Number 4

293 Optimising opioid substitution therapy in the prison environment
Farrukh Alam, Nat Wright, Paul Roberts, Sunny Dhadiy, Joanne Townley and Russell Webster

308 A model for sustainable laser tattoo removal services for adult probationers
Victoria D. Ojeda, Laura Romero and Arisa Ortiz

316 Problem gambling and support preferences among Finnish prisoners: a pilot study in an adult correctional population
Kalle Lind, Anne H. Salonen, Johanna Jahrinen-Tassopoulos, Hannu Aho and Sari Castrén

332 Prisoners’ ambivalent sexism and domestic violence: a narrative study
Ines Testoni, Giulia Branciforti, Adriano Zamperini, Livia Zuliani and Felice Alfonso Nava

349 Access to a quality healthcare among prisoners – perspectives of health providers of a prison infirmary, Ghana
Terrylyna Baffoe-Bonnie, Samuel Kojo Ntow, Kwasi Awuah-Werekoh and Augustine Adomah-Alari

366 Posttraumatic stress, panic disorder, violence, and recidivism among local jail detainees
Elizabeth Combs, Kaitlin Guston, Albert Kopak, Alyssa Raggio and Norman G. Hoffmann
Optimising opioid substitution therapy in the prison environment

Farrukh Alam, Nat Wright, Paul Roberts, Sunny Dhadley, Joanne Townley and Russell Webster

Abstract

Purpose – The purpose of this paper is to examine the current provision of opioid substitution therapy (OST) during and immediately following release from detention in prisons in England and Wales.

Design/methodology/approach – A group of experts was convened to comment on current practices and to make recommendations for improving OST management in prison. Current practices were previously assessed using an online survey and a focus group with experience of OST in prison (Webster, 2017).

Findings – Disruption to the management of addiction and reduced treatment choice for OST adversely influences adequate provision of OST in prison. A key concern was the routine diversion of opiate substitutes to other prisoners. The new controlled drug formulations were considered a positive development to ensure streamlined and efficient OST administration. The following patient populations were identified as having concerns beyond their opioid use, and therefore require additional considerations in prison: older people with comorbidities and complex treatment needs; women who have experienced trauma and have childcare issues; and those with existing mental health needs requiring effective understanding and treatment in prison.

Originality/value – Integration of clinical and psychosocial services would enable a joint care plan to be tailored for each individual with opioid dependence and include options for detoxification or maintenance treatment. This would better enable those struggling with opioid use to make informed choices concerning their care during incarceration and for the period immediately following their release. Improvements in coordination of OST would facilitate inclusion of strategies to further streamline this process for the benefit of prisoners and prison staff.

Keywords Health in prison, Prison, Drug abuse, Drug dependence, Opioid substitution therapy, Prison medicine

Paper type Viewpoint

The current delivery of OST in prisons shows inconsistencies and is often carried out in isolation from routine clinical assessments

A recent Freedom of Information Request (2017) revealed that over 22,500 prisoners received opioid substitution therapy (OST) during the 2016 calendar year; an average of 205 individuals per prison. An online survey of 102 opiate-using detainees across the UK assessed the real-life access to OST by prisoners during their previous detention period (Webster, 2017).

The survey employed two main methods to gain service-user views. First, an online survey was completed by 102 opiate users who had been in an English or Welsh prison in the previous two years. Opiate-using prisoners were identified and recruited by ten peer researchers trained, supervised and supported by the Revolving Doors Agency. Researchers were based throughout England and Wales and each was set a target of recruiting ten survey respondents. Peer researchers received a payment of £100 each for recruiting survey respondents. Analysis of this survey data informed the second stage of the research study; a focus group comprising nine individuals with recent experience of OST in prison was convened by the Revolving Doors Agency and held on 10 May 2017. The focus group was structured to allow respondents to give detailed first-hand accounts of their experiences of seeking OST in prison and on their release.
Using these methods, the survey asked whether respondents wanted and were able to access OST in prison and on release, and how easy or not this access was. Respondents were also asked to suggest improvements to the current provision.

Survey respondents were first asked whether they wanted medication for their opiate dependency; whether they wanted methadone or buprenorphine; and whether they wanted to be on maintenance or withdrawal prescription. In total, 95 per cent of respondents did want medication, with a majority of respondents (49 per cent) wanting a maintenance prescription vs a withdrawal prescription (43 per cent) and also preferring methadone (61 per cent) to buprenorphine (31 per cent).

Respondents were then asked: “If you wanted medication, did you get it?” and were given a choice of five options that reflected ease of access:

1. Yes – I was offered medication.
2. Yes – I asked for medication and got it easily.
3. Yes – I asked for medication and had to work hard to get it.
4. Yes – I got some medication, but not what (or as much) as I wanted.
5. No – I did not get medication.

The vast majority of respondents (88/94 = 94 per cent) received at least some medication with varying degrees of ease of access.

Figure 1(a) provides a breakdown of access to medication by substance, where it can be seen that respondents found it much easier to access methadone with over half (33/60 = 55 per cent) getting what they wanted easily and a large majority (51/60 = 85 per cent) achieving their goal, if sometimes after a lengthy battle. This compares with less than half (13/28 = 46 per cent) of those wanting buprenorphine getting what they wanted easily and almost one-third (9/28 = 32 per cent) not achieving their goal.

Respondents were then asked to consider the aforementioned questions with respect to whether, if they received medication in prison, they were offered a continuing prescription on release. In total, 86 survey respondents answered this question and 56 of them wanted medication on release. Figure 1(b) shows that just over half (29/56 = 52 per cent) were either offered medication on release or asked for it and secured it easily. However, almost two-fifths (21/56 = 38 per cent) either received no medication or did not get the type or as much as they wanted.

Overall, the survey showed that the choice of OST was largely limited to methadone or buprenorphine and that OST provision often differed from that requested by the individual, with methadone being the most common substitute medication provided (Figure 1(a)).

**Figure 1** Ease of access to OST whilst in prison and to continued prescription on release

**Notes:** (a) Ease of access to OST by substance (n=94); (b) if you wanted a continuing prescription on release, did you get it? (n=56)

**Source:** Figures reproduced from Webster (2017)
Following release from prison, the continuity of treatment on re-entering the community was variable, with some individuals finding the transition straightforward and their treatment needs met (Figure 1(b)); however, others did not receive the OST they requested or found that doses were frequently inconsistent with those received in prison or restricted to 1–3 days following their release. In some cases, no provision was made for continuity of OST after the individual’s release from detention; any disruption to treatment provision frequently resulted in relapse and a return to illicit opioid use.

Key themes from this research showed that the quality of OST provision is broadly inconsistent across the prison system and is not uniformly coordinated with community provision or with the needs of every individual receiving the service. Sometimes prison OST is appropriate for arriving inmates, and is readily available—sometimes more so than out in the community. At other times, those arriving in prison are given a lower dose of OST medication than they had been receiving, or a different medication altogether, for no obvious reason, without checks conducted for their medical or psychosocial profiles. For administrative reasons, these inappropriate dosage regimens are sometimes difficult to modify. Inmates who happen to arrive after hours can have long delays in treatment, or may not receive treatment at all, facing possible withdrawal symptoms.

Such findings contravene current government guidelines; uninterrupted treatment in custody, integrated with psychosocial care, and with clear plans for what happens on release are mainstays of the prison recommendations within the “Orange Book” (Independent Expert Working Group, 2017).

In the online survey, satisfaction with OST provision was graded as “terrible”, “poor”, “good” or “excellent”. The overall survey results showed that this experience was evenly split, with 48 per cent of respondents giving an experience of “terrible/poor” and 49 per cent stating “good/excellent” (Webster, 2017).

The findings from this survey were discussed in a focus group with experts by experience (individuals with recent experience of OST in prison). These focus group members suggested a number of key improvements including: increasing the available support for prisoners requiring OST; reducing the availability of illicit drugs, especially new psychoactive substances; providing dedicated recovery wings in prisons for those with opioid dependence; and increasing the continuity of care during the transition between prison and re-integration into the community healthcare system after release.

Exploring existing models of OST provision in prisons: what does “good” provision look like?

An expert group consisting of individuals with extensive experience of OST in prisons from a range of perspectives (clinicians, psychosocial care providers, prison inspectors, researchers and service user representatives) was convened to develop an authoritative assessment of current practices and to make recommendations for improving OST service delivery. Details of the members of this expert group are provided at the beginning of this paper.

Following the findings of the Webster Survey (2017), the group was asked to answer the following questions:

■ What is the availability of OST in prisons currently?
■ How efficient is the OST service generally?
■ What are the recent trends in prison OST provision?
■ What is the extent of user/prisoner choice around substance, maintenance or withdrawal, and dose?
■ What are the practicalities in terms of choice and diversion of medication?
■ What are the challenges facing OST programmes?
■ What are the important features of best practice in OST provision?

Answers were gathered by the group Chair after moderated discussion, and sorted into a consensus of current landscape observations in prison OST provision in the UK, and into recommendations for potential improvements.
Recent positive examples of best practice in the delivery of OST in a prison setting were examined. Where an overall priority was given to addressing drug use and treatment in prisons, OST treatment provision was optimised by the creation of separate recovery wings for those on OST and those not receiving substitute treatment. Once effective OST provision was in place, further steps could then be taken to address the reduction of harm, supply and demand, leading to increased benefits throughout the prisons and ultimately contributing to making the prison environment a safer place for all prisoners and staff.

An example of this effective approach cited by several expert group members was operative at a UK prison (the prison) between 2011 and 2013 (see the later section). The success of this approach was attributed to strong leadership by the prison governor, who positively influenced the entire prison staff, who were, in turn, supportive of prioritising treatment for drug addiction as a means of making improvements throughout the prison as a whole.

Undertaking such an approach requires a general culture change to ensure that prisoners requiring OST are not effectively punished by having their medication denied or delayed and where inadequacies in the provision of OST are recognised and addressed. The advantage of having a supportive prison governor to champion good OST provision is that they demonstrate what good practice looks like so the OST regimen can be driven and aligned to this view. In addition, the integration of best practice within the whole prison is essential to allow an overall understanding of the individual’s needs (e.g. why extra time with a counsellor or pain clinic may be required).

Tellingly, practice at the prison was considered to have deteriorated following the promotion and transfer of the governor who had led this approach of prioritising effective OST.

It is equally important to acknowledge what bad practice looks like and that there is a need to challenge any attitudes among prison staff that are contrary to the desire to avoid all unnecessary drug-related deaths and harms. All prison staff should be required to align with the message that recovery from problematic drug use is an achievable goal for many and that help is available to reduce harm in the meantime. Increasing the recovery rates from drug addiction is a key step towards addressing bad practice.

New treatments and regimens for improved OST provision in prison

The expert group shared the view that one of the key factors affecting the lack of patient choice around OST medications was the concern that opiate substitutes (and other medications prescribed in prison) were routinely diverted and sold illicitly to other prisoners. Recommendations for improvements in OST provision were put forward in full knowledge of the importance of minimising the diversion of OST medication.

One suggestion for improving OST administration in prison may be alternate-day dosing, simply to reduce the queues for supervised self-administration of substitute medications. Some within the expert group questioned the practicality of this approach in the prison setting however, noting that introducing such changes would require a rigorous system to avoid any mistakes with dosing.

Alternate-day dosing has been found to be efficient (Magura et al., 2009), halving the number of times a patient needs to stand in a queue. Medically, it is perfectly sound. Buprenorphine can be given on alternate days in higher doses and it requires a shorter drug-free period than methadone before induction with naltrexone for prevention of relapse (British National Formulary, 2018). There is some evidence that alternate-day treatment using multiples of the daily doses may yield better outcomes than daily dosing (Amass et al., 2000). It “may suit some patients”, in the language of the Orange Book (Independent Expert Working Group, 2017). According to a study in 1998, patients overwhelmingly prefer it (Amass et al., 1998). There is a shortage of literature on any operational drawbacks to alternate-day administration that may exist. The Department of Health’s (2006) “Clinical management of drug dependence in the adult prison setting” simply made no comment on it.

Prisons and other closed facilities create opportunities for transmission of infectious diseases, particularly HIV and viral hepatitis, both during detention and after release (Wirtz et al., 2018; Peate, 2011). A recent eight-year study in Australia showed that, upon entry to prison, injecting
drug use decreased but syringe sharing increased among injectors. Younger individuals are most likely to exhibit high-risk injecting behaviours while in prison (Cunningham et al., 2018).

Thus, there is a disproportionate impact of HIV and hepatitis C (HCV) on prisoners worldwide (Sander and Murphy, 2017). Current estimates suggest that 15 per cent of all prisoners worldwide are chronically infected with HCV, and this number is even higher in regions with high rates of injecting drug use (Bielen et al., 2018). Sharing of injecting drug equipment in prisons has undeniably contributed to higher prevalence of blood-borne diseases in prisoners than in the general population.

Prevention programmes specific to key populations are important, particularly for populations that are criminalised and/or may cycle in and out of prison (Wirtz et al., 2018). Surprisingly few exist (Lazarus et al., 2018). More research is needed on exactly how effective harm-reduction programmes are (Lazarus et al., 2018). Reductions can be modest and require long-term sustained intervention coverage (Vickerman et al., 2012), but there is good evidence for the effectiveness of OST as a form of harm-reduction intervention, because it reduces injecting risk behaviour. OST is associated with a reduction in the risk of both HIV and HCV acquisition (Platt et al., 2017).

In addition, in a supportive environment, prison can represent a “teachable moment” for individuals who feel able to follow a detoxification programme with support from within the prison prior to release. At present, if an individual’s initial efforts to detox are unsuccessful, re-initiation onto methadone prior to release is frequently seen. This represents a negative step for the individual, which could jeopardise their efforts to detox in the future.

The current administration of OST in prisons typically involves long waiting times and queues, as well as considerable prison officer resources to supervise the consumption of substitute medications and to ensure that oral doses are taken as intended and not diverted for sale and misuse within the prison. The new formulations of controlled drugs were considered by expert group members to be positive developments that will help ensure that OST administration is as streamlined and efficient as possible. This includes the fast-dissolving wafer formulation of buprenorphine (Espranor), which has recently been approved for use across the NHS in the UK. There are other novel formulations of buprenorphine currently under review by the regulatory authorities, including long-acting depot-style injections and an implant that may prove beneficial in preventing the diversion and misuse of buprenorphine-based OST medications in prison (Bi-Mohammed et al., 2017). Liquid formulations of other drugs commonly prescribed alongside opiate substitutes, such as gabapentin and diazepam have also been recently developed (Gabapentin Summary of Product Characteristics, 2019; Diazepam Summary of Product Characteristics, 2018).

**Case study: an effective prison drug-treatment strategy**

This case study highlights an effective approach to tackling drugs employed at the prison between 2011 and 2013. The write-up of the experience at the prison has been developed based on the experiences of expert group members and the report from an unannounced inspection by the HM Chief Inspector of Prisons (2013).

The key characteristic of the approach at the prison was the governor’s prioritisation of tackling drugs, with an emphasis on providing excellent treatment as well as reducing supply. A whole-prison approach was taken, which was underpinned by a belief in the importance of staff–prisoner relations. This was identified by the prison inspectors:

> At the heart of the prison’s success were very good staff–prisoner relationships, which were among the best we have seen in a local prison. Most prisoners told us they were treated with respect, and this was reflected both in the individual interactions we observed and well-developed consultation arrangements. (HM Chief Inspector of Prisons, 2013)

The inspectors noted that the prison was characterised by “a generally safe and respectful environment [which] created the conditions in which prisoners could have a very good amount of time out of cell” (HM Chief Inspector of Prisons, 2013). This, in turn, helped to create a virtuous circle of continuous improvement:

> Because the prison was generally safe, prisoners could spend a lot of time out of their cell. Prisoners used this opportunity to take part in activities likely to reduce the risk they would reoffend. Because
prisoners felt they were making progress, that helped make the prison safer and relationships more relaxed. (HM Chief Inspector of Prisons, 2013)

A comprehensive treatment programme was put in place for all prisoners with substance-use problems (including alcohol), a staged approach that began with their reception in prison. Prisoners were steered through detoxification or maintenance treatment in the recovery unit (D wing) and into intensive support and group work in the post-recovery unit (E wing). The inspectors highlighted the high-quality supervision and support provided by the uniformed officers in both of these wings and noted that they had received specific extra training on substance misuse.

Clinical reviews of prisoners were led by a GP specialising in substance use, and involved Integrated Drug Treatment System (IDTS) nurses and Counselling, Assessment, Referral, Advice and Throughcare (CARAT) workers. Prisoners typically stayed in the recovery unit for six weeks, where they had access to regular one-to-one support, IDTS psychosocial group work, Narcotics Anonymous and Alcoholics Anonymous (AA) groups and a good range of clinics and classes. The recovery unit also provided peer support from prisoner “recovery champions”. Similar provisions were available in the post-recovery unit, with the addition of a Self-Management and Recovery Training recovery programme for addictive behaviours. Throughout the process, prisoners who failed mandatory drug testing were subject to special support reviews. Psychosocial support was available throughout the prison.

At the time of the inspection, there were 218 prisoners receiving opiate substitution treatment, of whom 80 were on reducing detoxification doses. The emphasis on dose reduction was assessed by inspectors as “impressive” and “largely well-received by prisoners” (HM Chief Inspector of Prisons, 2013). Alcohol treatment was also integrated into the recovery-centred approach, with access to detoxification, one-to-one sessions with CARAT staff, AA and group work, including a special compulsive binge-drinkers’ group.

The inspectors also noted that there remained work to do, and that – although impressive – the improvements were fragile. This assessment proved prophetic, because progress quickly stalled, at least partly because of the transfer of the governor. An Independent Monitoring Boards (2017) report stated that drug use at the prison was unacceptably high.

Improved management strategies for OST provision in prisons

**OST initiation**

An effective OST strategy requires clear expectations of what the affected individual is to receive when entering prison, during detention and on release. From the perspective of the prison, the completion of a full needs assessment for addiction services was found to be rarely carried out either by commissioners or providers. From the perspective of prisoners, entering the prison system can be a confusing time when a large amount of information is expected to be absorbed. Such conditions are not always conducive to effective decision making regarding the correct OST prescription.

Despite the Orange Book stating the broad expectations for treatment in prisons (Independent Expert Working Group, 2017), currently individuals cannot rely on their OST continuing while in prison. There is a need to streamline the transition into custody so that prisoners can be confident of receiving continued OST at the correct dose and understand the different regimens for detoxification or maintenance treatment so that an informed choice can be made regarding their treatment. It is important for prison services to realise that dependent opioid users being received into treatment in prison may already be experiencing withdrawal symptoms and may be
preoccupied by the need to secure any form of OST; they may not be in an appropriately secure emotional state to discuss their medium- to long-term needs and wishes.

The expert group suggested that there would be considerable value in the prison service co-producing, with drug user and prisoner groups, a short national statement of basic rights for opioid-dependent prisoners in terms of what OST options will be available in prison with an emphasis on ensuring informed patient consent to different treatment regimens. It was envisaged that this statement could be displayed in the prison reception and healthcare areas.

It is also important to ensure that the correct OST dose is provided in a timely manner to avoid withdrawal symptoms that would compromise the individual’s ongoing care. Owing to the large numbers of people entering prison with OST needs, an initial goal of stabilising on methadone or buprenorphine should be set, after which they should be assessed to determine whether maintenance or reduction treatment is more appropriate, with flexibility being provided for prisoner involvement in relation to their preferred choice of dosage and treatment type.

**Transition from prison to community OST provision**

Similar consideration needs to be given to continuity of treatment for those leaving prison and re-integrating into community healthcare. This is a moment of great vulnerability for the addict who is trying to recover, a period characterised by the Orange Book as “high risk” (Independent Expert Working Group, 2017). The current (positive) practice of moving people towards the end of their sentence to a prison located nearer their home often results in disruption to their OST. There is a need for ongoing assessment at all times throughout a prison stay to ensure continuity of treatment and that the correct OST regimen for maintenance or detoxification is prescribed during this transition, with the full informed consent of the patient.

Hand-in-hand with this is the importance of developing protocols and procedures to ensure that the OST provided in prison is adopted seamlessly by community healthcare providers to preserve the continuity of treatment after release. On this, the Orange Book is adamant, throughout Chapter 5, calling for professionals involved in rehabilitating prisoners “to establish effective working relationships and open channels of communication with substance misuse providers and healthcare staff in custody and in the community to ensure that treatment requirements and conditions are met and that continuity of care arrangements are supported” (Independent Expert Working Group, 2017; for the USA, see Patel et al., 2014). This clearly necessitates communication between OST providers, probation services and housing provision services upon the individual’s release, to avoid any delays in receiving OST due to errors in assigning an address and difficulties with housing arrangements. It is acknowledged that prisoners are often not released to secure accommodation and that care needs to be taken to ensure that community prescribing arrangements are compatible with both the individual’s immediate housing situation on release and any likely changes in the short to medium term.

The timing of release also needs to be taken into consideration to avoid gaps in treatment which may occur following a Friday release when prescriptions may not be filled until the following Monday (Independent Expert Working Group, 2017). Care arrangements need to be coordinated so that housing provision, OST and psychosocial support are not disrupted on the individual’s release from the prison. There are benefits to the wider community in terms of crime reduction following a positive experience of leaving prison, with the individual’s needs for OST provision having been addressed as part of a coordinated release process.

In the community primary care setting, the FP10 prescription system aims to ensure that prescriptions are made available to prison healthcare services so that a seamless transfer of prescribing care is made between prisons and the community upon release of inmates. A prescription is provided on prisoner release, often for several doses of OST, but for not more than one to three days’ duration. This system is not currently in universal use and, in the absence of any published feasibility studies, the authors feel it should remain this way. Managing several doses for the transition out of prison would need coordination in relation to home visits to ensure the safe storage of medication within the home, for reasons of child protection. Access to prescribing services in the community can be difficult to organise, particularly if a newly released prisoner misses an initial appointment, but the consideration of a right to emergency access
should be made in the interest of the individual’s health and crime reduction in the community. The prisoner’s physician records should be checked in advance of release to ensure that the individual has confirmed access to primary care on release.

