



# Preliminary research informing policy on remote alcohol monitoring in criminal justice: the Scottish experience

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## Abstract

**Objectives** To explore the views of Scottish offenders on the impact of alcohol on their experience of offending and their lives in general. Furthermore, to explore their views on the concept of remote alcohol monitoring (RAM) as a way to address alcohol misuse upon liberation from prison.

**Methods** A convenience sample of 12 serving offenders participated in one of three focus groups. Data were analysed using the principles of thematic analysis.

**Results** Analysis of the data revealed the significant impact of alcohol on the lives of the participants. Key themes included the amount and frequency of alcohol consumption; the association of alcohol with harm; the association of alcohol with offending; the previous attempts to reduce alcohol consumption and possible reasons for failure; and the views of participants on the utility of RAM in relation to crime prevention.

**Conclusions** Participants had significant issues with alcohol misuse prior to incarceration that had impacted on their offending and resulted in both health and social harms. Participants were generally positive but pragmatic about RAM, recognising that technology alone may not be

enough to change deeply ingrained and addictive behaviours.

**Keywords** Alcohol misuse · Violence prevention · Offender health

## Introduction

The United Nations Sustainable Development Goals, 2030, list the promotion of peaceful and inclusive societies as Goal 16, along with a subtext of violence reduction (United Nations 2015). The Scottish violence reduction unit (SVRU), an innovation unit of the Scottish police force, was created in 2005 to tackle, what was at the time, a significant issue with violence in Scotland. They were the first police unit to sit on the World Health Organisation's (WHO) violence prevention alliance (VPA) and over the past 10 years have introduced many innovative approaches in the field of violence prevention in Scotland, taking, as their lead, the WHO's public health approach to violence prevention (Reform UK 2014). This approach is one of prevention and support rather than simply enforcement and the SVRU work in partnership with many other organisations, including health and education, to put in place alternative models of primary, secondary and tertiary violence prevention across the WHO's now seven recommended strategies for violence prevention (WHO 2014). Levels of violence, and in particular homicide, serious assaults, and weapons offences, have reduced considerably in Scotland over the lifespan of the SVRU (Scottish Government 2015); while this reduction has been set against a backdrop of a worldwide reduction in violence particularly seen in high-income countries (WHO 2014) violence in Scotland has reduced at a faster pace than in

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other European nations (Eurostat accessed June 2016), and violence prevention is firmly embedded in the national policy framework.

This holistic and preventive approach extends to offending, and in recent years, the SVRU has sought to explore alternative forms of community justice that not only address the index crime, but some of the health issues, such as drug and alcohol misuse, that are often associated with offending. One such approach is the use of remote alcohol monitoring (RAM).

#### Alcohol and violent offending in Scotland

Violent crime in Scotland disproportionately affects more deprived areas of society and contributes to both the inequality gap and poorer health outcomes in that group. Alongside this, alcohol misuse, a major public health issue, is a contributing factor to many crimes of violence in Scotland and alcohol use disorders pervade the prison population (SPS 2014a, b; Scottish Government 2014). Seventy-three percent of adult male prisoners in Scotland had alcohol use disorders identification test [AUDIT (Babor and Higgins-Biddle 2001)] scores, over 8 indicating a hazardous drinking habit, while 36 % had scores in excess of 20 indicating possible dependence (Parkes et al. 2011). This is a pattern that is repeated globally, and although data on alcohol-related violence in many of the countries in the Global South are lacking; worldwide, there is a clear link between alcohol and the risk of violence perpetration and victimisation. In South Africa, where researchers have looked at victims of violence, 44 % judged their attacker to have been drinking at the time of the attack (WHO 2006).

Offenders are denied access to alcohol in prison and some receive support to address their alcohol issues, however, those serving short-term sentences do not automatically receive the same access to support services as long-term prisoners (Parkes et al. 2011). On release, they can be very vulnerable, psychologically, and socially, to repeating familiar, pre-imprisonment patterns of behaviour, which may include heavy drinking and re-acquaintance with drinking associates and this, in some cases, may contribute to re-offending. These patterns of behaviour can impact negatively on their chances of re-integration into society in terms of re-employment, engagement with education, their family life, involvement in acts of domestic abuse, and, importantly, on their health as individuals. Employment, education, and family life otherwise have the potential to contribute to desistance (Sapouna et al. 2015).

If more options were available to support offenders to reduce their alcohol consumption, both in place of a custodial sentence and on liberation from prison, this might, in

turn, help to reduce other forms of harm that affect them individually and socially.

