, Cameron S, McMenamin J, Mitchell A, *et al* (2004) The incidence of Hepatitis C Virus infection and associated risk factors among Scottish prisoners: a cohort study. *The American Journal of Epidemiology*. 159 (5): 514-519.

Commission on Women Offenders (2012)  
[www.scotland.gov.uk/Resource/0039/00391828.pdf](http://www.scotland.gov.uk/Resource/0039/00391828.pdf). Accessed 1st May 2013

Gillies M, Knifton L and Dougall R (2012) *Prison health in NHS Greater Glasgow and Clyde: a health needs assessment*. NHS Greater Glasgow and Clyde: Glasgow.

Graham L (2007). *Prison Health in Scotland: A Health Care Needs Assessment*. Scottish Prison Service: Edinburgh.

Green J, Hetherington J, Heuston J, Whiteley C & Strang J (2003a) Heterosexual activity of male prisoners in England and Wales. *International Journal of STD and AIDS*. 14: 248–252

Green J, Strang J, Hetherington J, Whiteley C, Heuston J & Maden T (2003b) Same-sex sexual activity of male prisoners in England and Wales. *International Journal of STD and AIDS*. 14: 253–257.

General Register Office for Scotland (2011). Drug related deaths in Scotland 2010.

ISD (2012a) *Drug misuse statistics Scotland 2011*. Information Services Division, NHS Scotland: Edinburgh.

ISD (2012b) *Quality and Outcomes Framework statistics*. Information Services Division, NHS Scotland: Edinburgh.

Jones CM, McCann M, Nugent Z (2004) *Scottish Prisons' Dental Health Survey 2002*. Scottish Executive: Edinburgh.

MacLeod P, Page L, Kinver A, Iliasov A, Littlewood M and Williams R (2009) *Scottish Crime and Justice Survey: First Findings*. Scottish Government: Edinburgh.

Marshall T, Simpson S, Stevens A (2001) Health care needs assessment in prisons: a toolkit. *Journal of Public Health Medicine*. 23: 198–204.

Moller L, Stover H, Jurgens R, Gatherer A and Nikogosian H (2007) *Health in prisons: A WHO guide to the essentials in prison health*. World Health Organisation: Copenhagen.

NHS Scotland (2010) *Scottish Diabetes Survey 2010*. Scottish Diabetes Monitoring Survey Group, NHS Scotland: Edinburgh.

Parkes T, MacAskill S, Brooks O, Jepson R, Atherton I, Doi L *et al* (2010) *Prison health needs assessment for alcohol problems*. University of Stirling: Scotland.

Scottish Government (2008) *The road to recovery: a new approach to tackling Scotland's drug problem*. Scottish Government: Edinburgh.

Scottish Government (2011a) *Prison statistics Scotland 2010/11*. Scottish Government: Edinburgh.

Scottish Government (2011b) *The Scottish Health Survey 2010*. Scottish Government: Edinburgh.

Scottish Government (2012a) *The same as you? 2000-2012: Consultation Report*. The Scottish Government: Edinburgh.

Scottish Government (2012b) *Mental Health Strategy for Scotland: 2012-2015*. The Scottish Government: Edinburgh.

Scottish Prison Service (2011) *Scottish Prisoner Survey*. Scottish Prison Service: Edinburgh.

SEU (2002) *Reducing re-offending by ex-prisoners*. Social Exclusion Unit, HMG Cabinet Office: London.

Sirdifield C, Gojkovic G, Brooker C, Ferriter M (2009) *A systematic review of research on the epidemiology of mental health disorders in prison populations: a summary of findings*. *Journal of Forensic Psychiatry & Psychology*. 20 (1): 78-101.

Taylor A, Munro A, Allen E, Dunleavy K, Hickman M, Cameron S, Miller L (2012) *Hepatitis C Prevalence and Incidence among Scottish Prisoners and Staff Views of its Management*. University of the West of Scotland: Glasgow.