Another key element of release planning is the provision of advice and information about the increased risk of death from overdose that comes from reduced opioid tolerance (including the provision of relevant information to the individual’s family and friends) and the routine provision of naloxone, which rapidly reverses the effects of heroin or methadone – the most lethal of which being the way they cause respiratory depression, the factor most closely associated with death by overdose. The expert group’s experience was that the availability of naloxone for released prisoners varied considerably between different prisons in England and Wales.

The period following release from prison is a time of extraordinarily high mortality (Strang et al., 2013). In Scotland, the provision of overdose-prevention training and the supply of take-home naloxone kits to people on release from prison has been established as part of a nationally funded programme (the first in the world) since 2011. In this time, 12,000 kits have been issued from prisons across Scotland. A recently published evaluation of this programme demonstrated a 36 per cent reduction in opioid-related deaths in the four weeks following release from prison (Bird et al., 2016; Strang et al., 2014). Worldwide, take-home naloxone has been available for 20 years now (McDonald et al., 2017; Dettmer et al., 2001). Provision for its use has widened, with public buy-in (McDonald et al., 2017). It needs to be widened even more, as the death toll due to overdosing continues to rise (McDonald et al., 2017). The logistics of this are currently under investigation in the UK (Meade et al., 2018).

There is much left to learn, and study should continue. It is now established that prison-based substitution therapy reduces drug use and injection in penal institutions and brings down drugs charges and re-admission rates (Stallwitz and Stöver, 2007). This is as true for women offenders as for men (Farrell-MacDonald et al., 2014). The numbers are not always enormous. In one recent study, by way of example, within 12 months of release from prison, 58 per cent of heroin users who did not receive OST had been re-incarcerated, compared with 41 per cent of those who did receive OST (Stöver and Michels, 2010). The effectiveness of methadone therapy measured in terms of treatment retention and recidivism varies from study to study, from as little as 20 per cent to as much as 70 per cent (Ornić, 2017; for the methodological difficulties in conducting studies in prison settings, see de Andrade et al., 2018). Numerous clinical studies are now investigating the reasons for its effectiveness, both on the underlying clinical symptoms of addiction and on social and health implications. Interestingly, being allowed to continue in prison an OST regimen begun before arrest may also have a beneficial effect on eventual recidivism rates (Westerberg et al., 2016). Length of care and consistency, whatever else is true, do appear critical (Westerberg et al., 2016).

**Integrating clinical and psychosocial care in prisons**

In order for OST provision to improve, the expert group shared the view that an integrated approach that addresses all aspects of healthcare during detention is needed (Sander et al., 2016). To achieve this, integration between clinical and psychosocial care is essential. Often these services are commissioned separately; where this is the case, it is important that all drug-treatment staff are co-located so that the same account of patient needs is heard by all members of the care team and a coordinated treatment/care plan can be implemented and managed.

Currently, it is not unusual for a named drug worker to be assigned to a prisoner entering prison. However, in some cases, a named clinical nurse is also available to allow the development of a joint care plan. This care plan should then be reviewed with the full care team present so that the patient’s clinical and psychosocial care can be assessed and ongoing plans can be formulated involving all the relevant aspects of an individual’s care. Such integrated care would allow the prisoner a clearer view of their treatment as a whole and enable them to make better-informed decisions regarding their future care.

Making decisions without such information may fuel the prescription of higher-than-needed maintenance doses of methadone as clinical staff have insufficient information regarding the psychosocial welfare of the service user; higher doses are then justified as there is a lack of psychological support for those on lower or reducing doses of OST. A good care model for OST
would have clinical and psychosocial care fully integrated to instil confidence that all aspects of care are being covered. It is envisaged that this would also include care plans for additional health issues, such as general self-care and management of smoking cessation, together with the integration of social services with OST provision within the prison setting.

Diverse prison populations need tailored provision of OST

Optimising the care model for provision of OST in prison will need to take into account several diverse patient populations. Recent policy directives within the Scottish Prison Service point out that many health promotion activities target the general prison population and may not address the needs of minority groups. The framework argues the importance of using an impact assessment (such as the “Health Inequalities Impact Assessment”) on all new prison policies “to understand the impact on health and wellbeing on all prisoners but especially of the minority groups”. The Service defines minority groups to include (among others) older prisoners, prisoners with any kind of disability, women and prisoners of minority ethnic origin (Scottish Prison Service, 2014). Brigadier Hugh Monro, HM Chief Inspector of Prisons for Scotland, stated that although much has improved in prison buildings in recent years, rehabilitation is still a major issue. He says there needs to be a strategic shift in the way prisoners are rehabilitated, particularly women prisoners, who are simply not being given enough to do during the day, especially with regard to work and education opportunities (HM Chief Inspector of Prisons, 2012–2013). Occasional initiatives in the UK, sometimes outside the realms of work and education, show promise of enriching inmates’ lives and making them more amenable to rehabilitation. One such is the “Good Vibrations” arts project for older offenders, whose result was perceptible increase in insight and reflection in individual prisoners and a stronger cohesion in groups of prisoners (Wilkinson and Caulfield, 2017). Broadly speaking, though, sustained and successful efforts at meaningful rehabilitation strategies are difficult to find. It is within this reality that policies for provision of OST reside.

The older offender

There is an increasing population of ageing incarcerated drug users (PPO, 2017), with additional comorbidities, poly drug use and general additional health issues that affect their OST needs. Psychological disorders vary with age (O’Hara et al., 2016). Some severe functional impairment has been shown to decrease as opioid maintenance age increases, but depression is routinely higher in older people (O’Hara et al., 2016). In addition, somatic comorbidity, particularly the incidence of liver disease, also increases with age. Social isolation and the despair over reconnecting with family after years of neglect are other documentable features of older patients in recovery (Gaulen, 2017). Indeed, many of the older population can be expected to have very poor social networks. Factors like these underline the need for coordinated care within prisons and the need for continued, consistent care in the community healthcare system following release. However, care has not been forthcoming. In the past eight years, the Prison Reform Trust has found that the majority of prisons have nothing specific in place to support the resettlement needs of older people, and that older people feel that planning for their release is inadequate. The government introduced radical changes to support people on release from prison with the Care Act 2014, with its wide-ranging implications for the care of older people (Cornish et al., 2016). It remains to be seen what effect this will have.

The mentally ill

In a survey of psychiatric morbidity in prisons in England and Wales, 97 per cent of sentenced drug-dependent men had at least one co-occurring mental health condition and 77 per cent had at least two such conditions (Singleton et al., 1999). Hence, there is likely to be a widespread occurrence of prisoners requiring treatment for both their opiate use and for their mental health concerns. The clearer coordination of treatment and any relevant treatment sequencing is needed to avoid individuals in prison being sent back and forth between mental health support and OST supervision, with each requiring the other to be addressed first. Ongoing care for the ill after release has been limited. Despite this, it has been shown in trials that opiate substitution treatments reduce substance misuse relapse and possibly reoffending (Fazel et al., 2016).
Women

Women in prison present with unique requirements for OST. Data suggest that incarcerated women are more likely than men to inject opioids, are more likely to be addicted to multiple substances and are at an increased risk of post-release overdose. They have higher rates of psychiatric comorbidities than men or non-incarcerated women and are more likely than men to have chronic or communicable diseases (including HIV and HCV). Women offenders have higher rates of trauma and are more likely than men to be victims of staff misconduct while incarcerated. Nearly two-thirds of women in prison have dependent children at home. They are less likely than men to commit violent crimes, but more likely to commit other drug-related offences (Evans, 2015). These realities align with women’s existing, often complex physical and mental health concerns, and additional considerations need to be taken into account if there are children in their care or in the care of local services. The coordination between prison and community services is especially important where assessments may be needed of the women’s home environments if OST medication is to be stored within the home and children may be present. Unfortunately, the evidence remains slim that the introduction of women-specific policies and support programmes has had a great impact on women’s post-release success (Carlton and Segrave, 2016).

Ethnic and cultural minority populations

Similarly, improvements in cultural competence in the provision of addiction treatment within the British Black, Asian and minority ethnic population are needed; the survey conducted for this paper (Webster, 2017) reported that people in this patient population find OST harder to access although treatment provision should strive for consistency for all individuals in every setting. The Orange Book does encourage particular consideration of minority ethnic groups in treatment, to deliver OST in culturally sensitive ways wherever possible (Independent Expert Working Group, 2017). Research into how well this is being done is only beginning. Likewise, studies on institutional provision for after-prison care that is specifically for minorities are hard to find. One study noted the considerable difficulty implementing a service: a methadone maintenance programme in an indigenous community in Canada had difficulty in uptake because the intervention was misunderstood at first and stigmatised (Landry et al., 2016).

Educational needs for healthcare providers and administration of OST

Many GPs lack experience with the administration of OST within the prison environment and the expert group advocated the provision of a key drug worker for GPs (analogous to the “shared care” model prevalent in the community) to be a source of reliable information when they are unsure of any specialised knowledge about opioid use, misuse or treatment. Aligned with this is the assessment of the availability of drugs within a particular prison. The examination of specific local markets may give very different pictures (including from both the dispensing and service-user perspectives); assessment should focus on which drugs are available and the extent of the diversion of OST medications within a particular prison. It is clear from feedback that these drug markets can change very quickly in relation to supply and demand and the desire to use more in prison due to the circumstances of incarceration. Prison drug markets have recently been complicated by the availability of large amounts of different new psychoactive substances (User Voice, 2016).

The expert group also agreed that introducing more structured days and more purposeful activities for prison inmates would offset the inherent boredom and long queues for treatment administration, resulting in greater adherence and compliance with OST regimens. Aligned with this is the lack of OST integration within the prisons’ wider healthcare services – it is suggested that by working more closely together, integrated healthcare services, including those given by visiting GPs, would help improve engagement with OST provision overall. However, it was noted that at present there is some tension between clinicians dealing with the administration of treatment for OST and those dealing with the rest of prison healthcare.
Summary

Barriers to effective management of OST in prisons have recently been identified (Independent Expert Working Group, 2017). These barriers include a lack of coordination of care between healthcare providers in prison, resulting in the disrupted management of addiction. The integration of clinical and psychosocial care in prisons would enable a joint care plan for each individual with opioid dependence to be developed and modified as required.

Improvements in the overall coordination of OST administration would facilitate the inclusion of strategies to further streamline this process for the benefit of individuals in prison and prison staff alike. Improvements would include clearer information being made available for opioid-dependent individuals about the range of OST medications available and whether these are prescribed on a maintenance or reduction basis. Further study is needed into the viability and desirability of alternate-day dosing for supervised self-administration of OST medications.

Prioritising effective management strategies for drug addiction in prisons and championing by senior prison managers would foster a more supportive environment for the successful delivery of maintenance or detoxification OST as needed.

Training prison inmates with experience of OST to provide peer support and advocacy to individuals seeking OST on their reception into prison is an initiative that was also recommended for further exploration by the expert group.

The expert group was convened before the publication of the 2017 Drug Strategy (HM Government, 2017). That strategy sets out a number of key actions to address drug use in prison that are consonant with the recommendations in this paper, including:

- governors working in partnership with health commissioners to co-commission integrated and patient-focussed drug treatment programmes;
- improving continuity of care with community services;
- reassessing the substance misuse treatment pathway for prisoners and how these services, including peer support, meet the treatment and recovery needs of offenders;
- more highly trained prison officers playing a bigger role in the provision of services while building more constructive and relevant relationships with offenders; and
- developing options to address the misuse of prescribed medicines more effectively.

To go along with this, we propose the following expedients:

- establish a clear OST strategy between care team and prisoner at the moment of arrival, with careful note of the individual’s specific needs;
- ensure that the OST is prompt, reliable and can be adjusted;
- establish clear protocols for transition to the community on release, with no gaps in care, and no changes, and with adequate safeguards against overdose; and
- integrate clinical and psychosocial care, using a full-team care plan that regards the prisoner as part of the team.

References


About the authors

Farrukh Alam (MD) is Divisional Medical Director at Central & North West London NHS Foundation Trust, London, UK. He has published widely in the field of addiction, and his current interests are in prescription opioid analgesic dependence and substance misuse in vulnerable populations. Farrukh Alam is the corresponding author and can be contacted at: Dr.Alam@nhs.net

Dr Nat Wright (MD, MBBS) is Clinical Research Director for the Transform Research Alliance at Spectrum Community Health and Honorary GP Consultant for Rotherham Doncaster and South Humber NHS Foundation Trust (RDaSH). He undertakes clinical work in both community and prison general practice and is the Primary Care Specialty Lead for the National Institute for Health Research (NIHR) Yorkshire and Humber Clinical Research Network. Dr Wright graduated from the University of Leeds and has published extensively in the area of healthcare provision for prisoners and wider vulnerable groups.

Paul Roberts is Substance Use Inspector, HM Inspectorate of Prisons, London. He has been a vital member of HM Prison Inspection teams for many years and has been involved in the development of multiple reports on the changing patterns of substance misuse in adult prisons and service responses to these changes to ensure that the most vulnerable prisoners are kept safe.

Sunny Dhadley (FRSA CMgr) is Service User Involvement Officer at the Wolverhampton Drug & Alcohol Service User Involvement Team (SUIT). Mr Dhadley works with individuals on a one-to-one basis delivering support sessions, interventions and referrals to meet the wide range of needs of those suffering from addiction. Mr Dhadley graduated from the University of Wolverhampton and has recently completed the Executive Course on Drug Policy, Diplomacy and Global Public Health at The Graduate Institute, Geneva.

Joanne Townley is Prisons Manager at the charity Pathways to Recovery, a free and confidential drug and alcohol service for adults (including offenders), families and carers in Warrington.
She has a special interest in addiction, recovery, crime reduction initiatives and improving the transition between prison and the community.

Russell Webster is Independent Consultant, Researcher, Writer, Trainer and Expert in Drug Treatment and Criminal Justice. Mr Webster graduated from Cambridge University, is a trained probation officer, and has worked for a range of voluntary sector organisations with homeless people, ex-offenders and young at-risk people. Since 1996, Mr Webster has worked as an independent consultant specialising in the fields of substance misuse and crime and is the author or co-author of over thirty national publications on issues relating to drugs, alcohol and offending.
A model for sustainable laser tattoo removal services for adult probationers

Victoria D. Ojeda, Laura Romero and Arisa Ortiz

Abstract

Purpose – The purpose of this paper is to describe a sustainable free laser tattoo removal clinic for economically disadvantaged adult probationers.

Design/methodology/approach – This paper describes the partnerships, methods and challenges/lessons learned from the implementation of a free monthly laser tattoo removal program for adult probationers within a medical school setting in California.

Findings – Possible patients are identified via a collaboration with the county’s Probation Department. Founded in 2016, this monthly program has provided tattoo removal services to 37 adult patient probationers, many of whom receive follow-up treatments. Clients seek to remove about four blue/black ink tattoos. Since its inception, 23 dermatology residents have volunteered in the program. Challenges to patients’ ongoing participation primarily pertain to scheduling issues; strategies for overcoming barriers to participation are provided. No safety concerns have emerged.

Social implications – Programs such as this public-private partnership may benefit probationers by eliminating financial barriers associated with tattoo removal. This model supports the training of cohorts of dermatologists seeking community service opportunities related to laser medicine. Others seeking to implement a similar program may also consider expanding treatment days/times to facilitate access for working probationers, providing enrollment options for other health and social services (e.g. public insurance, food stamp programs) and hosting a mobile onsite clinic to address clients’ physical and mental health needs.

Originality/value – This paper describes a unique collaboration between law enforcement and a medical school and it may assist other jurisdictions in establishing free tattoo removal programs for the benefit of probationers. The methods described overcome challenges regarding the implementation of this specialized clinical service.

Keywords Medical school, Recidivism, Laser tattoo removal, Probation department, Probationer, Reentry process, Community reentry, Tattoo regret, Dermatology, Laser medicine, Reentrants, Gang tattoos

Paper type Technical paper

Introduction

Tattoos are pervasive in the USA – a 2015 US poll found that 29 percent of Americans have at least one tattoo (The Harris Poll, 2016). Justice-involved individuals (e.g. incarcerated, probationers or parolees) may have amateur tattoos or tattoos that may be perceived as anti-social or which represent gang affiliations (Demello, 1993; Hellard et al., 2007; Komar and Lathrop, 2008). Goffman suggests that physical markers or visual characteristics may produce a stigmatizing response by others (Goffman, 2009), resulting in labeling, negative attributions, separation of that person from others, and status loss and discrimination (Link and Phelan, 2001). Prior studies have found that tattoos may contribute to stigma, discrimination or police profiling (Pinedo et al., 2015; Bekhor et al., 1995; Boyle, 2011). These conditions may affect individuals’ re-entry process and ability to successfully navigate social institutions (e.g. secure employment, establish relationships with friends/family) following their release from jail or prison (Inderbitzin, 2009; Madfis and Arford, 2013; Liszewski et al., 2015; Varma and Langan, 1999).

Some individuals may become dissatisfied with their tattoos over time (e.g. changing identity, terminated affiliation with group, mistake, pressure to remove tattoo, lifestyle transition) (Russell, 2010; Madfis and Arford, 2013; McIlwee and Alster, 2018; Varma and Langan, 1999;
Liszewski et al., 2015; Klein et al., 2014; Shelton and Peters, 2008). One recent poll found that 23 percent of respondents regretted their tattoos (The Harris Poll, 2016). Consequently, some individuals may attempt to remove their tattoos through non-professional methods (e.g. rubbing with abrasive or chemical substances, burning, cutting) (Demello, 1993; Poljac and Burke, 2008) that may be physically harmful and result in pain, infection or scarring (Yim et al., 2010; Kluger and Koljonen, 2014; Snelling et al., 2006; Serup, 2017).

Evidence-based tattoo removal methods are available, including laser tattoo removal (De Cuyper and Perez-Cotapos, 2018). Selective photothermolysis using Q-switched laser nanosecond or picosecond technology is the most effective procedure from among many FDA approved procedures used for tattoo removal (Food and Drug Administration, 2017; Anderson et al., 1989; Naga and Alster, 2017).

The Behavioral Model of Health Services Use can help elucidate barriers and facilitators to accessing/using health care services (Andersen, 1995); its key domains are: population characteristics; the environment; health behaviors; and health outcomes. Andersen further identified the roles of predisposing (e.g. demographics, social structural factors), enabling (e.g. personal/family/community resources), and need characteristics (e.g. individual’s perceived need vs professional evaluated need) in shaping health care utilization. This model can help identify areas where programs and policies can intervene to improve minorities’ (Scheppers et al., 2006) and reentrants’ health. For example, a recent study of newly released prisoners participating in the Transition Clinic Network 10-site study found that 46.9 percent were black, 30.2 percent were Latino, 30 percent lacked a high-school degree, 25 percent were homeless, 78.7 percent were unemployed, 39.8 percent were uninsured, 43.9 percent had 3+ chronic physical health conditions and 52.7 percent had chronic mental health conditions (Shavit et al., 2017). Reentrants have in some instances identified healthcare as a low priority in the face of competing needs (e.g. unemployment, unstable housing) (Dong et al., 2018), suggesting that tattoo removal, a costly service (Castillo, 2013) may also be considered a low priority by low-income reentrants (Chintakrindi et al., 2015) facing multiple co-occurring health and social challenges.

This paper describes the strategies undertaken to implement an evidence-based, clinically effective and sustainable free laser tattoo removal program (i.e. the UCSD Clean Slate Free Tattoo Removal Program, known hereafter, as the UCSD Clean Slate Program) for underserved and economically disadvantaged probationers who participate voluntarily. Challenges to implementation, lessons learned, suggested solutions and avenues for future research are also presented. Strategies presented in this paper may assist other jurisdictions develop partnerships with universities and establish tattoo removal programs for justice-involved persons. The model described here also offers Dermatology Residents and Fellows additional training in laser tattoo removal and the opportunity to contribute their specialized skills within a community service setting.

Methods

Laser procurement

In 2015, the San Diego Indigent Legal Defense Grant Fund provided the first author with grant funding to purchase a state-of-the art Q-switched laser; this device supported the founding and implementation of a free tattoo removal program for adult probationers in San Diego County. The Program purchased a Certified Pre-Owned Alex TriVantage system (Candela, Wayland, MA); it can successfully treat a range of colored tattoo inks, including blue/black inks, using the following wavelengths: 532, 755, 1064 nm (Syneron Candela, 2018). The device is hosted by the UCSD Department of Dermatology.

Collaborating with San Diego County Probation Department for patient referrals

In order to achieve our goal of providing tattoo removal to underserved low-income probationers, the first author established a partnership with the San Diego County Probation Department. The following sections describe this collaboration.
To facilitate the referral process, San Diego County Probation Department first authorized the Program to be listed in its “Community Resource Directory (CRD),” which is an electronic web-based directory of service providers used by probation officers seeking to refer their probationer clients to optional or court-mandated community-based services (e.g., education, substance abuse, mental health, violence prevention or employment services) (San Diego County Probation Department, 2018). All programs listed in the CRD are vetted by the Probation Department.

**Client eligibility**

The UCSD Clean Slate Program provides free laser tattoo removal to adults ages 18 years and older; participation is voluntary. We focused on an adult population since a tattoo removal program designed for juvenile probationers was already established and an adult-focused program was desired by probationers and the Probation Department.

Each month, the UCSD Clean Slate Program Director reviews the list of individuals referred through the CRD and compiles a list of potential new clients and returning clients; this list is distributed to the lead Probation Officer who has been assigned to interface between the Probation Department and the program. That Officer assesses the client list for safety and continued eligibility. Eligibility criteria for participating in the program are as follows: abstaining from drug use; do not pose a safety threat to patients or clinicians; in good standing within the probation system; interested in receiving tattoo removal services; and able to provide informed consent.