#### Remote alcohol monitoring

RAM, using a transdermal alcohol monitor, is one option currently under consideration by the SVRU and the Scottish Government as a way to support offenders to change their drinking behaviour on release from prison (Kilmer et al. 2013). It also has potential as an alternative to incarceration for low-level offences that would otherwise incur a short prison sentence. RAM, along with other forms of Electronic Monitoring (EM), was the subject of a recent consultation in Scotland (Scottish Government 2013, 2014). As a response to the consultation, a comprehensive review of the literature was commissioned that outlines much of the existing evidence for the use of RAM in criminal justice (Graham and McIvor 2015).

In the USA, RAM is mainly used for alcohol-related driving offences, and in this, context is associated with significant reductions in repeat offending. Its use has also been associated with positive collateral effects, such as reduced incidences of domestic abuse (Kilmer et al. 2013). Moreover, a recent small-scale mixed methods' study conducted with students at the University of St Andrews, Scotland, provided the early indications of the utility of the device to assist individuals in abstaining from alcohol consumption in a voluntary, non-punishment context (Neville et al. 2013). A recent pilot compulsory sobriety scheme in four areas of London, UK, introduced Alcohol Abstinence Monitoring Requirements (AAMRs) as part of a Community or Suspended Sentence Order using RAM with 50 offenders. This trial has shown compliance rates of 94 % for the 26 offenders who completed the programme in the first 6 months (Pepper and Dawson 2015). RAM has not yet been tested in a UK context with a cohort of offenders on release from prison, and a little is known about the views of serving offenders as to its perceived utility in that context.

#### Objectives

The SVRU were interested in exploring the practicalities and utility of using RAM as a means to encourage sobriety among offenders leaving prison or those on community sentences who recognised a link between their drinking behaviour and their offending and expressed a desire to change.

This study aimed to explore the views of serving Scottish offenders on the impact of alcohol on their experience of offending and on their lives, in general. It further sought their views on the concept of RAM as a way to address alcohol misuse upon liberation from prison.

## Methods

### Ethical approval

Ethical approval was granted by the University of St Andrews' School of Medicine Ethics Committee. The approval was also granted by the Prison Access and Ethics Board of the Scottish Prison Service. Participants provided their written informed consent.

### Setting

The focus group study was conducted within Her Majesty's Prison (HMP) Barlinnie in October 2012. HMP Barlinnie is situated in Glasgow, Scotland's largest city; the prison largely accommodates adult male offenders serving sentences of less than 4 years, and remand prisoners awaiting trial.

### Participants

A convenience sample of twelve participants was recruited to participate in one of three focus groups by means of a poster placed in communal areas of the prison; prison staff members were briefed on the study, so that they were able to provide further information about the research. Participation was voluntary and no incentives were offered.

Each focus group comprised between 3 and 5 convicted adult male offenders who had a previous or current offence involving alcohol, who were approaching their liberation date and had a previous or current offence involving alcohol. Focus group participant numbers were limited to minimise disruption to the prison routine and to allow each participant to contribute within the time available. One participant withdrew following the short verbal introduction to the topic by the focus group facilitators.

### Focus group conduct and analysis

Each focus group lasted approximately 1 h. Each group used the same semi-structured topic guide to aid discussion, but flexibility was available to incorporate emerging themes. This allowed the participants to raise and discuss other relevant issues.

Focus groups were led by CG accompanied by FGN and DJW who took additional notes and asked supplementary questions. Prison officers were not present during the focus group sessions and prisoners were encouraged to express their honest views. The confidential nature of the discussion was emphasised, but it was stated at the outset that if prisoners expressed the intent to self-harm or injure another person, then this confidentiality would be broken.

Focus groups were recorded and then transcribed by a private transcription service. Transcripts were anonymised, with participants referred to only by letter, and analysed using procedures based on the Thematic Analysis (Braun and Clarke 2006) to identify key themes. The transcripts were first reviewed to provide familiarity with the content before being reviewed again and coded. The coded data were then collated into themes. Instances of the chosen themes were further reviewed by CG and PD and refined to ensure that they were an accurate reflection of the data set. It became clear during this process that some themes were very closely related and these were amalgamated. Names and definitions were then given to each theme, and extracts chosen to exemplify each one.

## Results

The main themes of the analysis of the focus groups are shown in Table 1 and further described and illustrated with quotes from participants below.