The Probation Officer shares the updated list with the UCSD Clean Slate Program Director, who then invites approved individuals to the next clinical session. The patient screening process occurs approximately ten days before each clinic session; this ensures that clients may be contacted about 5–7 days ahead of the upcoming session. The UCSD Clean Slate Program Director next generates a list of clients who have confirmed their attendance: up to ten individuals are scheduled per session. This list is shared with the Probation Department and the UCSD Dermatology team. By receiving the patient list two to three days ahead of the clinical session, the UCSD Dermatology team can adjust staffing needs and prepare supplies for each client (e.g., anesthesia: injectable lidocaine, syringes, gauze, protective eye-wear, consent forms, cameras for uploading patient pre-treatment photos, etc.). Anesthesia is provided to promote patient comfort during the procedure (De Cuyper and Perez-Cotapos, 2018; Kent and Graber, 2012). At each session, the Program Director updates patients’ contact information. Since launching its services in February, 2016, the Program has served at least 37 new clients. On average, clients are seeking to remove four tattoos (range: 1 to 10 tattoos).

**Ensuring safety and transportation**

Given the diverse clientele to be served (e.g., rival gang members, former substance users, transition age youth (aged 18–26 years), older adult probationers, women), the County and UCSD Clean Slate Program established the following procedures to protect patient and provider safety. On the clinic day – typically a third or fourth Saturday morning of the month, probationers first meet at the lead probation office and undergo a security screening prior to being transported to the clinic. Transportation is provided free of charge since many patients lack their own transportation and use of local public transportation is a time-consuming process and was determined to be a barrier to participation. Since gang-affiliation is pervasive among this patient population and there is a potential for interpersonal violence among rivals, probation officers who transport clients remain on-site to provide safety support services, if needed. The Probation Department determined that two officers would be assigned for every three patients, per session. In more than two years of service, no violent or adverse events have occurred.

**Client orientation to laser tattoo removal**

While many clients are aware of tattoo removal, many are unfamiliar with the process and aftercare. Thus, the Program Director describes the process when potential clients are first contacted and they may also request an information sheet by e-mail. In addition, a brief informational video specific
to the UCSD Clean Slate Program is shown to clients at their first session. At each session, the Attending Physician orients all new patients and answers their questions. Common concerns include pain management, work restrictions and issues related to sun exposure. Physicians educate patients on expected tattoo responses immediately after an individual treatment and the post-operative healing process. Patients are also informed that protective eye goggles are mandatory during tattoo removal treatment in order to prevent eye injury; however, this can be difficult for individuals who have experienced prior trauma or violence.

While removal of exposed tattoos (e.g. face, neck, hands, scalp) is prioritized, the program allows for removal of all unwanted tattoos. Patients are informed that the tattoo removal process typically requires repeated monthly or bimonthly treatments that will span a period of months to several years. Therefore, patients are also informed that they may continue in this tattoo removal program after they successfully terminate their probation supervision, and until they have achieved their tattoo removal objectives. There is no cost for the treatment.

**Participation by post-probation patients**

Individuals who have successfully terminated their probation supervision are informed that they may continue in the program until their tattoos are adequately removed. The Program Director conducts monthly outreach to ensure that such eligible and interested non-probation patients are included in the upcoming session’s client list. Non-probationer patients are provided with the clinic’s address and asked to arrive 15 min prior to the arrival of probationers (i.e. 8.45 a.m.). Non-probation patients are required to arrive alone to the clinic for client safety (e.g. they may either drive themselves, take public transportation, or arrange for a drop-off at a nearby location (e.g. shopping center) as they are ineligible for transportation provided by the Probation Department. There is no cost for the treatment for post-probation patients.

**UCSD dermatology administrative procedures**

All patients are registered in the UCSD EPIC Electronic Medical Record system to ensure appropriate record keeping (e.g. laser settings, anesthesia, relevant medical information, pre-treatment photos) and quality care. The Clean Slate Program Director shares the patient list with the Dermatology Department’s administrative staff three days before the clinical session, and the staff generate a new client medical record within EPIC, as needed, and patient labels are generated for each session. Next, written informed consent is obtained from each patient prior to each treatment, thus ensuring that all clients have voluntarily received this service and understand the goals and methods of the treatment. Sites to be treated are anesthetized with an injectable lidocaine at the beginning of the session, though some clients have opted to receive the treatment without prior numbing thus allowing them to have a greater number of tattoos removed during each session. Clients are advised to contact the Program Director with post-treatment follow-up questions; these are triaged to the attending physicians, including the Medical Director.

**Physician training and UCSD clean slate program sustainability**

The UCSD Dermatology Department supports the training of 14 Medical Residents in a three-year program. Residents are informed by their Chief about the UCSD Clean Slate Program, its goals and potential opportunity for additional clinical training in laser tattoo removal. UCSD 4th year medical students may also request to volunteer in the clinic and shadow the physicians. The Clean Slate Program operates one Saturday per month. Clinical dates are selected at the beginning of each academic year to ensure coverage by dermatology residents (n = 3 per session), medical students (n = 2) and board certified UCSD dermatologists (n = 1). Each volunteer physician signs up for at least one session that is convenient for their schedule. The UCSD Clean Slate Program is sustainable because all physicians and residents are volunteer clinicians who donate their time to the program, thus the costs associated with clinical fees are substantially reduced. The burden on volunteer clinicians is relatively low as the clinic is held once per month and sessions typically last about 3 hours; this model has ensured that staffing the clinic is sustainable.
The UCSD Dermatology Department encourages resident involvement in community service projects. The UCSD Clean Slate Program is an excellent service activity for residents seeking to contribute and refine their clinical skills, interact with justice-involved adults, and benefit underserved reentrants seeking to reintegrate into the community. By participating in the Clean Slate Program, dermatology resident physicians acquire additional hands-on experience in laser tattoo removal, treat diverse sites (e.g., neck, scalp, arms, hands, chest, genitalia) and interact with a diverse client population. By attending serial sessions, they are able to observe the fading process and become experienced in laser setting adjustment based on tattoo response. Residents have been very supportive of this tattoo removal program. In the two years the program has been operating, 23 Dermatology Residents and Fellows have rotated through the UCSD Clean Slate Program and one Resident expressed a desire of establishing a similar program in his home state.

Challenges and lessons learned

This section addresses challenges to program implementation and potential solutions. The program operates once per month on a day/time that has been selected by the medical team. The first author interacts with all patients as appointments are scheduled and as they await their treatment and in these discussions, has observed that patient participation may be hindered by diverse enabling factors (Andersen, 1995) such as family demands, child care availability, relocation to other communities (for those who complete their probation), or fluctuations in client eligibility (e.g., clients may recidivate or be non-compliant with their probation conditions). Employment schedules pose a particular challenge as clients may be unable to take time off from work. Therefore, other programs may consider offering several slots during a wider time window (i.e., > 3 hours per session, evening appointments, weekday appointments). While ten patients are scheduled for each session, the first author finds that no-show rates vary from 30 to 50 percent. Other programs may consider scheduling a greater number of patients depending on the clinical capacity (e.g., clinician availability, number of lasers available for treatment, cost of supplies). The grant supported the use of anesthesia – a product that has been well-received by patients; anecdotally, patients have indicated that the use of anesthesia has supported their continued participation by reducing discomfort during the treatment. The use of anesthesia has enabled patients to receive treatment for numerous tattoos during each session. The requirement that patients be transported by the Probation Department may pose a challenge to persons who reside far from the clinic; for example, the San Diego region is vast and public transportation is time consuming and per the first author’s personal experience, patients may need to travel for several hours prior to and after receiving their treatment. The program is in the process of revising this requirement in order to facilitate the participation by patients who live far from the clinic. The program grant included funding for client transportation and safety services (to be provided by Probation Officers who are trained to work with gang members and are armed). Ensuring that these services are available upon termination of the grant funding is an important component of the program for client participation and patient and provider safety. Finally, in recognition of the high levels of stress and anxiety experienced by patients, our program offered onsite individualized meditation/relaxation services pre or post-laser tattoo removal to interested patients; this service has ended due to a change in the volunteer’s schedule. Anecdotally, this service was well received and could be implemented by other programs.

Others seeking to launch a similar tattoo removal program may also consider scheduling social service providers (e.g., enrollment in Medicaid, a public insurance program for impoverished individuals, or Supplemental Nutrition Assistance Program which provides food assistance) so they are onsite during clinical days; this would increase access to such services. The addition of a mobile clinic that can screen for high blood pressure, HIV, diabetes, Hepatitis, vision acuity and other health conditions can help promote patients’ physical health by reducing access to care barriers. In addition, providing onsite mental health services during the clinical hours can also facilitate access to this service given the high prevalence of mental health conditions, including trauma, among justice-involved persons. These strategies, including a “one-stop-shop” approach, can help reach and engage this underserved patient population in the health care system and potentially help reduce racial/ethnic disparities in health status and access to care among justice-involved adults, especially males.
Conclusion and next steps

The UCSD Clean Slate Removal Program is a free tattoo removal program that relies on highly skilled laser operators to provide an important evidence-based service to probationer clients seeking to reduce social stigma resulting from their tattoos and change their lives as they reconnect with their families, the labor market and the communities. While other tattoo removal programs have been established for the purpose of assisting gang-involved persons to transition from this status (Bochenek, 1996; Boyle, 2011), to our knowledge, this program is unique in its collaboration between academia and local law enforcement. The UCSD Clean Slate Removal Program partners with the San Diego County Probation Department; this relationship has produced a safe and successful process for the implementation of this greatly needed program. Similar programs have been established for youth as a method of preventing violence and fostering youth health and well-being (Jain et al., 2014). By housing this tattoo removal program within a university setting that supports resident and fellow dermatology training, we can ensure a high quality service, while also facilitating physician training and ensuring program sustainability due to the availability of a regular source of clinician volunteers. This public-private partnership can be replicated in other jurisdictions in collaboration with local academic institutions and can greatly benefit justice-involved persons re-engage in their communities by removing harmful or undesired tattoos. Tattoo removal, however, is unlikely to address reentrants’ multiple needs and should be considered as one resource within the reentry planning and service delivery array.

Research is needed to address barriers and facilitators to participation as well as the impact of this program on clients and resident physicians. For example, longitudinal mixed-methods studies would enable jurisdictions to understand the impact of tattoo removal on well-being in diverse areas including mental health, socioeconomic status, interpersonal violence, labor market outcomes, police harassment and reincarceration. Qualitative studies may also examine probationers’ views of the self throughout the tattoo removal process and their perception of how this treatment impacts the reentry process. Qualitative studies with physician resident volunteers may elucidate their interest and barriers to participation, and a pre-post study design may inform our understanding of the perceived contributions to their professional development in laser medicine and social justice issues, physicians’ interest in continuing to treat justice-involved populations, and their interest in potentially re-creating this model in other communities. Lastly, public health researchers may explore whether this is a cost-effective treatment that can be incorporated into reentry programs. Thus, while laser tattoo removal is a well-established evidence-based medicine modality, its impact on communities and reentrants and other justice-involved persons has not been well studied and there is ample room to investigate the aforementioned issues.

References


Corresponding author
Victoria D. Ojeda can be contacted at: vojeda@ucsd.edu
Problem gambling and support preferences among Finnish prisoners: a pilot study in an adult correctional population

Kalle Lind, Anne H. Salonen, Johanna Järvinen-Tassopoulos, Hannu Alho and Sari Castrén

Abstract

Purpose – The purpose of this paper is to explore the prevalence of potential problem gambling among Finnish prisoners; the associations between problem gambling and demographics, substance use and crime-related factors; and problem gamblers' support preferences.

Design/methodology/approach – Prisoners (n = 96) from two Finnish prisons were recruited between December 2017 and January 2018. The estimated response rate was 31 percent. Gambling problems were measured using the Brief Biosocial Gambling Screen. The participants were asked to report their gambling both for one year prior to their incarceration and for the past year. The independent variables were demographics (age, gender and marital status), substance use (alcohol, smoking and narcotics) and crime-related factors (crime type, prison type and previous sentence). Statistical significance (p) was determined using Fischer's exact test.

Findings – Past-year pre-conviction problem gambling prevalence was 16.3 percent and past-year prevalence 15 percent. Age, gender, smoking, alcohol or illicit drug use were not associated with past-year problem gambling before sentencing. One-third of the prisoners (33.3 percent) who were sentenced for a property crime, financial crime or robbery were problem gamblers. One-quarter (24 percent) of all participants showed an interest in receiving support by identifying one or more support preferences. The most preferred type of support was group support in its all forms.

Research limitations/implications – It is recommended that correctional institutions undertake systematic screening for potential problem gambling, and implement tailored intervention programs for inmates with gambling problems.

Originality/value – This study provides a deeper understanding of problem gambling in prisons. Problem gambling is associated with crime and also seems to be linked with serving a previous sentence. Early detection and tailored interventions for problem gambling may help to reduce reoffending rates.

Keywords – Prisoners, Quantitative research, Substance use, Problem gambling, Addiction treatment, Criminal behaviour

Paper type – Research paper

Introduction

It is estimated that problem gambling is five to ten times higher in the adult correctional population than in the general population (Turner et al., 2013, 2017; Riley and Oakes, 2015; Williams et al., 2005; May-Chahal et al., 2017). In Finland, population surveys indicate that 3.3 percent (The South Oaks Gambling Screen, SOGS = 3+, Lesieur and Blume, 1987) of people suffer from problem gambling (Salonen and Raisamo, 2015); which falls in the middle of the suggested worldwide problem gambling range of 0.12–5.8 percent (past 12 months) reported by Calado and Griffiths (2016). Problem gambling is an important criminogenic factor, with the majority of identified inmates with problem gambling having committed a problem gambling-related criminal offense (Turner et al., 2009; Brown, 1987; Meyer and Stadler, 1999; Laursen et al., 2016). The types of crime committed by these offenders, such as fraud, forgery, embezzlement, larceny, selling drugs or stolen goods, shoplifting, burglary and petty theft or robbery, are specifically aimed at covering...
gambling losses and at making continued gambling possible (Turner et al., 2009; Lind et al., 2015; Kuoppamäki et al., 2014; Abbott and McKenna, 2005; Abbott et al., 2005; Potenza et al., 2000). A higher percentage of problem gamblers than social gamblers commit illegal acts in order to finance their gambling habit or to pay off gambling debts (Reith and The Scottish Centre for Social Research, 2006).

In Finland, there is a scarcity of research concerned with prisoners; no published data is currently available on problem gambling in the prison population. It is almost ten years since the last major prisoner health study, but while this research did address mental health and substance dependence, problem gambling was excluded (Joukamaa et al., 2010). The current study is the first peer-reviewed published report on the prevalence of problem gambling among Finnish prisoners. Gambling and problem gambling among prisoners is an important area of research for various reasons. Among prisoners, undetected and untreated problem gambling is widely viewed as a risk to community re-entry and can lead to re-incarceration. Problem gambling may also have a damaging impact on significant others (Salonen et al., 2016) and victims of gambling-related crimes, which can make re-entry difficult. Problem gambling associated with criminal behavior requires rigorous interventions and clear policies to reduce the incidence or re-occurrence of problematic gambling and to ease the burden on the criminal justice system.

In order to create an effective support mechanism for problem gambling prisoners, it is important to understand the demographics and comorbidities of prison populations. High rates of problem gambling are closely linked with being a young man, minority group status and comorbidities such as substance abuse (Crockford and el-Guebaly, 1998), but problem gambling also occurs among women inmates (Riley et al., 2017; Williams et al., 2005; Abbott and McKenna, 2005).

Problem gambling often remains undetected and undiagnosed, and it is less automatically assessed than substance abuse and mental health problems (Turner et al., 2017; Brooks and Blaszczynski, 2011; Williams et al., 2005). Problem gambling is often seen as a marginal issue that does not warrant the same attention as more visible problems such as substance use, especially when personnel resources are limited. The integration of interventions into broad addiction support programs such as Counselling, Assessment Referral Advice and Throughcare in the UK, a low threshold low/medium intensity, non-clinical drug treatment service for prisoners (Offender Health Research Network, 2010), involves multiple challenges. Shame and the fear of stigma, not wanting to quit gambling and lack of awareness about available support or help are major barriers to seeking help among both the general population and inmates (Suurvali et al., 2008; Turner et al., 2017). On the other hand, it has been reported that inmates with severe gambling problems do tend to seek help (Riley et al., 2017). The first step to making progress is, therefore, to identify the links between problem gambling and other life-control problems and then to integrate problem gambling treatment with prisons’ substance abuse treatment (Obstbaum et al., 2016) or broader prison rehabilitation programs. This would guarantee the best possible support services and treatment paths for this particular target population (Turner et al., 2017). Identifying the problem and providing sufficient services are crucial to the goal of preventing crime and reducing reoffending rates (Meyer and Stadler, 1999).

The empirical part of this study is based on a questionnaire among prisoners and probationers, the aim of which was to assess the prevalence of problem gambling, substance use and gambling behavior related to crime, as well as prisoners’ and probationers’ support preferences with regard to problem gambling. A further purpose is to discuss possible support and treatment options.

**Aims**

In order to build more effective support systems for prisoners, we need a more in-depth understanding of how substance use and problem gambling are associated and how their concomitant presence can be addressed in correctional institutions. This study set out to explore the prevalence of problem gambling among Finnish prisoners by gender; the association between potential problem gambling, age of gambling and problem gambling onset, and demographics (age, gender and marital status), substance use (alcohol, smoking and narcotics) and crime-related factors (crime type, prison type and previous sentence); and to explore the support preferences of those prisoners willing to seek help for their problem gambling.
Methods

Setting

The Criminal Sanctions Agency in Finland runs 26 prisons, which include both closed and open institutions. The two prisons selected for this survey represent two different types of penitentiaries. Both are located in the criminal sanctions region of Western Finland. Turku prison is a closed high-security prison with a capacity to house 255 inmates. Vanaja prison is an open prison and has two units, one for women and one for men. Open prisons are often the last step of a prison sentence before inmates make the transition back to regular life. Vanaja open prison also has a family ward where inmates can stay with their small children.

The data for this study were collected in these two prisons between December 2017 and January 2018. Before data collection, the researchers met with staff at both prisons, providing information about the purpose of the study and instructions regarding data collection. Staff members distributed the questionnaires to the participants, who also received an information sheet about the study and its purpose. All the data were collected by prison guards as the researchers did not have access to the wards. The researchers visited the prisons personally to promote the study and discuss the preferred and most appropriate method of data collection with the heads of the prisons. Based on these discussions the decision was made to organize data collection via the guards, who were provided with written instructions and who handed out the questionnaires, information sheets and informed consent forms to prisoners. The timing of data collection was based on the prisons’ own routines. No prior advertisements or notifications were issued about the study in the prisons. The questionnaires were collected in sealed ballot boxes to ensure confidentiality and to demonstrate that prison staff did not have access to the data.

In addition to prisoners, our survey included persons in supervised probationary freedom. Detainees were excluded as they had not yet been sentenced. The estimated response rate is calculated using statistics provided by the Criminal Sanctions Agency: the number of prisoners changes daily, which means it is difficult to give the precise number of prisoners reached in our study. On January 1, 2018 Turku had 194 prisoners belonging to our target group and Vanaja 59 prisoners. In all we received 96 responses from 312 prisoners (based on January 1 statistics), giving a response rate of 30.8 percent. The response rate was higher in Vanaja (66.1 percent) than in Turku (29.4 percent).

Measures

Problem gambling: the questionnaire instructions defined gambling as “games that are played for money.” Gambling problems were measured using the Brief Biosocial Gambling Screen (BBGS, Gebauer et al., 2010), a three-item scale measuring neuro-adaptation, psychosocial characteristics and adverse social consequences of gambling (Table I). Based on their “yes” or “no”

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Question</th>
<th>All n (%)</th>
<th>Men n (%)</th>
<th>Women n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Neuro-adaptation</td>
<td>“During the 12 months before being convicted, did you become restless, irritable or anxious when trying to stop/cut down on gambling?”</td>
<td>11 (12.0)</td>
<td>6 (11.1)</td>
<td>5 (13.2)</td>
</tr>
<tr>
<td>2. Psychosocial characteristics</td>
<td>“During the 12 months before being convicted, did you try to keep your family or friends from knowing how much you gambled?”</td>
<td>12 (12.9)</td>
<td>5 (9.1)</td>
<td>7 (18.4)</td>
</tr>
<tr>
<td>3. Adverse social consequences</td>
<td>“During the 12 months before being convicted, did you have such financial trouble as a result of your gambling that you had to get help with living expenses from family, friends or welfare?”</td>
<td>10 (10.6)</td>
<td>4 (7.3)</td>
<td>6 (15.4)</td>
</tr>
<tr>
<td>Problem gamblinga 12 months before conviction</td>
<td></td>
<td>15 (16.3)</td>
<td>8 (14.8)</td>
<td>7 (18.4)</td>
</tr>
</tbody>
</table>

Notes: BBGS, Brief Biosocial Gambling Screen, with yes and no response options. aOne or more positive responses (yes) to questions 1–3 indicated potential problem gambling during the 12 months before conviction.
responses (with total scores ranging from 0 to 3), the participants were defined as potential problem gamblers if they scored one or more. In addition, participants who had answered “yes” to any of the BBGS items were instructed to answer two further questions concerning age of gambling onset and age of problem gambling onset. BBGS was originally developed to measure gambling problems in the past 12 months. Since gambling opportunities are scarce in prison settings, we asked the participants to fill out two different versions of BBGS: the first one inquired about gambling during the past 12 months before the moment of completing the questionnaire, and the second one concerning the 12 months before the start of their prison sentence (on the street).

Substance use: alcohol consumption was measured by using a modified version of the Alcohol Use Disorders Identification Test (AUDIT-C) (Bush et al., 1998). AUDIT-C is a three-item screen used to identify persons who are hazardous drinkers or who have active alcohol use disorders (including alcohol abuse or dependence). It is based on a five-point Likert scale as follows: a = 0 point, b = 1 point, c = 2 points, d = 3 points e = 4 points. In this study, total scores were counted by summing up the points for each item, and cut-off points recommended by Seppä (2010) were used to identify risky drinking among men (score ≥ 6) and women (score ≥ 5). Smoking was ascertained with the following yes/no question: “Have you smoked any of the following products: cigarettes, pipe, cigar or electronic cigarettes during the past year?” Lifetime illicit drug use was ascertained with the question: “Have you used narcotic substances?,” with a yes/no response option.

Crime-related variables: respondents were also asked to identify the primary crime for which they were currently sentenced. The specified crime types were: robbery; theft or property crime; murder, manslaughter or attempted murder; other violent crime; tax offense, false accounting or other financial crime; drug offense; driving under the influence; and other crime. In addition, the respondents were asked (yes/no) whether they had any previous sentences (Do you have previous sentences?). Finally, the participants were asked to say whether or not their current sentence was gambling related (Is your current sentence related to gambling?). Prison type was also included in the analysis.

Support preferences: the participants’ support preferences were assessed by listing different types of support options (see Table IV). Respondents were allowed to choose as many options as they wanted.

Demographics: background variables included gender (man/woman/other/do not want to disclose), age and current marital status (married or in a registered relationship/cohabiting/single/divorced/widowed).

Ethics: the study was conducted in accordance with the ethical standards of the Declaration of Helsinki. The Ethics Committee of the National Institute for Health and Welfare, Finland, approved the research protocol (THL/1701/6.02.01/2017). Additional approval was obtained from the Criminal Sanctions Agency. Potential participants received written and verbal information about the study and the principles of voluntary participation.

Data analysis: the data were analyzed using SPSS 23 software (SPSS, Inc., Chicago, IL, USA). Statistical significance (p) was determined using χ² test (> 2 groups) or Fisher’s exact test (2 groups); χ² test was used for categorical variables when the test assumptions were valid and Fisher’s exact test was used when any expected cell count was less than five for a 2×2 table.

Results

Description of the participants

We had 96 prisoner participants, of whom 57.3 percent were men and 40.6 percent women (Table II). Just under one-third were aged 25–34 years, slightly over one-quarter were 35–44 years and one-quarter were 45–54 years. Among women the largest age group (41.0 percent) was 45–54 years, among men the largest age group (33.3 percent) was 25–34 years. Women were most often married or in a registered relationship (36.8 percent), among men the most common marital status was single (38.2 percent).
More than half (53.8 percent) of the participants used alcohol at a risky level (men 69.0 percent; women 31.0 percent). The Cronbach’s α for AUDIT-C was 0.747 (Table II). In the closed prison, 59.6 percent of the participants used alcohol at a risky level, compared to 39.3 percent in the open prison. Over 80 percent of the participants had smoked (men 90.9 percent; women 74.4 percent) at least once during the past 12 months. Overall, 37.0 percent of the participants (47.4 percent of men and 23.1 percent of women) had used narcotic substances in their lifetime.

Almost half of the participants reported that their principal offense was a violent crime (Table II). Almost one-third (31.9 percent) had been sentenced for murder, manslaughter or attempted murder. Violent crime was the most frequent category of crime among both men and women: 35.9 percent of women and 28.8 percent of men had been sentenced for murder, manslaughter or attempted murder. One-quarter of women and less than one-tenth of men had been sentenced for a drug offense; 5.2 percent of women and 21.2 percent of men for robbery, theft or property crime; and 10.3 percent of women and 7.7 percent of men for a tax offense, false accounting or other financial crime. Driving under the influence was the principal crime for 9.2 percent of men and 1.6 percent of women. Nearly 60 percent of the participants reported that they had been sentenced previously (39.5 percent of women and 73.6 percent of men). More than half (59.6 percent) of the respondents were in a closed high-security prison. These participants were predominantly men (89.1 percent), whereas women accounted for the bulk of the open prison inmates (82.1 percent).
Problem gambling

In total, 16.3 percent of the participants (18.4 percent of men and 14.8 percent of women) indicated having a gambling problem during the 12 months prior to their incarceration (BBGS = 1+) (Table I). The Cronbach’s α value for BBGS was 0.747. Psychosocial characteristics (12.9 percent) were the most commonly recognized criterion of problem gambling, followed by neuro-adaptation (12.0 percent) and adverse social consequences criteria (10.6 percent). Among men, the most often endorsed criterion was neuro-adaptation (11.1 percent), which refers to becoming irritable or anxious when trying to stop gambling. Among women, the most common criterion was psychosocial, referring to problems in trying to keep family or friends from knowing about their gambling (18.4 percent). Overall, women gave more positive (yes) responses to all three items of the BBGS questionnaire (10.5 percent) than men (5.6 percent) when evaluating past-year gambling, but due to the low count data, no formal statistical test was performed on group differences.

In addition, 15 percent of the participants were identified as potential problem gamblers (BBGS = 1+) during the past year. 92.9 percent of them also scored at least one point for the 12 months before incarceration. Similarly, 86.7 percent of those who were identified as potential problem gamblers pre-incarceration also scored at least one point for past-year BBGS. Mean age of gambling onset was 14.73 (SD = 5.78), which corresponded with the relatively early age of problem gambling onset (mean = 22.45, SD = 8.73).

Problem gambling and correlates

The proportion of problem gamblers was highest in the age group 35–44 years, regardless of gender. The most common marital status for problem gamblers was single (47 percent). Among those with risky alcohol consumption, 14.3 percent also had a gambling problem. In addition, 20 percent of the participants with a history of drug use and 17.5 percent of those who smoked presented with gambling problems. Prison type (closed/open) was not associated with problem gambling prevalence (Table III).

One-third of those who had been sentenced for an income-generating crime had a gambling problem. Tax offenses, false accounting and other financial crimes were the most common reasons for being sentenced among problem gamblers, followed by drug offenses and property crimes. There was a statistically significant association (p = 0.012) between crime type and problem gambling: problem gambling was more common among those who were sentenced for property crime, financial crime or theft. Among those who had a previous sentence, 24.1 percent (18 percent of men and 40 percent of women) can furthermore be defined as problem gamblers. Among women, having a previous sentence had a statistically significant (p = 0.011) association with gambling problems.

Among the six participants whose principal offense was gambling related, five were potential problem gamblers. There was an association (p < 0.000) between problem gambling and gambling-related crime. Of those six inmates whose principal offense was gambling related, four had been sentenced for a property offense, financial crime or robbery.

Support preferences

One-quarter (24 percent, n = 23) of the participants showed an interest in receiving support by identifying one or more support preferences (Table IV). There were more participants who wanted support than those who were identified as potential problem gamblers in either BBGS (16.7 percent, n = 16). The most preferred type of support was group support in all its forms, followed by personal discussion with a prison employee. Men in particular seemed to prefer group-based support and face-to-face discussions over other support types. Virtual support was more popular among women and, overall, women seemed to be more open to different types of support. Those whose principal offense was gambling related preferred personal conversations with a prison employee, mixed group support and a guided online forum.
### Table III: Association between the demographic factors and pre-conviction gambling problems

<table>
<thead>
<tr>
<th>Factor</th>
<th>Gambling problem n (%)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td>0.776</td>
</tr>
<tr>
<td>Men</td>
<td>8 (14.8)</td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>7 (18.4)</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td>0.527</td>
</tr>
<tr>
<td>18–34 years</td>
<td>6 (17.1)</td>
<td></td>
</tr>
<tr>
<td>35 years or more</td>
<td>9 (15.5)</td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td>0.463</td>
</tr>
<tr>
<td>Married, registered relationship or cohabitation</td>
<td>8 (17.8)</td>
<td></td>
</tr>
<tr>
<td>Single, divorced or widowed</td>
<td>7 (14.9)</td>
<td></td>
</tr>
<tr>
<td>Alcohol risk consumption</td>
<td></td>
<td>0.388c</td>
</tr>
<tr>
<td>Yes</td>
<td>6 (14.3)</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>3 (8.1)</td>
<td></td>
</tr>
<tr>
<td>Smoking</td>
<td></td>
<td>0.456c</td>
</tr>
<tr>
<td>Yes</td>
<td>14 (17.5)</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>1 (7.1)</td>
<td></td>
</tr>
<tr>
<td>Use of narcotics</td>
<td></td>
<td>0.563</td>
</tr>
<tr>
<td>Yes</td>
<td>7 (20.0)</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>8 (14.0)</td>
<td></td>
</tr>
<tr>
<td>Crime type</td>
<td></td>
<td>0.012*</td>
</tr>
<tr>
<td>Property crime, financial crime, robbery</td>
<td>7 (33.3)</td>
<td></td>
</tr>
<tr>
<td>Violent crime, drug offense or other crime</td>
<td>7 (10.0)</td>
<td></td>
</tr>
<tr>
<td>Previous sentence</td>
<td></td>
<td>0.022c</td>
</tr>
<tr>
<td>Yes</td>
<td>13 (24.1)</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>2 (5.4)</td>
<td></td>
</tr>
<tr>
<td>Sentence related to gambling</td>
<td></td>
<td>0.000c</td>
</tr>
<tr>
<td>Yes</td>
<td>5 (83.3)</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>10 (11.4)</td>
<td></td>
</tr>
<tr>
<td>Prison type</td>
<td></td>
<td>0.971</td>
</tr>
<tr>
<td>Open prison</td>
<td>6 (15.8)</td>
<td></td>
</tr>
<tr>
<td>Closed high-security prison</td>
<td>9 (16.1)</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:** n = 96. "BBGS = 1+, Brief Biosocial Gambling Screen: one or more positive responses (yes) indicated potential past-year gambling problems; AUDIT-C risky drinking defined among men score ≥ 6 points and women score ≥ 5 points; significance is determined by Fischer’s exact test (two groups); *expected cell count 5 or less. *p ≥ 0.05; **p ≥ 0.001

### Table IV: Support preferences of problem gambling prisoners wanting help by gender

<table>
<thead>
<tr>
<th>Support Preferences</th>
<th>All n = 22</th>
<th>Men n = 15</th>
<th>Women n = 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal discussion with prison employee</td>
<td>10 (45.5)</td>
<td>6 (60.0)</td>
<td>4 (40.0)</td>
</tr>
<tr>
<td>Group support</td>
<td>17 (77.3)</td>
<td>12 (75.0)</td>
<td>4 (25.0)</td>
</tr>
<tr>
<td>Male or female group</td>
<td>11 (50.0)</td>
<td>7 (63.6)</td>
<td>4 (36.3)</td>
</tr>
<tr>
<td>Mixed group</td>
<td>7 (31.8)</td>
<td>4 (57.1)</td>
<td>3 (42.9)</td>
</tr>
<tr>
<td>Not specified</td>
<td>2 (9.1)</td>
<td>2 (100.0)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Telephone supported virtual treatment program</td>
<td>4 (18.2)</td>
<td>0 (0.0)</td>
<td>4 (100.0)</td>
</tr>
<tr>
<td>Supportive telephone discussions with a professional</td>
<td>5 (22.7)</td>
<td>1 (20.0)</td>
<td>4 (80.0)</td>
</tr>
<tr>
<td>Supportive telephone discussions with a peer</td>
<td>6 (27.3)</td>
<td>2 (33.3)</td>
<td>4 (66.7)</td>
</tr>
<tr>
<td>Guided discussion forum or other virtual help from outside the prison</td>
<td>7 (31.8)</td>
<td>3 (42.9)</td>
<td>4 (57.1)</td>
</tr>
</tbody>
</table>
Discussion

Prevalence

Prior to incarceration, past-year prevalence of potential problem gambling among the inmates of the two Finnish prisons surveyed was 16.3 percent. Our results therefore support previous studies indicating that the prevalence of problem gambling is higher in the criminal justice population than the general population (Turner et al., 2013, 2017; Riley and Oakes, 2015; Williams et al., 2005; May-Chahal et al., 2017). In Germany, 7.5 percent of male and 3.6 percent of female prisoners were diagnosed as problem gamblers (Zurhold et al., 2014).

Our sample can be compared against the general prison population in Finland based on statistics from the Criminal Sanctions Agency. The mean age of all prisoners in the country in 2017 was 37.3 years. Most of them were sentenced for a violent crime (40 percent) and one quarter for a property crime. Eight percent of prisoners in Finland were women (Criminal Sanctions Agency, 2017). Our results showed no statistically significant gender differences in problem gambling prevalence. Castrén et al. (2015) have earlier reported the same result for patients receiving opioid substitution treatment. Some studies indicate that men gamble more often and suffer from more severe problem gambling than women in the criminal justice population (Wallisch and Kerber, 2001; Kerber et al., 2001), but others have found a higher gambling prevalence rate for female prisoners (Abbott and McKenna, 2005; Abbott et al., 2005).

This finding of no gender differences may indicate a growing trend for women’s problem gambling (Salonen et al., 2017; Romild et al., 2016) or other confounding factors. If the problem gambling rate among women is nearing the same level as among men in general, gender-specific approaches will be required for prevention and treatment at the population level as well as among prisoners, where the aim is to reduce levels of recidivism (Riley et al., 2017).

In this study, the most endorsed BBGS item was the psychosocial criterion, which refers to the consequences of problem gambling for social relationships. Problem gambling impacts significant others as well (Salonen et al., 2016), and in some cases can even lead to intimate partner violence (Roberts et al., 2016; Affifi et al., 2010; Liao, 2008). The second most endorsed criterion of neuro-adaptation refers to the behavioral manifestations of withdrawal, and was reported more often by men than women. On the other hand, women reported psychosocial characteristics more often than men. This finding must be interpreted with caution because of our small sample size, but it certainly warrants further investigation of the different gender trajectories. Previous studies have shown that the onset of problem gambling among women is usually associated with stressful life situations and coping difficulties, traumatic experiences in childhood or later life and financial difficulties (Järvinen-Tassopoulos, 2016).

Problem gambling prevalence rates were quite similar for both timeframes, i.e. 12 months before incarceration and the previous 12 months. This might indicate that gambling problems are persistent and long lasting among prisoners. Measurement of the prevalence of problem gambling among prisoners involves several challenges. Future studies should collect data from incoming prisoners in order to avoid problems stemming from recall bias, which may be compounded by the prison setting and the different lengths of sentences. In the current study our focus was to assess the situation of those who were currently in prison, their preferences for support and to help develop practices of support in prisons, regardless of the length of sentence. Among our prisoners, age at problem gambling onset was lower than reported in previous prison studies (Turner et al., 2009) and among help-seeking gamblers (e.g. Teo et al., 2007). Age at gambling onset was also lower than in the general population (Salonen and Raisamo, 2015). Previous studies confirm that early gambling onset not only predicts the development of later gambling problems, but also mental health problems and substance abuse (Burge et al., 2006). In adolescents, particularly males, problem gambling seems to be associated with various problem behaviors, such as substance use, violence and delinquency (Vitaro et al., 2004; Winters et al., 2002); individuals who are prone to one problem behavior are also more vulnerable to others. Similarly, antisocial and risk-taking behavior is a risk factor for problem gambling among adolescents (Dowling et al., 2017; Stinchfield, 2000; Gupta et al., 2006).
Comorbidities

Alcohol risk consumption, smoking and narcotics use was very common in this prison population. Due to several limitations with regard to the measures used and their timeframes, however, these results must be considered tentative, even though they are closely in line with earlier findings (Fazel et al., 2017). Although we found no significant association between problem gambling and other substance use, it is obvious that these problems do tend to accumulate among prisoners. It is well-established that substance abusers are overrepresented in prison populations (Fazel et al., 2006; Lintonen et al., 2011). Even though it is estimated that substance abuse is ten times more prevalent than in the general population (Joukamaa et al., 2010), substance problems are not always detected in Finnish prison settings. In this sample, prisoners in a closed prison setting reported using alcohol at a risky level more often than those in an open prison setting. Future studies into problem gambling and the use of any substances among prisoners should use interviews alongside self-report questionnaires in order to ensure the reliability of the results.

Globally, most prisoners tend to come from the lower end of the socioeconomic spectrum; they have a low education and a wide range of physical and mental health problems. Since the 1980s, mental health problems have become increasingly common and better recognized among prisoners, leading to a growing recognition of the need for preventive measures and treatment options (Obstbaum-Federley, 2017; Joukamaa et al., 2010). Indeed, it is crucial that comorbidities and depth of pathology are properly recognized before prognosis and treatment mechanisms are set up. Based on a pathways model of gambling, there is a possibility that prisoners may fall into the third subgroup of pathological gamblers, which is characterized by signs suggestive of neurological (Young et al., 2015; Morde et al., 2011) and neurochemical dysfunction, impulsivity and antisocial personality disorder (Blaszczynski and Nower, 2002; Nower and Blaszczynski, 2016). Future research could examine if problem gamblers, perhaps even by gender, in prison populations are in fact more likely to fall into the third subgroup. Both the accumulation of various problems and comorbidities suggest that this specific subgroup would greatly benefit from thorough clinical assessment.

Gambling and crime

One-third of the participants who were identified as problem gamblers reported that their current sentence was gambling related. Similarly, Turner et al. (2009) reported that 65 percent of the prisoners studied in Canada with serious gambling problems were sentenced for a gambling-related offense. In New Zealand, 19 percent of female and 9 percent of male prisoners who were recently sentenced had a gambling-related offense (Abbott and McKenna, 2005; Abbott et al., 2005). Despite the high rate observed by Turner, treatment for problem gambling is still not systematically integrated into prisoner health care anywhere in the world. There is clearly a need for preventive and supportive interventions and the early identification of problem gambling.

Problem gambling has many adverse consequences, one of which is criminal behavior. Problem gambling and crime can also be part of a risk-taking lifestyle (Mishra et al., 2011). Previous studies indicate that problem gambling tends to accumulate in socio-economically vulnerable populations. As the spiral of the gambler deepens, there are ever fewer legal options to finance gambling. Eventually, severe financial difficulties and indebtedness can lead to property crimes. This study suggests that problem gambling is relatively common, especially among prisoners sentenced for financial crimes.

In line with previous research, the results of this study suggest that problem gamblers’ sentences are often associated with gambling, particularly with income-generating crime (see also Riley et al., 2017; Riley and Oakes, 2015; Turner et al., 2009; Abbott and McKenna, 2005; Abbott et al., 2005). This is not surprising, since the aim and purpose of gambling-related crimes are precisely to finance gambling or to pay off gambling debts (Turner et al., 2000; Lind et al., 2015). In our study, one participant was sentenced for a violent crime other than homicide and one for a drug-related crime.

Such gambling-related violent crimes may include domestic violence, debt collecting induced by problem gambling or laundering drug money by gambling.
Women who had a previous sentence were more likely to have a gambling problem (cf. Bevan and Wehipeihana, 2015). In order to reduce recidivism, it is important to identify and provide appropriate treatment for possible gambling problems as early as possible. Riley et al. (2017) reported that women prisoners’ help-seeking rate was higher than in the general population. As this seems to be the case, courts could encourage help seeking. Cuadrado and Lieberman (2012), for their part, recommend screening programs in view of the high proportion of problem gamblers among prisoners and the fact that they are charged with more severe type of crimes. In fact, it would be prudent to screen all offenders who enter the criminal justice system (e.g. court) to identify those in need of help as early as possible, for example, using a court diversion program (see Riley et al., 2018). Future research could examine the prevalence of problem gambling among offenders entering the justice system.

Support preferences

One-quarter (24 percent) of our participants showed an interest in receiving support by selecting one or more support preferences, which is in line with a previous study showing similar rates in prior help-seeking behavior (Riley et al., 2017). The most preferred type of support was group support in all its forms, followed by personal discussions with a prison employee. The low proportion of prisoners willing to seek help may reflect the barrier that continues to deter people from seeking help (Turner et al., 2017; Riley, Larsen, Battersby and Harvey, 2018; Riley, Baigent, Harris, Larsen, Nye and Battersby, 2018), or the individual’s motivational stage. One unique discovery in our results was the finding that there were more responses indicating preferred forms of help than possible problem gamblers. This may suggest the presence of hidden problems, but on the other hand, also that if the preferred type of help and support were readily available, the number of prisoners taking advantage would also be higher. This is crucial information for purposes of planning and tailoring interventions in correctional settings. Despite the relatively high prevalence of problem gambling among prisoners, this remains an understudied and underdiagnosed phenomenon. As Turner et al. (2017) note, one major issue is the lack of knowledge in the judicial system: unlike substance addictions, problem gambling is still seen primarily as a moral issue, something that is more of a bad choice rather than a true addiction. This is despite the fact that in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2013), pathological gambling was renamed as a gambling disorder and moved from the category of impulse control disorder to non-substance related behavioral addiction. Problem gambling is surrounded by a negative social stigma and it might, therefore, be very difficult for outsiders to recognize the problem and for individuals to admit to the problem. The screening and early detection of possible problem gamblers among incoming prisoners is crucial to the effective prevention of recidivism, since untreated gambling problems coupled with accumulating debts can hamper and complicate rehabilitation into society. Financial desperation can greatly narrow the options available to problem gamblers.

Most treatment programs reviewed by Turner et al. (2017) take a biopsychosocial approach to problem gambling, using cognitive-behavioral therapy in group settings, with some programs focusing on prevention and others on treatment. Most problem gambling interventions in prison settings are integrated as part of general addiction treatment, while only few programs are specifically designed to address problem gambling. We still do not know what type of programs are most effective, since most treatment approaches used in prisons have not been evaluated. Evaluation is thus an important priority for the future. Prisons have limited personnel resources for gambling-related harm prevention, reduction and treatment, and substance addictions are considered a more visible problem than problem gambling. These kinds of factors may explain why substance addiction treatment is given priority over problem gambling.

Limitations

This study was explorative in nature, investigating prisoners problem gambling in Finland. Although our results are in line with previous studies (Turner et al., 2009; May-Chahal et al., 2017; Cuadrado and Lieberman, 2012), they must be interpreted with caution due to the following limitations. Our sample was small and may not be representative of the broader prison population in Finland. The participation rate was low, which in part at least can be explained by the novelty of
the research approach. Furthermore, we only received the total number of prisoners reached, and therefore we could not estimate response rates by gender. The cross-sectional nature of our study prevents any suggestion of causal associations or temporal relations. We did not inquire into the length of the participants’ sentences. Response bias cannot be excluded. Those who have been in prison for several years might not recall their gambling behavior before incarceration. Therefore, to avoid this problem, future studies should use a lifetime prevalence timeframe (Riley et al., 2017). Our study shows no positive associations with other addictions, which is unusual. This is likely explained by the measures used, such as the specification of the illicit drugs (Babor et al., 2010) used, the timeframe (current) AUDIT-C and the other limitations mentioned above.