### Amount and frequency of drinking

All participants recalled drinking to excess prior to incarceration. The patterns of alcohol consumption described by some were suggestive of alcohol addiction and, indeed, some classed themselves as alcoholics:

'I was drinking every day, just an alcoholic at fifteen [years of age]' (Focus Group 2, Participant A)

'If I go on a bender (drinking binge) it could be anything up to seven days, easy' (Focus Group 1, Participant A)

'it started as a wee drop but..it got more and more and it wound up being a bottle a day' (Focus Group 2, Participant D)

'I was waking up to a drink in the morning and going to bed with a drink' (Focus Group 1, Participant C)

**Table 1** Key themes from offender focus groups

Amount and frequency of drinking
Association of drinking with harm (adverse life events, harm to self, relationships with family, partners, and children)
Association of alcohol with crime, current offence, and violence
The previous attempts to reduce alcohol consumption, possible reasons for failure and incentives to succeed
Opinions on remote alcohol monitoring in relation to crime prevention

Data collected in Scotland 2012

### Association of alcohol with harm

It was clear from the data that alcohol had a significant harmful impact on both the lives of the participants and those around them.

Several participants mentioned experiencing physical or mental harm as a result of their excess alcohol consumption. Experiencing harm related to drinking indicates a problematic pattern of alcohol consumption. Blackouts and loss of memory were common consequences of drinking to excess mentioned by the offenders; other medical issues reported by participants included weight loss; pre-cancerous conditions, such as Barrett's oesophagus; vomiting; and the side effects of drinking, while on medication, including medication, taken to support treatment for alcohol addiction. The physical harms mentioned by some, such as shaking, seizures, and hallucinations, were again indicative of a dependent pattern of alcohol consumption and can all be symptoms of alcohol withdrawal:

'I have blackouts when I drink and I can't remember anything' (Focus Group 2, Participant B)

'Aye, I drink to be normal basically, aye. If I don't drink I just end up being sick and rattle' (Focus Group 1, Participant C)

Another significant harm from drinking mentioned by several participants was loss of employment:

'I was a chef. I was a landscaper. I've been a sheet metal worker. I've had quite a lot of jobs. But I've lost them through drink mostly.' (Focus Group 1, Participant C)

'I got tossed out of the army for drinking' (Focus Group 1, Participant B)

The majority of participants had partners and children and there was a general acceptance that alcohol impacted negatively on many of those relationships:

'I'm not allowed to see mine [children] just now until I get my act sorted out' (Focus Group 2, Participant A)

'We argue and all that...She says I'm with other birds [women] and I say she's with other boys..and it's just a load of rubbish, because you're mad with it [alcohol]' (Focus Group 3, Participant A)

'I've got a few domestics [convictions for domestic abuse] through arguing with the girlfriend through drink' (Focus Group 1, Participant A)

Furthermore, several participants acknowledged that being able to reduce their alcohol consumption might allow them to see more of their children on release from prison:

'My main goal is to stay off the drink when I get out. The main concern is my daughter, to get back to her' (Focus Group 1, Participant C)

### Association of alcohol with crime and violence

Almost all of the participants believed that there was a significant association between alcohol consumption and their criminality, including violence. Their experience of violent offending included domestic abuse, assault, possession and use of knives and other offensive weapons, breach of the peace and police assault:

'All my convictions have been through drink' (Focus Group 3, Participant D)

'Aye, I only get the jail when I'm drunk' (Focus Group 2, Participant B)

'Every single one of my convictions are alcohol related. Every single one. So if I didn't drink I wouldn't have any convictions' (Focus Group 1, Participant A)

One individual attributed his criminality to anger management issues and did not perceive a consistent link with drinking.

'No I do it [offending] sober as well, I've got bad anger problems' (Focus Group, Participant A)

Some participants also reported having been victims of violence following alcohol consumption, sometimes on multiple occasions:

'I was just coming back from the shops and I got into an argument... and ended up getting stabbed in the hand. A couple of years ago as well, I got hit in the back of the head with a sword, through drink as well... (Focus Group 1, Participant A)

'I got tumbled [assaulted with a glass] when I was eighteen, that's what the scar is, it was after the Celtic [football] game and I was drinking... I got forty-two stitches in my face' (Focus Group 1, Participant B).

Previous attempts to reduce alcohol consumption, possible reasons for failure, and incentives to succeed

Several participants spoke of the previous attempts to reduce their alcohol consumption and the circumstances that made these problematic. Such circumstances included reconnecting with former drinking associates, returning to the same geographical area on exit from prison and lack of employment. It was clear that several felt that, although the goal of sobriety was a challenge, they had much to gain by being sober:

‘..it’s all about changing your behaviour. My downfall was going back and seeing my pals and not changing my areas where I was jumping about’ (Focus Group 2, Participant C)

‘I don’t think I’d be drinking as bad if I was working all day’ (Focus Group 3, Participant C)

‘Better relationships with the family, better relationships with my girlfriend, no relationships with the prison, just a better lifestyle’ (Focus Group 1, Participant A when asked what he had to gain by staying sober).

#### Views on RAM in relation to crime prevention

Participant’ views on the concept of RAM and its use with those leaving prison were generally positive. Some participants stated that the knowledge that their alcohol consumption would be monitored (by ‘someone in authority’) would be sufficient to encourage them to change their behaviour:

‘if I’ve got the band on and you phone and say ‘you’re drinking too much’ then I would maybe say, okay I’ll cut down’ (Focus Group 3, Participant B)

However, other participants expressed scepticism as to the utility of a voluntary scheme without consequences in the event of alcohol consumption, particularly for individuals who have a problematic relationship with alcohol:

‘If you’re going to put that on someone with a drink problem and they’re agreeing not to drink, a lot of them won’t be able to stick to that agreement’ (Focus Group 3, Participant B)

‘If there was a custodial force behind it probably, the fact that there’s nothing...if I was feeling particularly low that day it wouldn’t stop me drinking’ (Focus Group 2 Participant D)

Finally, some participants expressed the support for a hybrid model, in which they could volunteer for a scheme that guaranteed early prison release in exchange for monitored sobriety, with legal repercussions for violating this condition:

‘That would be a good way to use it [as part of a voluntary early release scheme], that would give people the incentive not to go out and drink’ (Focus Group 3, Participant C).

‘if it was a condition of your sentence. If there was a consequence to your drinking then that would be beneficial’. (Focus Group 1, Participant B).

On the whole, participants were interested in the technology, and suggested that it could be used to attenuate

their alcohol consumption, and then potentially their offending. There was recognition, however, that their offending behaviour was not solely a consequence of their relationship with alcohol, and that the anklets would be of limited use in tackling other antecedents (e.g., individual mental health issues, drug abuse, peer groups, homelessness, employment status, etc.).

## Discussion

### Focus group outcomes and views on RAM

The contributions of serving offenders to the focus groups reported here have reinforced and added contextual information to the findings of other studies of the Scottish prison population with regard to problem drinking (Graham et al. 2012; MacAskill et al. 2011; Parkes et al. 2011). It was clear that this group of offenders had significant issues with alcohol misuse prior to incarceration that had impacted on their offending and resulted in a variety of health and social harms. Furthermore, they had insight into their alcohol problems and the wider consequences of these and several had taken steps, largely unsuccessfully, to address these. Most were very keen not to fall into their pre-imprisonment patterns of behaviour, but realised that this would pose a significant challenge. Participants were generally positive but pragmatic about RAM, recognising that technology alone may not be enough to change deeply ingrained and addictive behaviours and those sanctions may be required to encourage compliance. However, most stated that they would sign up to a hypothetical programme voluntarily, as they felt that they had much to gain from sobriety.

### Potential use of RAM in a Scottish criminal justice context

The preceding points raise the question of how RAM might be used in a Scottish context where the target issue is alcohol-related violence among a socially deprived cohort of male offenders.

One option to consider is whether such a scheme should be a condition of sentence, where offenders are compelled to wear a RAM device, or a voluntary scheme. The latter could form part of a wider health or social care intervention to promote recovery from alcohol addiction and re-integration into society, with desistance from offending being a potential beneficial side effect. Another point to consider is whether sanctions for non-compliance would improve success, and, finally, whether incentives have any place in such a scheme.

## Compelling individuals to sobriety

At present, in Scotland, a compulsory requirement to abstain from drinking alcohol can only be used as a condition of licence or non-licence by a Parole Board under Section 40 of the Criminal Justice (Scotland) Act (Criminal Justice (Scotland) Act 2003). If RAM was to be introduced on a compulsory basis into other orders, such as restriction of liberty orders (RLO) or community payback orders (CPO), then a change in primary legislation would be required (Scottish Government 2013). While ethically RAM could be used as part of this with sanctions (Shaw et al. 2012), it is unclear whether compelling an individual with an alcohol use disorder to stop drinking would be successful, as any health behaviour change intervention is more likely to be successful if individuals are ready to change (Prochaska and DiClemente 1999). There are currently no voluntary schemes in existence.