Previous problem gambling surveys in the criminal justice population have used a variety of instruments, such as the South Oaks Gambling Screen and the Canadian Problem Gambling Severity Index [e.g. Turner et al., 2009; May-Chahal et al., 2017], the Lie-Bet (Zurhold et al., 2014; Cuadrado and Lieberman, 2012) which limits the comparability of our results. To our knowledge, BBGS has not been used previously among prison populations. Furthermore, the timeframe of evaluations has varied from current to the past 6 or 12 months before incarceration through to lifetime (Abbott and McKenna, 2005; Turner et al., 2009; Zurhold et al., 2014; Lahn, 2005). In this study, we opted to use the BBGS due to its strong psychometric properties (Gebauer et al., 2010) and its brevity. This brevity probably means that our figures for the prevalence of problem gambling are higher than those based on SOGS and PGSI or clinical evaluations. Future studies should therefore evaluate gambling severity using longer measures coupled with clinical assessments. Ours is the first study to use a brief screen of problem gambling in a prison setting and, at the same time, to inquire about support preferences among those who might be in need of support. We found no gender differences in problem gambling, which may have to do with the sample size or prison setting. This is an area that certainly warrants further investigation, as noted by others (Riley et al., 2017). Overall, although indicative only, our results provide valuable insights for the research community, developers and decision makers alike.

**Implications**

In 2016, the Criminal Sanctions Agency’s Health Care Unit was renamed as the Prisoners’ Health Care Unit and placed under the supervision of the National Institute for Health and Welfare. The purpose of this administrative reorganization was to integrate prisoners’ health care more closely with wider health care services and to improve the monitoring of health care provision. It will guarantee that prisoners have the same rights to health care as the general population, as discussed by Turner et al. (2017). In order to ensure that this basic requirement is met, it is necessary to have mechanisms in place for the early detection of problems, to increase general awareness of gambling problems, and to provide clear intervention guidelines for prison staff. As problem gambling often remains undetected and prison workers are trained and motivated to help (Tourunen and Kaskela, 2014; Turner et al., 2017) and to look for signs of risky behaviors, prisons are a potentially important environment for effective intervention. The reception of the results of our pilot study was very positive at all levels of the Criminal Sanctions Agency. The next steps will be to increase policy makers’ awareness of gambling problems; to apply for funding for both quantitative and qualitative studies in prison settings; to draw up guidelines for assessment, support and treatment and to assess the efficacy of these guidelines in the future.

**Conclusions**

Our study indicates that problem gambling is relatively common among prisoners and that they clearly need support. Surprisingly, despite the strong evidence provided by other studies, we found no association between problem gambling and other addictions. It is more common among inmates sentenced for a property crime, financial crime or robbery than those sentenced for violent crime other crimes. Among women, a previous sentence is associated with having a gambling problem. Based on the results, it is recommended that steps are taken to develop early detection systems and to make tailored treatment options more readily available. In addition to prisons, we also encourage courts to screen for at-risk and problem gambling and to promote help seeking in an effort to divert suitable offenders from incarceration to rehabilitation.
References


Further reading


Author Affiliations

Kalle Lind is based at Alcohol, Drugs and Addictions Unit, Terveyden ja hyvinvoinnin laitos, Helsinki, Finland.

Anne H. Salonen is based at the Alcohol, Drugs and Addiction Unit, Terveyden ja hyvinvoinnin laitos, Helsinki, Finland and Terveystieteiden tiedekunta, Itä-Suomen yliopisto, Kuopio, Finland.

Johanna Järvinen-Tassopoulos is based at the Alcohol, Drugs and Addictions Unit, Terveyden ja hyvinvoinnin laitos, Helsinki, Finland and Faculty of Social Sciences, University of Helsinki, Helsinki, Finland.

Hannu Alho is based at the Alcohol, Drugs and Addictions Unit, Terveyden ja hyvinvoinnin laitos, Helsinki, Finland and Institute of Clinical Medicine, Helsingin Yliopisto, Helsinki, Finland.

Sari Castrén is based at the Alcohol Drugs and Addictions Unit, National Institute for Health and Welfare, Helsinki, Finland; Department of Psychology and Speech and Language Pathology, University of Turku, Turku, Finland and Helsingin Yliopisto, Helsinki, Finland.

About the authors

Kalle Lind, MSSc, is currently working as Researcher at the National Institute for Health and Welfare, Helsinki, Finland. He is also completing his PhD studies (Sociology) at the School of Social Sciences and Humanities at the University of Tampere, focusing on gambling-related crime reported to the police in Finland. In addition, he has been studying gambling and crime among support program participants. His research interests include gambling, crime, addiction and treatment development, which he approaches using both qualitative and quantitative methods. Kalle Lind is the corresponding author and can be contacted at: kalle.lind@thl.fi

Dr Anne H. Salonen is RN and Doctor of Health Sciences. Currently, she works as Senior Researcher at the National Institute for Health and Welfare, Finland and serves as Adjunct Professor at the University of Eastern Finland, Faculty of Health Sciences. Dr Salonen’s research interests include studies monitoring and enhancing health and wellbeing. Her strongest expertise involves quantitative studies, particularly different types of surveys.
Currently, she is Principal Investigator of the population-based Finnish Gambling Study and the Gambling Harms Survey.

Dr Johanna Järvinen-Tassopoulos, PhD and Adjunct Professor in Social Policy, is affiliated to the National Institute for Health and Welfare in Helsinki, Finland, at the Alcohol, Drugs and Addiction Unit. Dr Johanna Järvinen-Tassopoulos has authored and co-authored multiple peer-reviewed scientific papers and presented works at many national and international conferences. Dr Johanna Järvinen-Tassopoulos contributions have acclaimed recognition from honorable subject experts around the world. Dr Johanna Järvinen-Tassopoulos is actively associated with different societies and academies. Dr Johanna Järvinen-Tassopoulos academic career is decorated with several reputed awards and funding. Dr Johanna Järvinen-Tassopoulos research interests include qualitative analysis.

Hannu Alho has MD and PhD Degrees, and is Specialist in Addiction Medicine. Hannu Alho is Professor of Addiction Medicine at the Institute of Clinical Medicine, University of Helsinki, Research Professor at the National Institute of Health and Welfare and Chief Physician at the Department of Alcohol Abuse, Helsinki University Hospital. Hannu Alho is also Past President of International Society for Addiction Medicine (ISAM). Hannu Alho’s main interests are clinical research on pharmacological treatment of alcoholism, prevention of alcohol-related health problems, treatment of pathological gambling and treatment opiate addictions.

Dr Sari Castrén, PhD and Licensed Clinical Psychologist, is currently Senior Researcher at the National Institute for Health and Welfare in Helsinki, Finland and Adjunct Professor at the University of Turku, Finland. Dr Castrén is also Practicing Clinical Psychologist and is actively training professionals in the addiction field (MI and CBT approaches). Her research publications are in the area of gambling. Her research endeavors in this area include: understanding the development and maintenance of gambling behaviors. She is also interested in the area of interventions and further investigating the efficacy of treatments.

For instructions on how to order reprints of this article, please visit our website: www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: permissions@emeraldinsight.com
Prisoners’ ambivalent sexism and domestic violence: a narrative study

Ines Testoni, Giulia Branciforti, Adriano Zamperini, Livia Zuliani and Felice Alfonso Nava

Abstract

Purpose – Gender inequality and sexism are often at the root of domestic violence against women and children, with both serving to justify male domination. This runs in parallel with mother-blaming bias, which constitutes a pervasive common sense and scientific error derived from the myth of the good and the bad mother, characterising a large part of studies on deviance. The purpose of this paper is to consider the possible role of sexism in prisoners’ deviant biographies; for this, the authors considered the role of the mother in the biographies of prisoners, and the results lend support to the idea that mother-blaming is a serious fallacy. Starting from a critical psychology point of view and following the retrospective methodology, the authors interviewed 22 drug-addicted prisoners through Interpretative Phenomenological Analysis (IPA) regarding their biographies and their relationships with parents and partners.

Design/methodology/approach – In the survey, the authors followed the same intention, and the results lend support to the idea that mother-blaming is a serious fallacy. The authors interviewed 22 drug-addicted prisoners through IPA concerning their biographies and their relationships with parents and partners.

Findings – The main result of this qualitative study was the recognition of a fundamental sexism assumed by participants, characterised by a paradox between the representation of the mother and the representation of the ideal woman. Despite the mother being their positive affective referent, and battered by her husband/partner, the same participants had been witnesses of domestic violence, and sometimes victims, they interiorised from their father an ambivalent sexism: benevolent sexism with regard to their mother and exhibited hostile sexism with their partner. On the one hand, it emerged that female empowerment was desirable with respect to the mothers. On the other hand, the ideal woman was exactly as their mother was, that is, being absolutely subordinated to men (a patient, caring, submissive housewife, totally dedicated to her children and her husband).

Research limitations/implications – From a mainstream psychological perspective, the limits of the research are linked to the utilisation of the narrative method. Also, this methodology does not verify any hypotheses, so quotations from the participants are used to illustrate themes, and thus, it is difficult to report the informational complexities arising from the dialogues. However, the literature has emphasised that these limitations do not invalidate qualitative research findings, despite the difficulties in generalising the results of the qualitative studies. Thereafter, the critical analysis moved within the intersection of experience-centred approaches and the culturally oriented treatment of narratives, so that the focus on the stories of the prisoners makes meaning because it applies structure to experience, albeit, with the form and content of the texts. This research did not permit us to measure and evaluate post-hoc any post-traumatic hypotheses, which, in turn, would give room for further research. Another limitation of the research was that the relationship between culture of origin and gender biases, especially with participants from non-European countries, was not analysed. This topic would require an important in-depth study, which encompasses how women are treated in different countries and its effects on social maladjustment for immigrants in Italy.

Practical implications – The outcome of this study suggests that within similar structures in the Institute of Mitigated Custody, the theme of sexism should be considered in more depth. Since sexism justifies violence against women, and is therefore a factor that can cause recidivism in the antisocial behaviour of prisoners once they have served their sentences. It is important to allow them to analyse the relationship between their sexist attitudes, witnessing violence in childhood and the possibility of changing moral values of reference in favour of equality. This type of psychological intervention must necessarily be based not only on the elaboration of traumas suffered during childhood with an abusive father, but also on issues related to gender equality and the theme of social inclusion.

Social implications – The study suggests the idea that male sexism can be a factor responsible for suffering and maladjustment for men and that therefore an education that promotes equality of gender differences can also help prevent the social distress associated with drug addiction and deviance.
Introduction

Research into sexism in prison and its implications for deviant behaviour is still limited. Some studies have considered the problem (Goetting, 1985; Cowburn, 2007), focusing primarily on the effect of masculinity (Crewe et al., 2014; Hood-Williams, 2001), but have not specifically considered how sexism has affected the lives of prisoners. This limitation may be due to the fact that scientific knowledge itself has long been distorted by sexist bias (Eagly, 1995; Shields, 2008; Westbrook and Saperstein, 2015). This paper focuses on the psychological effects of sexism, from the critical psychology perspective (Jovanović, 2010; Phillelantsky and Nelson, 2002).

This point of view challenges mainstream studies by applying psychological understanding to social change as a means of preventing and treating psychological problems (Hook, 2012).

The term “sexism” indicates stereotypes, prejudices or discrimination based on a person’s sex, which resides in an individual’s attitudes, beliefs and behaviours, as well as organisational, institutional and cultural practices that assume negative valuations of persons, supporting unequal status of women and men (Lewis, 2018; Lorber, 2011; Macklem, 2003). As emphasised by several international policies organisations (EIGE, 2013, 2017; EUAFR, 2014; WHO, 2012), sexist attitudes support gender inequality, which has been reported to cause poverty and vulnerability in society as a whole. Ambivalent sexism posits certain prejudices, which serve to justify and maintain imbalanced gender roles characterised by male domination and violence against women. Hostile sexism reflects explicitly negative attitudes towards women, while benevolent sexism presents evaluations, which may appear positive, but are actually detrimental (Glick and Fiske, 1997). Either standpoint constitutes a prior cause of maladjusted male behaviour, which operates on both a conscious and an unconscious level, from which sexual harassment, domestic violence and discriminatory hiring practices are derived (Lewis, 2018; Yamawaki et al., 2009). Research confirms that sexism is rooted in inaccurate beliefs, mostly derived from archaic patriarchal traditions, informed by the idea of destiny and divine moral judgment, and thus, is fundamentally conjoint with the “just world belief” (Lerner, 1965, 1980; Gangloff et al., 2014), in which people accept as true that they live in a world where they “get what they deserve and deserve what they get” (Lerner and Simmons, 1966, p. 204). Indeed, these prejudices perpetuate conflict in various forms among women and men and make it appear appropriate for men to physically abuse their partners (Bitzer, 2015; Jones and Holmes, 2010; Romito, 2008). In the light of such a distorted paradigm, people justify domestic violence through victim-blaming biases that exonerate aggressors (Correia et al., 2015; Giger et al., 2017; Papp and Erchull, 2017; Pedersen and Strömwall, 2013; Sakalli-Uğurlu et al., 2007; Val r-Segura et al., 2011).

Furthermore, studies have demonstrated that the wellbeing of men is also damaged by these cultural attitudes. Indeed, sexism may be considered dangerous for male psychological health as well, with the intergenerational transmission of violence identified as a factor causing severe harm (Courtmenay, 2000, 2004; Himmelstein and Sanchez, 2016; Kaya et al., 2018; Keohane and Richardson, 2018; Rasmussen et al., 2018; Widom and Maxfield, 1996). In fact, domestic violence is almost always acted out in front of male children, who can be victims and/or powerless witnesses. This can result in them suffering serious trauma with long-term negative consequences including post-traumatic stress disorders, problematic drug use, aggression towards their partners and deviance (Horner, 2005; Romito, 2008). Indeed, as noted by Unicef (2006), witnessing domestic violence has been shown to be a prior predictor of juvenile delinquency and adult criminality, with children from violent homes at substantially higher risk of alcohol/drug abuse (DuBe et al., 2003).

However, sexism is not a mere characteristic of a broadly accepted worldview. Indeed, the history of psychology and psychoanalysis exhibits manifold instances of sexism (Robnett et al., 2018;
Pheips, 2015; Travis et al., 2018). There is, for example, literature on domestic violence that is related to the mother-blaming bias (Radford and Hester, 2001). This constitutes a major and pervasive problem emanating from “the myth of the good and the bad mother” (Chodorow, 1978), in which the practices of “intensive mothering” spring (Hays, 1996). Since motherhood and mothering are relationships located in a social context regulated by prevailing gender norms, in a patriarchal culture where the “cult of domesticity” or the “cult of true womanhood” have been prevalent for centuries (Coltrane and Adams, 2008), mother-blaming biases have characterised a large part of both common sense and scientific research (Schoen, 2005; Weir, 2007). Many psychological studies through the sexist idea of “good or good enough mother” vs the “bad mother” considered a mother to be the primary cause of disabilities and deviance of children (Arnup, 1994; Malacrida, 2009). This bias is considered by sociologists as a consequence of the aim of Western welfare policies to transform the definition of “needs to be respected” into a recognition of “risks to be avoided”, which is useful in diminishing the social costs of wellbeing through the domestic work of mothers (Arendell, 2000; Douglas and Michaels, 2005; Swift and Callahan, 2009; Bowlby, 1944; Klein, 1932; Winnicott, 1953; Bettelheim, 1967). Risk-oriented psychology, which considered motherhood as responsible for the actions, behaviour, health and wellbeing of their adult children, largely supported mother blaming, rather than critiquing the social system (Phares, 1992; Swift, 1995). To this end, in the 1960–1970s, families of deviant and problematic drug users were typically presented as having a detached and uninvolved father and a dominating mother who exhibited emotional immaturity and ambivalence in her role (Singer, 1974). Moreover, such a distortion has produced bizarre interpretations in numerous forms of child and adult mental discomfort: from the bias of the “schizophrenogenic mother” to the attribution of responsibility for children’s disabilities (Caplan, 1990; Harrington, 2012; Jackson and Mannix, 2004). Furthermore, mother blaming characterised psychological research until the end of the last century (Caplan and Hall-McCorquodale, 1985; Chodorow, 1999; Heenan, 2002; Holt, 1992; Pedersen, 2016; Sommerfeld, 1989; Gustafson, 2005; McCollum and Russell, 1992; Risley-Curtiss and Heffernan, 2003). From this perspective, research considered how mothers contributed to child and adolescent maladjustment while underestimating the role of fathers (Swift, 1995; Vandenbeld Giles, 2014).

Running in parallel, retrospective methodology has been widely utilised with prisoners to identify the risk factors responsible for their deviant biographies (Boduszek et al., 2014; González et al., 2015; Seewald et al., 2018). John Bowlby (1944) was perhaps the only researcher who extensively utilised the retrospective method with male prisoners. He was persuaded that the causes of habitual delinquency could be explained by child psychology, especially through the negative effects of an absent mother. Bowlby aspired to overcome the Freudian conviction that mothers’ negative attitudes unconsciously existed under apparent love for the child, hypothesising that separation experiences could have been pathogenic. He is considered as one of the most significant theorists responsible for mother-blaming biases (Vicedo, 2009, 2011). In fact, after Bowlby’s original research with prisoners, the study of attachment was developed resulting in further controversial debate over the possible detrimental outcomes of maternal-child relationships. From this perspective, psychosocial development can be hampered by bad maternal responsiveness, which generates uncertainty, thereby leading to an insecure attachment style and then to psychosocial problems (Ainsworth, 1985a, b; Hohat, 1996). After Bowlby’s study, retrospective methodology has been widely utilised to analyse the effects of “maternal deprivation” in many fields of mental health (Stansfeld et al., 2008; Wang et al., 2011; Westermeyer et al., 2004). Donald Winnicott followed in the tradition of Bowlby and developed the idea of “good enough mother” (Vincent et al., 2010). The result of this work has been the over-representation of mothers and under-representation of fathers in issues focussed on child abuse and neglect, while biases inherent in father-absence and mother-blaming remain widely utilised to explain deviance and mental problems (Risley-Curtiss and Heffernan, 2003; Strega et al., 2008). On the one hand, subsequent studies only partially confirmed that early affective experiences with the mother influence the future of adulthood, because this relationship is always intersected with cultural, environmental and family conditions (Wedenoja, 1991), while, on the other hand, the “maternal absence” can be considered as a social construction to blame mothers (Gustafson, 2005). Furthermore, in cases of domestic violence, which is one of the most important predictive factors of deviance and drug abuse in adolescence, attachment theory is...
utilised in a dogmatic way, without considering the relational difficulties encountered by battered mothers and their children (Buchanan et al., 2013; Levendosky et al., 2011).

The retrospective method has been utilised in further research with prisoners (Johnsen et al., 2013; Neuber, 2011), as a specific form of the qualitative approach utilised in this field (Ratner, 1996; Young et al., 2009; Tulloch, 2003; Waldram, 2007). However, only a limited number of investigations utilised this procedure in prison environments to survey sexism, and the only ones conducted focussed primarily on masculinity (De Viggiani, 2012; Evans and Wallace, 2008; Ricciardelli et al., 2015). Our research aimed to partially retrace Bowlby’s original aim: first, to re-consider the role of mothers in relation to fathers and, second, to investigate how women are represented in the biographical narrations of convicted male problematic drug users. This group, it could be argued, would represent the most significant victims of so-called “bad mothers”. We decided to analyse prisoners because they constitute the prototypical target of mother-blaming psychological prophecies, but, most importantly, because we believe it would be useful to understand the problem in order to help prisoners overcome sexist attitudes that damage their intimate and social relational dimension.

Aims

The research aimed to trace the forms of representation of mothers and female partners among problematic drug users in Attenuated Custody for Treatment. In particular, we intended to investigate whether, in their biographies, the mother was recalled as absent or negative or violent or dominant, to the detriment of a weak or absent father. In addition, we wished to determine whether there was a sexist representation of women. We also wanted to discern whether any violence against women was legitimised by such representations, as a possible form of retaliation against an oppressive maternal figure. The object of the biographical retrospective analysis was the interpretative repertory, which is the semantic structure of terms used to characterise and to value experiences, considered as the elucidation of broader symbolic systems, which is capable of indicating the sense of gender roles.

Participants

The research was carried out in Northern Italy, within the Institute of Attenuated Custody for Treatment of a district penitentiary, which is a type of prison section (as a place of detention) operating in Italy since 2015. This also acts as a rehabilitation centre for the treatment of problematic drug users, run by a multidisciplinary team of psychotherapists, educators, psychiatrists, doctors and nurses. The intervention model of this structure, developed in three phases (selection, reception and treatment), is based on the therapeutic alliance between psychotherapist and prisoner/patient, while its goal is to solve the problems of problematic drug use in order to reduce relapse into drug use and recurrent offending. Prisoners belonging to this structure are selected on the basis that they do not have an antisocial or psychopathic diagnosis, that is, with low social danger and with personality characteristics suitable for psychotherapy and that they possess sufficient motivation to participate. Their offences are often linked to problematic drug use (theft, robbery, imprisonment, dealing and certain types of aggression). Most are between 20 and 40 years old.

In the reception phase, the psychotherapist carries out a psychodiagnostic assessment with the following tools: The Cognitive Behavioural Assessment (CBA 2.0: useful in providing an initial description of any problem in the relationship between behaviour and environment); the Minnesota Multiphasic Personality Inventory (MMPI 2: used to provide information on personality characteristics and the presence of any disorder); the Symptom Checklist 90 R (SCL 90 R: used to detect internal malaise by measuring depression, anxiety, somatization and external behaviours of aggression, hostility, impulsiveness in the last week); the Structured Clinical Interview (SCID-II is an interview for the diagnosis of personality disorders according to the diagnostic criteria of the DSM IV). After analysis of the results, an individualised project is performed by the prisoner-patient, focusing on the following areas: addiction awareness, crime awareness, alexithymia and life-skills. The high point of the Section is characterised by sports and educational activities, as well as special treatment and social and occupational reintegration.
All prisoners were informed about our research, with 22 prisoners voluntarily choosing to participate in our survey because they were interested in the experience. The project was presented individually, explaining the aims and the narrative methodology. One prisoner withdrew from the study because he did not want to be recorded. All the others completed interviews, which lasted for about 60 to 90 minutes each in the room of the psychologist. There were no dropouts. Each participant signed the informed consent form and also agreed to be audio-recorded. Their age varied from 23 to 52 years old (with an average age of 37, DS: 9). The group was mainly composed of people of Italian nationality; seven were external to the EU-Community (three Albanians, two Tunisians and two Moroccans). All participants were problematic poly-drug users, but the most abused substance was cocaine. From the diagnostic point of view, the participants were complex patients, characterised by a borderline organisation of personality, by dysphoria and the inability to hold back impulses; by instability in maintaining social relations; by strong reactivity to separations and frustrations; by anxiety linked to the inability to relate with others and by an attempt to perform self-therapy through the use of drugs. The offences for which they had been sentenced were mainly drug-related: illicit production, trafficking and possession of narcotic or psychotropic substances (crimes according to Article 73 of the Italian Penal Code), theft (art. 624), and robbery (art. 628). Some were sentenced for personal injury (art. 582), beatings (art. 585) and resistance to public officials (art. 337); three for mistreatment of family members or cohabitants (art. 572), one for stalking (art. 612 bis) and one for murder (art. 575). The duration of the sentences varied. At the time of the research, participants had been in prison for an average of one year and six months. The data were collected in 2016, and the duration of the study was one year. Data were collected by a female psychologist experienced in gender-based violence issues, under the supervision and with the collaboration of two psychotherapists (one male and one female) working in the same Institute of Attenuated Custody for Treatment and two university professors (one male and one female). The research followed APA Ethical Principles of Psychologists and the Code of Conduct and principles of the Declaration of Helsinki. Ethical approval was obtained from the Padua University Ethics Committee for Experimentation.

The qualitative method

The research adopted the narrative perspective and was therefore conducted with a qualitative-phenomenological approach, considered in the literature to be the most reliable method for investigating people’s biographies and their interpretation of life experiences (Pietkiewicz and Smith, 2014). Since this kind of research strategy has already been utilised with prisoners (Aresti et al., 2016; Kennedy, 2014; Young et al., 2009), and has shown to be efficacious in the recognition of specific difficulties which require further research and particular interventions, our study utilised the Interpretative Phenomenological Analysis (Carric et al., 2003; Gill, 2014; Denzin, 1995) within the grounded ethnographic method (Glaser and Strauss, 1967). The combination of the emic view of the participants and the interpretative etic view of the researchers facilitated understanding of cultural issues about health (Oliffe and Bottorff, 2006; Sanjek, 2000; Testoni et al., 2017; Zamperini et al., 2016). Indeed, this technique can generate reflections to a much greater extent than the classical technique of direct interview or questionnaire (Morgan, 1997). Following the CORE-Q check-list (Tong et al., 2007), our analysis focussed on the relationships between the representation of gender roles and biographical experiences with parents, through critical theory-driven interpretations within gender studies’ theories (Cook and Fonow, 1986; Radford and Hester, 2001; Testoni, Cecchini, Zulian, Guglielmin, Ronconi, Kirk, Berto, Guardigli and Cruz, 2018; Testoni, Francescono, De Leo, Santini and Zamperini, 2018; Testoni, Russotto, Zamperini and De Leo, 2018). Moreover, we assumed the perspective of recognition of gender as basic to all social life, acknowledging the ethical responsibilities in research with respect to such issues (Testoni, Cecchini, Zulian, Guglielmin, Ronconi, Kirk, Berto, Guardigli and Cruz, 2018; Testoni, Francescono, De Leo, Santini and Zamperini, 2018; Testoni, Russotto, Zamperini and De Leo, 2018; Zamperini et al., 2015).

The structure of the narratives constituted a trace of sequential topics, although, it is always presented with sufficient flexibility. The issues derived from the personal experiences were used as transition questions, which made it possible to pass from one subject to another without logical interruptions. The average duration of each interview was approximately 90 minutes and all
interviews were audio-recorded and transcribed verbatim. The corpora obtained were analysed with thematic analysis: reading, tracing the units of meaning, examining the redundancies and differences, reflecting on the units of meaning to extrapolate the theme transformed into scientific language and, finally, formulating a consistent description of personal experiences (Testoni et al., 2016). This method allows researchers to identify relevant thematic categories, subsequently facilitating detailed conceptual analysis of the discourse (Testoni, Cecchini, Zulian, Guglielmin, Ronconi, Kirk, Berto, Guardigli and Cruz, 2018; Testoni, Francescon, De Leo, Santini and Zamperini, 2018; Testoni, Russotto, Zamperini and De Leo, 2018). The paper-and-pencil analysis operations were then integrated using the computer programme, Atlas.ti.

Results

From the analysis, two areas of thematic prevalence emerged: first, domestic violence and mothers’ suffering; and second, parental relationship as a model and the mother as “the true woman”.

First area of thematic prevalence: domestic violence and mothers’ suffering

The biographies of all participants were quite similar, exhibiting numerous common elements. With respect to the issue of “who I was and how I arrived here”, it emerged that they came from violent and problematic families, where neglect and physical violence characterised their childhood. All of them had experienced many changes of residence and strong experiences of death (deceased fellow drug users, friends, victims of violence) and were fully aware of having taken the wrong path and failed in many choices:

Bruno: “I know, it was wrong, I don’t really know how I chose to go down this road”; “Yes, now I’m aware that everything in my life is wrong, but I don’t know when I could’ve made other choices”.

They were also witnesses of continuous violence against the mother by the father, and suffered themselves from both psychological and physical violence:

Antonio: “My mother had been crying during the day and also at night. My father battered her and me together, almost throughout the day. There were slaps in every moments of the day”; “It was an unstoppable violence […] until one day, I took a knife and told him ‘touch her another time and I kill you’! My mother tried to make him think, but all her attempts were futile”; Luigi: “The situation of my mother was similar to that of other women in the neighborhood where we lived: muffled, constantly crying and feeling threatened”.

In all of their biographical reconstructions, problematic drug use and detention were derived from these early experiences, in which fathers engaged in infidelity, showed violence towards the mother and children and were indifferent towards their responsibilities:

Claudio: “There were moments when he suddenly got angry and slaps came from all directions. He would often spit at me in the face. I left home and started taking drugs”; “I reacted to his violence and unfortunately, I got eight months in prison for nothing”.

Furthermore, in all biographies, there emerged unresolved family bereavements and, in many cases, suicide attempts:

Franco: “When my friend died, nobody helped me with the grief. I had to do everything on my own. What is the need for living if you then have to die like him, for nothing? Neither my mother nor my father understood my mourning”; “I attempted suicide, but it didn’t solve the problems”; “I am sorry to live […] When you think about this, nothing makes sense. The most important aim is to die. Whether the family is close to you or not, you care about nothing, you say if I die who knows, who cares […]”.

Overdoses or periods of coma led to trauma and the inability to work and continue with any form of ongoing commitment. Moreover, trials, imprisonment and a substantial incapacity to maintain meaningful emotional relationships inevitably began after the first consumption of drugs. However, they were unable to clearly define the relationship between all of these situations and the present. The dominant idea was that they had made mistakes involuntarily, without any deliberation:

Claudio: “I don’t know why I finished this way, maybe the devil I have inside […]”; “I know I have the famous dark side”.
The time lived in the Institute of Attenuated Custody for Treatment was the first opportunity in their lives to give meaning to past experiences and choices made unconsciously:

Franco: “Actually, here, everyone is helping me and teaching me things I had inside, but those things were stuck in a drawer”; “Maybe, I could get out of this damn situation. Here, I am learning that there are other solutions to problems”; “It’s not easy to follow all such reasoning, but I feel that I can do it”.

In the Institute of Attenuated Custody for Treatment, they reconsider parental relationships and sometimes the possibility was expressed that mother empowerment could have changed family life:

Carmelo: “My mother suffered so much because of my father. It would have been better if she was more independent”; “He was too stressful, too paranoid, jealous, and jealous of nothing. It would have been better if she had been able to live freely”.

Ronaldo: “It would be better if everything were balanced. More importance should be placed on women, and they should be respected as individuals. They must not be underestimated. They already feel inferior”; Tito: “Everything must be decided on an equal basis. A relationship works when there is dialogue. We must accept the female point of view. We must put ourselves in their shoes. This would guarantee mutual respect, loyalty, and sincerity between the couple”.

It emerged that, only on this basis, is it possible to make happy children, who do not have to endure the violence associated with a failed parental relationship: “The family is fundamental. If the parents do not get along well, the children end badly”.

On the contrary, the father was substantially described as inept:

Lucio: “I don’t want to die in the prison as my good-for-nothing father”; Guido: “My father always had more fun than my mother: he loved to go out to play, drink, dance, […]”.

Tito: “My father was never at home, while my mother was at home working, but it was better when he was out, because everything was peaceful”; “My father was a musician and used to stop in bars to drink, in a kiosk here and in a kiosk there. He played drums. He was out for a long time and was scarcely at home […] I saw very little of him”.

Second area of thematic prevalence: parental relationship as a model and the mother as “the true woman”

Aspirations for the future assumed a very traditionalistic perspective. Their hope was focussed on living a simple life in society, with a family, a job, a house and freedom:

Ronaldo: “I would like to be a serene person, who has one or two children, a nice, tidy home, and a job. All these are important”; “I hope to change and be different, I would like to improve myself a bit, I would like to understand everything I have passed through and done. I’d like to give a sense to each experience I had, in order to improve my life”.

Lucio: “I hope that all this will never happen again. In the future, I hope to be a free man forever, out of prison, but also free from drugs and its vicious circle”.

Despite the domestic violence that they witnessed as children and descriptions of past family experiences, portrayal of their parent’s relationship was described positively by participants and empowerment of mothers was noted as desirable. However, the description of future relationships with women maintained a traditional model characterised by sexism and a strong imbalance of power in favour of the man:

Lucio: “It was a perfect relationship […] how to say […] beautiful […] always seen. I always had this example of a relationship as a couple”.

Ciro: “My mother and my father had a traditional relationship […] my mother was a typical Albanian woman […] home, ironing. He was a classic Sicilian […] he was used to going outside to drink and seeing girls. Who knows […] but they could not live without each other”; “I hope to build a romantic relationship as theirs. They were inseparable”.

Adamat: “Man commands. He has the power and the authority to tell his wife and children what they must do and must not do”; “My mother never worked, because it was my father who had to work, this is the female role”; “The man works and the woman at home cooks and waits till her husband arrives”.
In many cases, participants assumed the same paternal behaviour with their partners, using violence:

Carlo: “Yes, I behaved like my father with my partner […] Sometimes, I beat her. But, then I regretted it”; “There is hate. Sometimes, you get there”.

Addo: “I always remember the teaching of my grandfather, who said to me, ‘Remember that the hen has a small brain like this, women have the brain of hen and when they try to enlarge it, it bursts and dies, the woman is the same. The woman, like the hen, comes up to a certain point to reason and then begins to turn around. So, she’s unbearable and sometimes the man loses his patience’”.

Carmelo: “I’m sorry to say this, but I did it […] I don’t know whether to say that I repented, I can’t say it”.

Almost all participants were seeking “the true woman”, who corresponded to the maternal prototype: capable of suffering and sacrificing herself for the family. She was described as a strong person, able to withstand pain, incapable of becoming discouraged, tolerant, long-suffering, serene, unshakeable, understanding, uncomplaining, enduring and with a good nature.

She is someone that can always be counted on:

Ennio: “I loved my mother. She was like a sister, because when I was born she was 16 years old, so we are like brother and sister. She was a child mother”; Franco: “They say the woman is fragile, the woman is not fragile! Women are capable of enduring suffering, unlike men. Women know how to suffer in their heart, in silence. They suffer and know how to endure suffering, as my mother did”.

Ennio: “The real woman is the one who dedicates herself to the family, a good mother and a good wife, able to support and help those in difficulties”.

Carmelo: “There are no more women like that, like my mother. My mother gave up everything for the family, and made sacrifices to raise her children”.

Addo: “A true woman must be intelligent and not stupid. She must have principles”; “The good woman is the one who gets up in the morning, makes breakfast and brings her children to school, prepares food for the man who returns home tired in the evening. A good woman is a good mother, as it has always been with my mother”.

Adamat: “The woman, in my opinion, must support the man and must be close to him even when he is sick. I would like a partner who is close to me even if I am on the hot seat. The right woman doesn’t have to stress me”.

Luigi: “I’m interested in the feminine charm that makes you fall in love, like the mother of my children who is very feminine”.

Only three participants explicated the negativity of the paternal role and the unhelpful parental relationship:

Costanzo: “He was jealous and possessive, but my mother patiently endured, accepted in silence the impositions, amusements, and behaviours of my father to keep the family united, to continue the relationship. It was unjust and I don’t want to be like my father”; Tino: “They couldn’t stand the sight of each other. I don’t want to have a similar relationship”.

Giovanni: “Our parents and others in this neighbourhood were all like that. All fathers were used to drinking and all women to crying”.

Discussion

Adopting the perspective of critical psychology, however, without any confutative intention because of the qualitative methodology adopted, and believing that the concept of maternal deprivation could be an expression of mother blaming bias assumed by Bowlby and his followers, we undertook retrospective research with 20 prisoners in an Italian Institute of Attenuated Custody for Therapy. Since critical qualitative analysis moved towards a more culturally oriented treatment of narratives, the fundamental perspective that guided our survey was that deviant behaviour such as violence and substance abuse could be associated with sexism, as indicated by the literature, which posits that many forms of violence are derived from intolerance and prejudicial attitudes (Cotter et al., 2001; Fredrickson and Roberts, 1997; Goodboy et al., 2016; Nussbaum, 1995). Indeed, individuals first learn and are influenced by family and sexism widely affects families, devaluing, depriving and abusing women (Atwood, 2001). Our retrospective research aimed at considering the possible role of sexism in prisoners’ deviant biographies.
Mother blaming vs child witnesses of domestic violence

Confirming the opinion of some researchers (Gao et al., 2010; Follan and Minnis, 2010) who argue that Bowlby’s emphasis on the mother could be misleading and that bonding with a father-figure could have been likewise important, we found that almost all of the participants had experienced painful and traumatic childhoods in their families of origin, which contributed to their subsequent addictive behaviour. They were complex patients, characterised by a borderline organisation of personality due to their childhood experiences, from which, on the one hand, poly-toxic drug use, and on the other hand, drug-related crime paths, affected all of their relational life. Our research corroborated findings already widely available in the literature, that substance use is often a consequence of a childhood lived in violent, abusive and neglectful families (Cuomo et al., 2008; Schäfer, 2011).

As also indicated in the literature (Honorato et al., 2016; Sarchiapone et al., 2009), trauma in childhood may determine problematic drug use and criminality in adulthood. Indeed, the deepest cause of this deviance lies in the trauma of domestic violence, which they suffered in childhood because of their father. These traumatic experiences exposed them to the risk of developing a dissociative pathology with a borderline personality. In their stories, it was possible to observe some indications that support this hypothesis. Self-descriptions were very vague, generic and approximate. The participants were also unable to maintain a narrative coherence, as clearly expressed in attitudes towards women. In fact, in the first thematic area, the idea emerged that female empowerment is desirable with respect to their mothers’ suffering from their fathers’ violence.

The forms of ambivalent sexism and their paradoxes

In the second thematic area, the “true woman” is exactly as their mother was, that is, being absolutely subordinated. Although, this can be considered as a form of primitive dissociative defense, accompanied by detachment during the description of traumatic events, the matrix of this violent environment constituted a profound ambivalent sexism. None of the participants described their mother as absent, violent or inept. Instead, the recollection of her suffering triggered the evocation of the gender equality principle in almost all participants, but only temporarily: she should be respected and therefore enjoy the same power as her husband. However, after this fleeting narrative phase, participants returned to the personal sphere and the model to which woman had to correspond remained the traditional one, that is, the mother-wife who is able to bear and support all, ever-helping her partner or husband. The two forms of attitude reflect the two dimensions of ambivalent sexism. Essentially, the judgment of women was that of fathers, in which the woman should not complain, should be patient, and bear suffering. The hostile sexism of fathers and grandfathers was transformed into a benevolent one, in which the celebration of the sacrificial role of women, supposed to be totally dedicated to husbands and children, constitutes the symbolic bridge between the father and their role. Actually, the mother was idealised and beloved at the same time.

This result confirms the relationship between sexism and domestic violence as described by the extant literature, which illustrates that children’s exposure to marital violence is a significant predictor of ambivalent sexism (Ibabe et al., 2017) and furthermore, of intergenerational transmission of domestic violence and deviance (Brown and Stone, 2016; Hellmann et al., 2018; Kim, 2012; Mandal and Hindin, 2015). Vecina and Piñuela (2017) worked with men convicted of violence against their partners and considered that, in this population, ambivalent sexism is rooted in a traditional and ideological moral perspective, which justifies the unequal gender distribution of power and authority.

The inadequacy of the attachment theory

With respect to attachment theory, it is possible to assert that the idealisation of mothers can be associated with the need for an actual attachment figure. Indeed, a battered mother and a violent father cannot assist their children to develop a secure attachment style and, furthermore, problematic drug use is frequently associated with insecure attachment (Thorberg and Lyvers, 2010). Indeed, such individuals are less likely to be involved in supportive partner relationships.
and may resort to abusing substances in order to cope with their circumstances (Kassel et al., 2006). However, they need a maternal figure that compensates for their affective paucity. In fact, the idealistic representation of the woman is instrumental to their needs and is not based on a regulatory principle that values gender equality. Consequently, the ability to perceive reality accurately, which requires the capacity to recognise the autonomy and independence of others, does not develop and results in abusive behaviour learned from the father.

The outcome of this study suggests that within similar structures in the Institute of Mitigated Custody, the theme of sexism should be considered in more depth as sexism justifies violence against women and could, therefore, be a factor that can cause recidivism due to the antisocial behaviour of prisoners released into the community. It is important to allow them to analyse the relationship between their sexist attitudes, their witnessing of violence in childhood and the possibility of changing moral values of reference in favour of equality. This type of psychological intervention must necessarily be based not only on the elaboration of traumas suffered during childhood with an abusive father, but also on issues related to gender equality and the theme of social inclusion.

Limits of the research

From the mainstream psychological perspective, the limits of the research are linked to the utilisation of the narrative method. Also, this methodology does not verify any hypotheses, so quotations from the participants are used to illustrate themes, and thus, it is difficult to report the informational complexities arising from the dialogues. However, the literature has emphasised that these limitations do not invalidate qualitative research findings, despite the difficulties in generalising the results of the qualitative studies. Thereafter, our critical analysis moved within the intersection of experience-centred approaches and the culturally oriented treatment of narratives, so that the focus on the stories of our prisoners makes meaning, because it applies structure to experience, albeit, with the form and content of the texts. This research did not permit us to measure and evaluate post-hoc any post-traumatic hypotheses, which in turn would give room for further research.

Another limitation of the research was that the relationship between culture of origin and gender biases, especially with participants from non-European countries, was not analysed. This topic would require an important in-depth study, which encompasses how women are treated in different countries and its effects on social maladjustment for immigrants in Italy.

References


Camic, P.M., Rhodes, J.E. and Yardley, L. (2003), Qualitative Research in Psychology. Expanding Perspectives in Methodology and Design, American Psychological Association, Washington, DC, available at: http://dx.doi.org/10.1037/10595-000


Jones, N. and Holmes, R. (2010), Gender, Politics and Social Protection, Overseas Development Institute, London.


Morgan, D.L. (1997), Focus Groups as Qualitative Research, Sage, Newbury Park, CA.


Further reading


Corresponding author

Ines Testoni can be contacted at: ines.testoni@unipd.it

For instructions on how to order reprints of this article, please visit our website: www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: permissions@emeraldinsight.com
Access to a quality healthcare among prisoners – perspectives of health providers of a prison infirmary, Ghana

Terrylyna Baffoe-Bonnie, Samuel Kojo Ntow, Kwasi Awuah-Werekoh and Augustine Adomah-Afari

Abstract
Purpose – The purpose of this paper is to explore the influence of health system factors on access to a quality healthcare among prisoners in Ghana.
Design/methodology/approach – Data were gathered using different qualitative methods (interviews and participant observation) with staff of the James Camp Prison, Accra. Findings were analyzed using a framework method for the thematic analysis of the semi-structured interview data; and interpreted with the theoretical perspective of health systems thinking and innovation.
Findings – The study concludes that health system factors such as inadequate funding for health services, lack of skilled personnel and a paucity of essential medical supplies and drugs negatively affected the quality of healthcare provided to inmates.
Research limitations/implications – The limited facilities available and the sample size (healthcare workers and prison administrators) impeded the achievement of varied views on the topic.
Practical implications – The paper recommends the need for health policy makers and authorities of the Ghana Prison Service to collaborate and coordinate in a unified way to undertake policy analysis in an effort to reform the prisons healthcare system.
Social implications – The national health insurance scheme was found to be the financing option for prisoners’ access to free healthcare with supplementation from the Ghana Prison Service. The study recommends that policy makers and healthcare stakeholders should understand and appreciate the reality that the provision of a quality healthcare for prisoners is part of the entire system of healthcare service delivery in Ghana and as such should be given the needed attention.
Originality/value – This is one of few studies conducted on male only prisoners/prison in the context of Ghana. It recommends the need for an integrated approach to ensure that the entire healthcare system achieves set objectives in response to the primary healthcare concept.