Responses to a recent public consultation on Electronic Monitoring in Scotland (Scottish Government 2013, 2014) were generally supportive of RAM, but there was disagreement as to whether it should be voluntary or mandatory, and as to whether it should fall under the remit of the criminal justice sector. In common with the outcomes of the consultation, some participants in this study were supportive of a voluntary scheme, while others felt that it would only be successful if made mandatory.

Compelling individuals to sobriety has been shown to be successful in certain contexts in the USA. The South Dakota 24/7 Sobriety initiative enforces monitored sobriety for those driving under the influence (DUI) of alcohol (Kilmer et al. 2013). It uses regular alcohol monitoring, largely via breath testing, but with an element of RAM for those living in more rural areas, and is used in conjunction with sanctions for breaches, usually 24–48 h of immediate incarceration. Participation in the programme, which reports high compliance rates, involves a charge to clients. Following its successful use for DUI, the programme has been extended to include domestic violence and drug offences. An evaluation demonstrated that from 2005 to 2012, the programme contributed to a 12 % reduction in DUI and a 9 % reduction in domestic violence among participants (Kilmer et al. 2013). There is, however, a little available information about the socioeconomic status of the individuals in the programme or their drinking history (Kilmer et al. 2013; Larkin 2016). This model may function less well in a Scottish context with a population of offenders drawn from a socially deprived population and with significant alcohol issues. A lack of payment to

be on the programme may also reduce compliance, because of the lack of personal investment, and thus, a scheme where offenders sign up on a voluntary basis and are supported throughout the programme may be preferable.

## The use of sanctions for non-compliance

The South Dakota programme operated with sanctions for non-compliance, and in the current study, this was something that some participants believed would be an essential part of any future scheme. They suggested that the sanctions should be custodial and that the threat of going back to prison would be a disincentive to them to drink. It would be important, however, that sanctions were swift and proportionate, so that those on the programme could relate them to their drinking behaviour. The HOPE (Hawaii Opportunity Probation with Enforcement) programme works with substance abusers on probation in Hawaii and saw marked reductions in positive drug tests for those subject to swift and modest custodial sanctions for non-compliance with their drug orders (Hawken and Kleiman 2009). The findings here suggest that regardless of whether a RAM programme is voluntary or mandatory; there is a need for a combination of sanctions and support.

## Incentivisation

Although the use of financial or other incentives was not considered in this study, others have explored its usefulness in this context. Dougherty et al. (2015) used RAM as part of a contingency management intervention for a heavy drinking, non-offending population who were non-dependent drinkers. Participants received financial reward for successful completion of each phase of the study. Incentivisation seemed to aid participants in reducing the frequency and amount of alcohol consumed. This may be another consideration for any future scheme in Scotland. An alternative, and, perhaps, more cost effective incentive for the Scottish offending population may be earlier release from prison or the use of RAM as an alternative to a custodial sentence. Many of the social issues associated with offending raised by the participants in this study related to disruption to their family or work life and the use of RAM as an alternative to prison may minimise disruption to these areas of their life which have the potential to both support recovery from alcohol issues and contribute to desistance.

The valuable information gained and lessons learned from the focus groups will contribute to the development of

policy in this area in Scotland (Scottish Government 2014; Graham and McIvor 2015).

A note on the use of RAM in low- and middle-income countries

The introduction of non-custodial sentences and sanctions as alternatives to imprisonment is something that the United Nations support in low- and middle-income countries. The benefit of alternatives to incarceration in these countries in terms of reduction in poverty, the positive public health and social impacts, the avoidance of unintended prison acquired morbidity, such as drug addiction, HIV, hepatitis and multi-drug resistant TB, and the financial savings are clear (United Nations Office on Drugs and Crime accessed June 2016). In addition, the adoption of a public health-orientated policing approach, such as that taken by the SVRU in Scotland would undoubtedly, through a focus on prevention rather than enforcement, results in further cost savings through reducing both violence perpetration and incarceration. The use of technologies, such as RAM, will necessarily be limited, at present, in the Global South, because of the initial cost of setting up such a scheme. However, the burgeoning development of the digital infrastructure in the Global South may, in time, make this a useful and cost effective alternative to imprisonment in such countries. The development and evaluation of such schemes in the Global North, particularly among socially deprived offending populations, are something that the Global South may look towards to inform their decision making.

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#### Compliance with ethical standards

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**Ethical approval** All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

**Informed consent** Informed consent was obtained from all individual participants included in the study.

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