Keywords Prisoners, Quality of care, Health system, Health providers, Access to healthcare, Prisons healthcare

Paper type Research paper

Introduction
The establishment of good administrative systems and procedures can lead to efficient management of limited resources in prisons. Their health systems could as well be improved as such efficient management aids in the collection of appropriate information to enhance training and research (Tapscott, 2006). The Revised Standard Minimum Rules for the treatment of Prisoners also known as the Nelson Mandela Rules provides regulations and standards specific to the quality of healthcare in prisons, noting that healthcare services should be provided by the country’s National Health Service rather than by prison authorities or judicial institutions (United Nations, 2018).

The total number of incarcerated persons in Ghana was estimated at 13,955 with a prison population rate of 48 per 100,000 of the national population as of October 2017; predominantly males and about 1.2 percent females (Prison Studies, 2018). The increase in prison population...
without commensurate increase in prison infrastructure naturally leads to overcrowding; the occupancy level based on the official prison capacity was 141.7 percent making Ghana the 56th most overcrowded in the world (Prison Studies, 2018).

It is open knowledge that the prison population suffers from certain health conditions and generally has a poor health status (Binswanger et al., 2009). A study observed a higher prevalence of HIV and HCV in correctional facilities and prisons than in the general population of Ghana (Adjei et al., 2007, 2008). Telisinghe et al. (2014) concluded that undiagnosed tuberculosis and HIV prevalence was high in prisons in South Africa as well. This could be attributed to the fact that awaiting trial prisoners were highly prone to drug-sensitive and drug-resistant TB in South Africa (Robertson et al., 2011).

A challenge yet to be addressed was whether both healthcare workers and prison inmates had knowledge of some of the health risks (infectious diseases) that prisoners might be predisposed to while incarcerated. A study in Nigeria proved that “despite the fact that many of them [prisoners] knew the modes of transmission, many indulged in high-risk behaviors of AIDS transmission” (Odujinrin and Adebajo, 2001, p. 191). A further study among healthcare workers of Nigerian prison service health facilities in Kaduna State Command found a statistically significant relationship between knowledge and practice of injection safety in relation to cadre of staff, staff that had training on injection safety and years of experience of the staff, respectively (Onyemocho et al., 2013).

However, research has demonstrated a deficiency in health system factors that affect the quality of health services provided to prison inmates in Zambia, including lack of essential medical equipment and medications necessitating external referrals, lack of qualified personnel and inability to pay for health services rendered (Topp et al., 2016). Similarly, Solomon et al. (2014) reported that Nigerian prisons are characterized by inhumane conditions and overcrowding. This leads to a deplorable health situation among inmates. It is also argued that problems with the provision of quality care to inmates in Nigerian prisons include the inadequacy of healthcare personnel, facilities and systems. Others are the “lack of healthcare policies and standard operating procedures, corruption in the criminal justice system and bureaucratic bottleneck” (Solomon et al., 2014, p. 152). These make continuity of care difficult to maintain because records are essentially non-existent; prisoners are not aware of their clinical diagnosis and health staff do not communicate with those on the outside (see Kripalani et al., 2007).

Most of the prisons in Sub-Saharan Africa (SSA), especially Ghana, do not have well-structured healthcare facilities (see Adjei et al., 2007, 2008). The lack of a structured relationship between the prison system and the national health system has a negative impact on the provision of quality healthcare to prisoners, especially in Ghana (Sarpong et al., 2015). Although there are infirmaries in some of the prisons in Ghana, these usually lack stockpiles of essential medicines, equipment, technologies and other medical consumables necessary for providing quality healthcare to prisoners (see Adjei et al., 2007, 2008). This means that this combination of factors identified results in prisoners remaining undiagnosed upon release. The result of a relatively weak surveillance system means cases remain unidentified, thereby heightening the rate of contamination or infection of the general population on their release (Binswanger et al., 2011).

Arguably, the prison population would benefit from quality healthcare if there was provision of suitable health amenities within the prisons and effective linkages with other levels of the healthcare system. For instance, some researchers suggest that to ensure an uninterrupted and quality healthcare system among prisoners, there should be a need for policy makers to re-evaluate the present healthcare policy. This could be achieved by facilitating easy access to medical facilities by patients, including prisoners (see Solomon et al., 2014).

Similar to other SSA settings, the health system in Ghanaian prisons is generally under-researched (see Adjei et al., 2007, 2008; Topp et al., 2016). It is important to note that the majority of the Ghanaian prison population (86 percent) is male (Prison Studies, 2018). Therefore, this study explored the influence of health system factors on access to quality healthcare among male prisoners at the James Camp Prison (JCP). The paper argues that it is important for health policy makers and Ghana Prison Service authorities to collaborate and coordinate in a unified way to undertake policy analysis in an effort to reform the prison healthcare system in the country.
Literature review

Access to quality healthcare

Several researchers have conceptualized access to healthcare and identified determinants which affect it, including the health system, health providers and individual and population factors (Levesque et al., 2013). Topp et al. (2016) argued that prison inmates in SSA experience a high burden of disease and poor access to healthcare. Øvretveit (2009) defined quality care as the provision of care that exceeds patient expectations and achieves the highest possible clinical outcomes with the resources available and further developed a system for improving the quality of healthcare based on three dimensions – professional, client and management.

Donabedian (1990) defined healthcare quality as the application of medical science and technology in a manner that maximizes its benefit to health without correspondingly increasing the risk. This model (which was adapted for this study) has three dimensions: structure, process and outcome. Structure: this is the setting in which healthcare is provided and received. This describes the healthcare provider (physicians, nurses among others) and their skills and attributes, the health facility and its characteristics including total number of staff, equipment available, facilities, etc., and the organization and funding of the healthcare system as a whole. Process: this describes the interaction between the patient and healthcare provider. Outcome: this refers to the status of the patient following care: cure, morbidity or mortality. Kairy et al. (2009) found that clinical outcomes were generally improved following a tele-rehabilitation intervention and were, at least, similar to or better than an alternative intervention.

Health system factors influencing access to a quality healthcare

In the context of Ghana, primary healthcare (PHC) is the required level of care in prisons as indicated by the Ghana Health Service (2018) organizational structure. It is necessary, therefore, to examine the resources/factors needed to ensure the provision of, and access to, quality healthcare for and by prisoners. Access to quality healthcare is influenced by certain health system factors which include, but are not limited to, administrative systems and procedures (health information and research), availability of health facilities/equipment, health human resources, health service delivery and health financing.

Administrative systems and procedures. It has been reported that the impact of training for prison officials in an effort to correct the imbalances in the prison governance structures in South Africa depends, to a substantial extent, on the administrative and managerial environment in which the training was conducted (Tapscott, 2006). Obioha (2011) argued that despite the reality that the main aim of establishing the prison institution in all parts of the world, including Nigeria, is to provide a rehabilitation and correctional facility for those who have violated the rules and regulations of their society, the extent to which this truism manifests in practice has been a subject of debate. This suggests that even though a good administrative system would enhance the delivery of quality healthcare to prisoners, revamping the institutional landscape could also create challenges, if not handled effectively (Tapscott, 2006).

Tapscott (2006) reported that the dramatic institutional change in South Africa, which included a process of reform and restructuring, had created institutional instability that adversely affected the governance of prisons across the country. Obioha (2011) supported this point by noting that the population that goes in and out of Nigerian prisons presupposes that there are some problems in the system. Invariably, a lack of adequate or well-functioning administrative systems and procedures that keep records of the health conditions of the prisoners would make it difficult to retrieve information on their health status (outside of the prison walls) on their release into the general community.

Health facilities/equipment. In order for an individual to access healthcare, the health facility must first be available and within an acceptable distance to the clients since availability is a component of spatial accessibility (Guagliardo, 2004). Ross et al. (2011) noted that correctional institutions are authoritarian organizations and may control access to healthcare services by using staff to identify and facilitate prisoner medical care. In Norway, unlike Ghana, all prison health services are
integrated into the general health services in the local community and the larger health region where the prison is situated (Bjørngaard et al., 2009). The provision of quality healthcare will also depend on the availability of state-of-the-art and modern medical equipment. The absence of required medical equipment and medications has led to a poor quality of healthcare in Ghana (see Boateng and Flanagan, 2008). Berendes et al. (2011) concluded that although quality in both provider groups seemed poor, it was better in the private health sector as there was better drug availability and their services were more client-oriented.

**Health human resources.** Qualified health personnel are needed to provide quality healthcare with available adequate medical equipment. The presence of qualified health personnel can help to attract clients/patients to access the services of a health facility (Ashraf et al., 1982; Young, 1983; Peters et al., 2008). Bjørngaard et al. (2009) noted that in Norway, while large prisons have health workers that work in the prison only, small prisons have part-time health workers that work in community health services the rest of the time.

**Health service delivery.** The incarcerated population has been shown to have a higher representation of poor people and their capacity to finance healthcare may be reduced, thereby reducing access to healthcare (Bjørngaard et al., 2009). Ghana’s health sector is mainly financed by the government, its development partners and Ghanaian households; and the national health insurance scheme (NHIS) established in 2013 is the most used insurance scheme with coverage of approximately 40 percent in 2014 (Wang et al., 2017).

**Health financing.** Access to healthcare was noticed to be challenging to prisoners and the Ghana Prison Service because the Ghana Prison Service was saddled with bills owed to healthcare providers and government hospitals (MOGCSP, 2017). Despite attempts to enroll prisoners unto the NHIS, these interventions were not associated with policy changes and remained highly subjective and unsustainable; the prison population may lack the needed finance to access the available healthcare (NHIA, 2013; MOGCSP, 2017; Safo, 2017).

**Theoretical perspective**

The theoretical perspective underlying this study is based on health systems’ thinking and innovation which shows how this system deals with problems by using its institutions to identify innovations for adoption (Atun, 2012). A common fact about a health system is that it is a “means to an end” – a system which “exists and evolves to serve societal needs” – with “components” that can be utilized as policy instruments to alter the outcomes (Hsiao, 2003; Shakarishvili et al., 2010; Atun, 2012). Health systems are open systems with interlinked components that interact in the context within which the health system is situated, thereby forming a whole with properties beyond the component parts (Checkland, 1981; Atun et al., 2007; Atun, 2012).

Accompanying the system’s thinking and innovation is the WHO (2017) framework which recognizes six elements of the health system such as leadership/governance, information and research, healthcare financing, service delivery, human resources/health workforce and medical products and technology; all these elements interact with one another to ensure quality health delivery to the people who are at the center of the health system. The prison health system can be said to have the same elements as any other health system because a prisoner is entitled to enjoy the same standards of healthcare that are available in the community. The only differences are in the context, which is the prison and the people who are the prisoners. A number of factors have been shown to influence the ways in which health systems achieve good health efficiently, including the capacity/abilities of both individuals and institutions within health systems to seize opportunities and some contextual characteristics such as socio-cultural beliefs and economic setup in which the health system operates (Balabanova et al., 2011; Atun, 2012).

This study recognizes that the current health financing system of Ghana excludes a section of the population from accessing even the limited quality healthcare available due to financial constraints (Nguyen et al., 2011; Jehu-Appiah et al., 2011). Additionally, the findings of the study indicate that the current inadequate healthcare provision for the prison population could be explained from the viewpoint of systems’ thinking, which requires that health policy makers address entire health
system difficulties with a holistic approach rather than in bits (Ministry of Health, 2018). The advantage of health systems’ thinking is that it helps to anticipate and prepare for challenges rather than react to them (Atun, 2012).

Methods
Different qualitative methods (interviews and participant observation) were applied to collect data from June to July, 2018.

Study area
The study was conducted in the JCP in the Greater Accra Region. Accra is the national capital of Ghana and serves as a hub for most of Ghana’s economic and tourist activities. It has a population of approximately 2.27m which amounts to 8 percent of Ghana’s estimated population of 29.4m. In the Accra Metropolis, healthcare is provided by both public and private institutions with a host of private health insurance schemes available as well as the NHIS for financing health with out-of-pocket payments for services not covered by the insurance schemes (Wang et al., 2017).

The JCP is one of the 43 prisons in Ghana (Ghana Prison Service, 2018). The Prison is one of three Open Camp Prisons and serves as a “halfway home” where rehabilitation and training of prisoners is undertaken before release. Generally, the prison holds short-sentenced prisoners received from several prisons in the southern part of Ghana instead of directly from the courts. Because prisoners in this prison are transferred-in from other institutions, information obtained from studying this population could be extended to prisoners in many prisons in the southern part of Ghana in particular and the country as a whole (Ghana Prison Service, 2018).

Selection of study participants
A purposive sampling technique was applied to select participants for this qualitative research. Purposive sampling is a deliberate choice of participants due to the qualities they possess. It is also a non-random technique where the researcher decides what needs to be known and sets out to find people who can and are willing to provide the information by virtue of knowledge or experience (Etikan et al., 2016).

Semi-structured interviews
Qualitative semi-structured interviews were conducted with seven participants selected on the basis of literature (Pope et al., 2000; Creswell and Garrett, 2008). A semi-structured interview is explained as comprising predetermined questions which can be modified based upon the interviewer’s perception of what seems most appropriate (Van Teijlingen, 2014). The study was set within a framework to address the question, “What is the influence of health system factors on access to quality healthcare among male prisoners at the James Camp Prison?”

Three administrative heads of the JCP were interviewed in-depth with a focus on soliciting their views on health system factors which could influence prisoners’ access to quality healthcare. Four healthcare providers attached to the infirmary of the JCP were also interviewed in-depth to investigate their perceptions of how health system factors could influence the provision of quality healthcare at the prison. The interviews, which were recorded with a digital voice recorder, were conducted at locations and times suitable to the participants. Each interview lasted between 30min and 1 h. Some interviews were written down and transcribed as participants did not consent to voice recording. The adapted semi-structured interview guide and approach was applied by earlier researchers to interview prisoners and staff at four prisons in the UK (Bowen et al., 2009).

Participant observation
Participant observation, which involves spending time being, living or working with people or communities in order to understand them, and a useful tool for collecting data about people, processes and cultures in qualitative research, was applied to collect data (Kawulich, 2005).
A non-active participant observation strategy was applied to collect information relating to how the availability of facilities and medical equipment at the infirmary and related institutions helped to provide access to quality healthcare for the prisoners of JCP using a checklist. This approach had been applied in earlier studies to support and inform the interview process (Bowen et al., 2009).

Data analysis and ethical consideration

The interview recordings were played and transcribed verbatim using a Microsoft application in text format before analysis. In addition, a framework method was applied to theoretically analyze the interview data (Gale et al., 2013). Gale et al. (2013) explained that the framework method sits within a broad family of analysis methods often termed thematic analysis or qualitative content analysis with key components including: transcription, familiarization with the interview, coding and interpreting the data. The framework method was adopted for analysis since it is most commonly used for the thematic analysis of semi-structured interview transcripts (Pope et al., 2000; Gale et al., 2013). The semi-structured interview guide was pre-tested in a male prison in the Accra Metropolis before the main study. Ethical approval was granted by the Ghana Health Service Ethics Review Committee and approval to undertake the research at the prison by the administration. Participants signed a consent form before their participation. Codes were developed to identify the interviewees when quoted. HW means infirmary health worker. PAS means prison administration staff.

Analysis of findings

The themes/sub-themes developed from the exploration of the health system/institutional characteristics that could influence access to quality healthcare among prisoners were related to the administrative systems and procedures, availability of health facilities/equipment, availability of health human resources, access to health financing and access to healthcare delivery as presented below.

Administrative systems and procedures

The discussion with interviewees centered on how adherence to administrative systems and procedures for admitting transferred prisoners was helping to enhance quality healthcare delivery to the prisoners at the JCP. The sub-themes that emerged under this theme related to medical examinations and health certificates as well as medical records. Participants’ perspectives have been described below.

Medical examinations and health certificates. Analysis of interview data showed that the administrative procedure was to ensure that prisoners transferred from other prisons to the JCP arrived with a health certificate and warrant. However, it was revealed that prisoners arrived with only the warrant. This made it difficult for the health providers to know prisoners previous health condition(s) and ensure continuity of care in the event that the prisoner became ill:

[...] I have been here for a few years but I have never seen a health certificate. I don’t think inmates are examined prior to transfer [...]. (HW-1)

The procedure is that an inmate is supposed to receive a full medical examination when being received into custody and also when being released. Unfortunately, this was not done in the prison due to the limited number of healthcare providers and the huge number of prisoners received into the prison in any particular period. This was likely to affect the health of other inmates and the general community in the event that a prisoner arrived or was released with an infectious disease:

[...] Unfortunately, the numbers do not permit us to be thorough in doing medical examination - about 100 inmates/prisoners are transferred in at a time [...] We’re only able to do inspection to identify obvious ailments and also to identify contrabands [...]. (HW-2)

However, attempts were made to control transmission of infectious diseases. For instance, in the first month after their transfer to the prison, new arrivals are quarantined in a separate part of the prison. The rationale is to give them an orientation of the prison and also to identify prisoners with
drug or alcohol-related problems, mental health problems and other chronic medical conditions. During this period, drug counseling and screening for HIV are conducted. Although this screening was not compulsory, all prisoners consented because of the incentives that came with opting in. The test kits were supplied or donated by Planned Parenthood Association of Ghana (PPAG) and always available. However, it was understood that Hepatitis B and Tuberculosis testing was not routinely done unless there was a donation of test kits to the prison:

[…] I cannot remember the last time we tested for Hep B when inmates were transferred […] if an inmate shows symptoms, they will be sent to the hospital where they will be diagnosed […]. (HW-4)

Nonetheless, this showed how the referral system between the infirmary at the prison and the next level of the healthcare system works in the provision of an acceptable level of quality and continuity of healthcare. Once a prisoner was diagnosed with HIV or Hepatitis B, treatment would be started usually at the hospital. All prisoners who were found to be positive for tuberculosis were transferred to the Contagious Disease Prison at Ankaful in the Central Region where they served the rest of their sentence. For prisoners with chronic medical conditions such as Hep B or HIV, the referral health facility was usually informed about the discharge and arrangements made for continuity of care. This was seen as an attempt to reduce the spread of infections in the prison; preventive/public health. However, as a general rule, prisoners were not examined before their release or given a medical certificate.

Medical records. The availability of medical records is important as they help to ensure the continuity or management of the health conditions of prisoners while incarcerated. All infirmary visits were documented in a large record/attendance book but there were no individual prisoner folders. There was a separate record book for documentation of prisoners with HIV/AIDS similar to those used in other health institutions. The process of recording the medical history of the prisoners was:

[…] At the end of every week, we compile a return on types of illnesses, number of referrals and external reviews on the report/attendance book, which is then forwarded to the headquarters […]. (HW-3)

[…] Ideally, there should be independent records because sometimes it is difficult to trace back the history and treatments as the book is quite large as you can see and the inmates are many […]. (HW-1)

The analysis revealed that the provision of individual health records was not viewed by prison administrators as a priority due to the relatively short time that prisoners spent in this prison:

[…] Because of these relatively short sentences (about six months), the need for folders has been less […] In other prisons like Nsawam, the inmates do have health records, which are kept at the infirmary, which they can even send to the hospital […]. (PAS-2)

This was determined by respondents to be a challenge as it poses a risk to the other inmates and the general population as well. However, the administration of the JCP had initiated steps to provide a proper records system to capture the various health conditions affecting the inmates.

Availability of health facilities/equipment

One key factor that the interviewees paid attention to was the availability of health facilities and equipment that could enable provision of quality healthcare to the prisoners at the JCP. The sub-themes that emerged under this theme were medical products and technologies. These were also confirmed through observation using the facility and equipment checklist. Participants’ perspectives are given below.

Medical products and technologies. The interviewees commented on the availability of medical equipment and supplies that would enable healthcare providers in the prison to deliver quality healthcare, noting that most basic equipment were absent. Health providers had to procure them on their own or had to improvise:

[…] Most of the time, I have to arrange to get some basic things in my own box […] However, if more equipment were available, we would be able to do many of the procedures like suturing and treatment of minor ailments in-house without the need to refer/transport the patient outside the facility – e.g. Police Hospital […]. (HW-1)
It was observed that much of the sparse equipment and drugs available were from donations. The analysis showed that most of the respondents admitted to having bought essential drugs for prisoners or sourced donations from philanthropists. These findings were further confirmed by the observation checklist.

**Summary of observation – facility and equipment checklist.** An observation checklist was used to collect information on certain amenities or equipment available in the facility in order to ascertain how the availability of medical equipment, or lack thereof, at the infirmary could impact on prisoner access to quality healthcare (see Table I). The checklist showed that the infirmary of the prison had five health personnel made up of four health aids and one physician assistant with no medical orderlies. At the time of the study, the prison population was 262. However, the analysis deduced that this number could be more than 300 at certain times of the year. There were two rooms dedicated to healthcare service delivery at the prison, each with an area of approximately 25 m². One was dedicated to consultation, storage of patient records, equipment and medication while the other room served as the makeshift ward for short-term detention. These rooms were found to be inadequate in terms of size as they could not accommodate more than one patient without breaching other patients’ confidentiality. However, the rooms were well cleaned and ventilated.

Notably present were measuring tapes for height, weight scales, stethoscopes, a sphygmomanometer, thermometers, disposable gloves and a wash-up area. There was also a direct telephone line to the administrative offices. Notably absent were an examination couch, secure filing cabinets for notes and confidential papers, secure drug storage, emergency medications, sterile surgical dressings, surgical instruments and an appropriate waste disposal system. The veranda served as the waiting area and there were no toilet facilities at the infirmary. Due to proximity to the dormitories, prisoners used the toilet facilities in the dormitories. Secretarial support, when needed, was provided by the team in the main administrative offices.

**Availability of health human resources**

Analysis of the interview data revealed the availability of health human resources helping to provide quality healthcare to the inmates at the JCP. The sub-themes that emerged under this theme were health workforce, remuneration and welfare of health workers as detailed below.

**Health workforce.** To establish the availability of skilled healthcare providers who deliver healthcare to the prisoners, discussions as well as the use of a checklist unearthed that there were four health aids and one physician assistant taking care of the healthcare needs of over 200 prisoners. The physician assistant was responsible for the two other facilities in the surrounding area. He was called in by the health aids whenever they were faced with a new case that they could not handle. Most of the care given was essentially first aid and sick prisoners were transferred/transported to the Police Hospital for further management if the need arose. It was noted that some of the healthcare providers did not undergo regular training to upgrade their skills in current healthcare methods. This was also due to the procedure of recruiting health personnel into the prison service:

[…] Most of our staff are health aids. The fully qualified nurses and PAs are very few. […] The whole service has one medical doctor who works in Nsawam - most of the doctors that come to work here are volunteer workers […] We have one psychiatrist and one physician who come here regularly […] The service could create more opportunities - attractive to the health workers like the Police and Military do […] Maybe in doing that we could get a Prison Hospital for staff and inmates […] (PAS-1)

When asked whether they considered themselves well equipped to handle the health needs of prisoners, the responses from the health workers were split:

[…] I was a Prison officer before I was sent for the 6-month health aid training – for the past 10 years and over […] Some of the basic equipment are not in this prison, so I don’t know or remember how to use them […] (HW-3)

[…] I was also trained by the Prison Service as a health aide […] In addition, I’ve gotten a diploma in drug counselling and a degree in social work since then so I can handle a lot of those issues […]. (HW-2)
<table>
<thead>
<tr>
<th>Description</th>
<th>Number available</th>
<th>Remarks/Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Human resources</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of nurses/physician assistant</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Number of medical orderlies</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Number of Prisoners</td>
<td>262</td>
<td></td>
</tr>
<tr>
<td>Number of prison officers</td>
<td>232</td>
<td></td>
</tr>
<tr>
<td><strong>Facilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of nursing/medical interview rooms</td>
<td>1</td>
<td>1 interview room with a second room designed to be a ward, containing 3 bunk beds for short daytime stay</td>
</tr>
<tr>
<td>Rooms Y/N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sufficient size to accommodate three people</td>
<td>Y</td>
<td>No privacy if more than one patient is seen at a time</td>
</tr>
<tr>
<td>Examination couch</td>
<td>N</td>
<td>A bunk in the ward can be used if necessary</td>
</tr>
<tr>
<td>Washbasin</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Secure filing cabinets for notes and confidential papers</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Cleanliness</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Heating</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Telephone – direct line to outside</td>
<td>Y</td>
<td>No direct line to/from the clinic but each staff of the infirmary had official phones or Gota</td>
</tr>
<tr>
<td><strong>Equipment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stethoscope</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Auroscope and clean tips</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Ophthalmoscope</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Reflex hammer</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Height/weight scales and measuring tape</td>
<td>Y</td>
<td>2 of each</td>
</tr>
<tr>
<td>Thermometer</td>
<td>Y</td>
<td>1 functioning thermometer</td>
</tr>
<tr>
<td>Sphygmomanometer</td>
<td>Y</td>
<td>1 digital and 2 manual</td>
</tr>
<tr>
<td>Disposable gloves</td>
<td>Y</td>
<td>Adequate supply</td>
</tr>
<tr>
<td>Lubricant</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Tongue depressors</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Ear syringe</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Urine testing equipment</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>ECG with interpretation</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Tourniquet</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Eye charts</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Emergency equipment</td>
<td>Y</td>
<td>Supplies like sutures are usually kept with the PA</td>
</tr>
<tr>
<td>Sharps and storage and disposal</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Clinical waste containers and disposal</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Surgical instruments and dressings</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Autoclave or sterilizer</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Essential drugs and secure storage</td>
<td>Y</td>
<td>Adequate supply of essential medications according to the essential medication checklist</td>
</tr>
<tr>
<td><strong>Ambulance system</strong></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Arrangements for blood sampling and dealing with body fluids</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Laboratory facilities</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Computer terminal</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Computerized prisoner medical record system</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Waiting area</td>
<td>Y</td>
<td>The veranda in front of the clinic was used as a waiting space if the need arose</td>
</tr>
<tr>
<td>Toilet facilities</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td><strong>General office area</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secretarial support</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Fax</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Photocopy</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Shredder</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Stationery</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Computer</td>
<td>N</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Y = means item is available; N = means item is not available
However, the staff in the prison thought that numbers were sufficient for the number of cases they attended to. They also run shifts outside the infirmary:

[...] For the number of cases we see, ideally the number should be enough [...] There are a total of 4 of us and we run 2 shifts [...] Unfortunately, although we are off on the weekends, we run duties in the main yard which are not related to health so there is very little off-duty time and this makes us tired and less effective [...] (HW-4)

Although the staff numbers were assumed to be enough, their lack of skills in certain areas, especially among the health aids, meant that a lot of the work, including setting intravenous lines, had to be done by the physician assistant leading to work overload:

[...] I am the only trained PA in this prison complex which is composed of SCC, JCP and POTS each with, at least, 200 people at each time [...] I am also supposed to take care of prison officers and their dependents in the surrounding barracks as well as the school children in the surrounding schools [...] Hence, although I have fixed working hours, I am always on call [...] (HW-1)

It was also obvious that the provision of in-service training for the health workers was rare. However, it was revealed that the service allowed an individual to undergo training in their chosen field if that individual chose to, so long as it did not require financial support from the prison service.

Remuneration and welfare of health workers. The delivery of quality healthcare, especially in the context of Ghana and other settings, depends on a well-motivated and skilled staff. It was important to understand how the healthcare providers in the infirmary of JCP were remunerated so as to enhance their performance. The analysis revealed that all healthcare workers were paid based on their rank. The evidence from the analysis showed that the health staff did not receive any extra incentives for the "on call duties, extra duties" and the risks associated with their job:

[...] I am paid my salary and that is it [...] I think that health workers in Ankaful receive extra risk allowance because they deal with infectious diseases like TB but we don’t [...] (HW-5)

This had led to perceived dissatisfaction among some health workers as they were doing more work and exposed to more risk than they were being paid for. The challenge was how to exactly locate who had the responsibility for providing incentives to the health workers: whether Ghana Prisons Service or Ministry of Health/Ghana Health Service.

Access to healthcare delivery

The discussion with the interviewees centered on issues that could enhance access to healthcare delivery for the prisoners at the JCP. The sub-theme that emerged was health service delivery as illustrated below.

Health service delivery. The Ghana Health Service and the Ministry of Health have produced a document on referrals in the healthcare system of the country. Since the healthcare system in the prison service appears to be a quasi-government facility, the channels of referral are not clearly shown to be linked up with public healthcare institutions. In other words, sick prisoners were referred to other parastatal health institutions such as the Police Hospital if the condition was beyond the expertise of the health team or if supplies were not available at the JCP. The discussion with the interviewees revealed that if this occurred in an emergency setting, patients were given first aid before they were referred to the hospital. They were mostly conveyed by using the prison camp’s vehicles due to a lack of an ambulance service. There were also challenges with the accompanying personnel to take the prisoner to the receiving health facility:

[...] There is only one ambulance for the whole service but it is kept at the main headquarters [...]. (HW-2)

[...] Because of the number of referrals, we sometimes send 2 or 3 prison officers with 3 to 5 inmates, which is not the ideal [...] Transportation of an inmate outside the prison is risky because the officer can be harmed and there is also the risk of absconding - it also requires more resources like fuel, accompanying prison officers and time [...]. (PAS-1)

It was disclosed that for reviews and other non-emergency conditions, prisoners would book sick and when the appointment was due, they would be accompanied to the hospital by an officer.
The prisoners were often given prompt attention at the external health facilities and not delayed or
given inferior care or prescriptions because of their status. They were sometimes given preferential treatment because they were accompanied by the prison officers.

Access to health financing

The interviewees discussed how the issue of health financing was encouraging access to quality healthcare for the prisoners at the JCP. The sub-theme that emerged under this was health insurance and other sources as considered below.

Health insurance and other sources. When asked to identify the sources of financing for healthcare for the prison and its prisoners, the interviewees revealed that healthcare was provided free to all prisoners. All prisoners were registered with the NHIS which covered a host of medical bills such as registration and some laboratory investigations. For other services, payment was made by the Prison Service:

[…] If a patient is given a prescription at the hospital, we first check if we have the medication in stock and give accordingly […] if we do not have, the prescription is made available to the Head of the Prison, who forwards it to the headquarters […] From there, funds are made available to buy medications - this applies to other hospital bills as well […]. (HW-1)

Nevertheless, this process was long and often led to delayed medical attention and interrupted or missed doses of medications which delayed patient recovery.

Discussion

The findings have been discussed in the light of health system factors affecting the quality of care while relating them to the World Health Organization framework for health systems which is linked with the theoretical perspective of health systems’ thinking and innovation (Atun, 2012; WHO, 2017). The key concepts in the WHO framework applicable are health information and research, medical products and technology, human resources/health workforce, service delivery and healthcare financing (WHO, 2017) as shown below.

Administrative systems and procedures (health information and research)

Health information and research is one of the key tenets of the six building blocks of the health system (see WHO, 2017, 2018). The argument is that a well-functioning health information system is one that ensures the production, analysis, dissemination and use of reliable and timely information on health determinants, health systems performance and health status (WHO, 2018). The study found that contrary to the Ghana Prison Service’s (2018) policy, prisoners were being transferred from various prisons to the JCP without medical certificates. The observational checklist also noted a lack of a secure filing cabinet for patients’ records. The main problem was their inability to trace patients’ histories and poor continuity of care within the prison with the referral facility and upon release. These findings call for the need to consider the suggestion in the literature that a good patient information system is necessary for effective patient diagnosis and treatment (WHO, 2010; Ledikwe et al., 2014).

Availability of health facilities/equipment (medical products and technology)

The theoretical model of the six building blocks of the health system indicates that medical products and technology are one of the key concepts necessary to ensure access to quality healthcare (see WHO, 2017, 2018). A well-functioning health system ensures equitable access to essential medical products, vaccines and technologies of assured quality and their scientifically sound and cost-effective use, safety, efficacy and cost-effectiveness (WHO, 2018).

It was ascertained that a major challenge to providing quality health services to prisoners was a lack of basic equipment and medical supplies. This was confirmed by the results of the observation checklist which showed there was an absence of sterile surgical dressings, surgical instruments, appropriate waste disposal systems and secure storage for medications. The disadvantage of receiving most
medications as donations was that many drugs were near expiry or expired at donation. A lack of medical equipment and supplies is a well-established barrier to access to care and has been linked with poor health service quality and overall poor health (see Mosadeghrad, 2014).

**Availability of health workforce (human resources/health workforce)**

According to the six building blocks, the health workforce refers to the human resource component of the health system (WHO, 2010, 2017). The health workforce must be competent and able to deliver quality healthcare. Kak et al. (2001) defined competence as the ability to perform a specific task in a manner that yields desirable outcomes – the knowledge, skill and abilities of the healthcare provider. The study found that even though health workers felt they were adequately trained for their job, they also felt they would benefit from more training. Although the health providers were willing, certain treatments could not be performed because of their lack of capacity and expertise. This contributed significantly to them rendering poor quality health services.

This corresponds with a study which directly relates a lack of skill or competence to overall poor service delivery and worse patient outcomes (Das et al., 2008). The reduced number of skilled/qualified health workers placed an excessive demand on the few qualified ones. This led to the delivery of poor quality health services, confirming the argument that the quantity and quality of healthcare providers affect the quality of services and adequate numbers of high-quality providers are critical to producing high-quality outcomes (Mosadeghrad, 2014).

The evidence showed that health workers at the JCP were subject to risks that went unrecognized by the Prison Service while other prison personnel were remunerated more due to disparities in rank. This affected their morale and exposed them to occupation-related transmission of certain infectious diseases (Adjei et al., 2007, 2008).

It is anticipated that some of these challenges could be addressed if regular and on-the-job training programs on core aspects of healthcare delivery and injection safety among health workers, for instance, were conducted by the health departments in the Ghana Prison Service as is done in the Nigerian Prison Service on a regular basis (see Onyemocho et al., 2013).

**Access to healthcare delivery (service delivery)**

One relevant concept of the theoretical model of the six building blocks of the health system is service delivery which is concerned with the actual delivery and access to healthcare services of an appreciable quality (see WHO, 2017, 2018). The study found that there was no medical screening when a prisoner/patient was transferred from their previous prison to the JCP although this is a requirement of the United Nations and the Ghana Prison Service (Ghana Prison Service, 2018; UNDP, 2018). This was attributed to the lack of funding, test kits and high prisoner-health provider ratio at the time of transfer.

The fact was that inmates were transferred without health certificates, relying often on inmates to report illnesses. However, denial of medical illnesses, especially chronic and infectious ones, is well documented as a reason for delayed reporting, treatment and compliance with medications (Wringe et al., 2009). This could lead to the spread of infections between the inmates, on the one hand, and the general population upon release on the other. Indeed, literature shows that the observed increased rate of external reviews and referrals were thought to lead to a reduced quality of care and an increase in transmission of certain communicable diseases (Mosadeghrad, 2014).

**Health insurance and other sources (health financing)**

One other important concept of the theoretical model of the six building blocks of the health system is health financing (see WHO, 2017, 2018). The evidence shows that a good health financing system raises adequate funds for health in ways that ensure people can use needed services and are protected from financial catastrophe or impoverishment associated with having to pay for them (WHO, 2010, 2017, 2018). The study revealed a gap in the health financing of the
prison health system as financing for the health of prisoners was grossly inadequate even though all prisoners were registered under the NHIS and were exempted from paying premiums and accessing certain services (registration) for free in line with NHIS regulations (Safo, 2017). The supplementary financial support from the headquarters of the Ghana Prison Service was noted to be insufficient and untimely, leading to lower quality healthcare for inmates. The literature indicates how important it is for health systems to have a definite way of obtaining adequate funds for health to ensure its sustainability and efficiency (Uzochukwu et al., 2015). Therefore, there is a need to consider the recommendation that policy makers need to re-evaluate the present healthcare policy by facilitating easy access to medical facilities for every patient, including prisoners (Solomon et al., 2014).

The findings of this study correspond with the theoretical framework applied: health systems’ thinking and innovation (see Atun, 2012; WHO, 2017). Some analysts have explained that the interacting elements of health systems influence each other with positive (amplifying) or negative (balancing) feedback, collectively determining the system’s behavior (Senge, 1990; Atun, 2012). There is an imperative need for health policy makers and the prisons’ authorities to see the prisons’ healthcare system as part of the entire healthcare dynamic system and recognize the need for an integrated approach to ensure that the entire healthcare system achieves its set objectives in response to the PHC concept (Ministry of Health, 2018).

Conclusion

This study explored the influence of health system factors on access to quality healthcare by prisoners at JCP from the perspective of administrators and health workers at the infirmary of the prison. The study concludes that health system factors such as inadequate funding for health services, lack of skilled personnel and a paucity of essential medical supplies and drugs negatively affected the quality of healthcare provided to prisoners. There was a lack of adequate health facilities in the prison, incomplete use of medical examination and health certificates, poor medical records system, lack of skilled health personnel, inadequate supply of medical equipment, supplies and drugs, problems with referrals and external reviews and selective remuneration and welfare packages for health workers due to the administrative structure of the Ghana Prison Service.

The NHIS was also found to be the financing option for prisoners’ access to free healthcare with supplementation from the Ghana Prison Service. This is congruous with results of a study which documented health system factors that contribute to a reduced quality of healthcare and suggested remedies to improve them (Mosadeghrad, 2014). Similar to earlier studies, this study also found some deficiencies in the health system factors that affect the quality of health services provided to prisoners which included lack of essential medical equipment and medications requiring external referrals, lack of qualified personnel and inability to pay for health services rendered (Topp et al., 2016).

Contribution to theory, policy and management of prison service

The findings of this study are relevant for policy makers, prison authorities and practitioners in the health sector. The study recommends that policy makers and healthcare stakeholders should understand and appreciate the reality that the provision of quality healthcare for prisoners is part of the entire system of healthcare service delivery in Ghana and, as such, must be given the attention needed. An integrated approach is required to ensure that the entire healthcare system achieves set objectives in response to the PHC concept (Ministry of Health, 2018). Based on Atun’s (2012) argument, it is essential to understand and apply this concept of interconnectedness and complexity as the essence of systems’ thinking which views the system as a whole rather than its individual component parts (Senge, 1990; Sterman, 2001; Atun, 2012).

This study indicates that the provision of an effective referral system, for instance, between the prisons healthcare system and the entire healthcare system of the country will help provide the needed results to improve efficiency in delivery. Until careful and deliberate efforts are made by policy makers and other health stakeholders to take a second look at the way the current prison health system is alienated from the overall healthcare system, achieving overall health goals, especially the sustainable development goals of the country, may be hampered considerably (Ministry of Health, 2018).
The prisons healthcare system is a reflection of the health of the community and also has a direct impact on it; prison health is public health (Macmadu and Rich, 2015).

One pitfall to avoid in health systems’ innovation and thinking is the limit of the human mind. Atun (2012) suggested that it is common for the brain to ignore the complexities in health systems because its ability to process information is somewhat limited. This may result in over-simplistic analyses of situations with misperception of feedback so that even when information is available, consequences of interactions cannot correctly be deduced (Sterman, 1994; Diehl and Sterman, 1995; Atun, 2012). Even though there may be an existing problem with the provision of quality healthcare for prison inmates, the possibility remains that policy makers might have turned a “blind eye” to them. The need for an overhaul of Ghana’s health system with particular reference to prison healthcare is obvious.

Limitations to the study and future research
The limitations encountered were the limited facilities available and the sample size. That is, the limited number of healthcare workers and prison administrators available impeded the achievement of varied views on the topic. Future studies should apply a quantitative method to include the prisoners and other prison officers working in the entire JCP. In order to improve on studies related to the health of prisoner populations, it is suggested that future studies should increase the sample size and number of prisons, including the bigger ones in the country such as the Nsawam Prisons. Research into health conditions affecting prisoners, their access to health and their quality of health should be conducted regularly to reduce their burden of disease and improve their overall health status through access to quality healthcare.

References


Posttraumatic stress, panic disorder, violence, and recidivism among local jail detainees

Elizabeth Combs, Kaitlin Guston, Albert Kopak, Alyssa Raggio and Norman G. Hoffmann

Abstract

Purpose – Most research on posttraumatic stress disorder (PTSD) and offending has been conducted with special populations (e.g. veterans and female inmates) and generally overlooks the additive effect of panic disorder (PD) in offending patterns. The purpose of this paper is to assess the prevalence of PTSD and PD among jail inmates, while simultaneously examining the relationships between these disorders, offending types and frequency.

Design/methodology/approach – A random sample of adults recently booked into a local county jail participated in the Comprehensive Addictions and Psychological Evaluation-5 (CAPE-5), a structured psychological assessment. The study sample was comprised of 200 male and 83 female inmates.

Findings – Indications of PTSD were observed among 44.0 percent of male inmates and 57.8 percent of female inmates. Most male inmates (78.4 percent) with positive PTSD indications also met criteria for PD, with a similar proportion (78.1 percent) of female inmates also meeting criteria for both. The combination of PTSD and PD was not associated with offending frequency, but inmates presenting indications of both PTSD and PD were more likely to be charged with a violent offense relative to those with only PTSD.

Practical implications – Inmates with PTSD who also have panic attacks may have a more severe condition with possible implications for other risks. Observations of these conditions among adults recently booked into local jails should coincide with each other.

Originality/value – Few studies have examined mental health conditions among local jail detainees, despite the ever-present need to address them. The current study considers this important population and investigates the prevalence of co-occurring conditions.

Keywords Mental health, PTSD, Panic disorder, Inmates, Jail, Correctional sample

Introduction

Posttraumatic stress disorder (PTSD) is an intrusive mental health condition which impacts 8 percent of the general population at some point in their lives (Kessler et al., 2005). PTSD symptomology, such as dissociative reactions or “flashbacks,” avoidance of reminders of the trauma, sleep disturbance and negative cognitions, often disrupt day-to-day life (American Psychiatric Association (APA), 2013). There is also a significant gender discrepancy in PTSD development with more women reporting symptoms consistent with PTSD compared to men (First et al., 2002; Kessler et al., 2005). Furthermore, PTSD ranks highly among the many mental health disorders that are disproportionately represented in jails and prisons in the USA (Goff et al., 2007; James and Glaze, 2006; Utzen and Hamilton, 2003; Wolff et al., 2014; Zlotnick, 1997).

Another widespread mental health issue, panic disorder (PD), affects 2.7 percent of the general population (National Institute of Mental Health, 2016). Panic attacks, the primary criterion for PD, disrupt daily functioning in a manner similar to the way in which symptoms representative of PTSD can significantly affect behavior. Symptoms include heart palpitations, dizziness, shortness of breath, nausea, derealization, depersonalization and fear of losing control (APA, 2013). Less is
known about the prevalence and impact of PD among incarcerated populations relative to PTSD, but some research has shown it to be more prevalent than other mental health conditions among adults in US jails (Bronson and Berzofsky, 2017). Given the lack of information regarding these disorders, it comes as no surprise that little is known about the comorbidity of them, which emphasizes the previously documented lack of research in this area (Cougle et al., 2010). Considering the pressing concerns related to recidivism rates, violence and the prevalence of these conditions, investigating the roles of these mental health disorders among inmates is crucial to developing better approaches to address the behavioral health needs of adults who enter local detention facilities while also enhancing public safety.

Examination of the mental health needs of imprisoned adults has shown that PTSD is more prevalent in incarcerated populations than in the general public. Some research has observed a lifetime prevalence of PTSD among adult prison inmates exceeding 50 percent (Kubiak, 2004). Others have observed lower rates, ranging from 21–33 percent, which remains significantly higher than the estimated national average of 4–8 percent (Gibson et al., 1999; Kessler et al., 2005). There is also evidence that this trend is reflected in the juvenile justice system. An examination of PTSD prevalence found 24.5 percent met criteria for a DSM-III-R PTSD diagnosis, which was dramatically higher than the zero-prevalence observed within the community sample serving as the comparison group in the study (Ulzen and Hamilton, 2003). These rates are fairly consistent with other work demonstrating 19–39 percent of criminal justice-involved samples appeared to meet criteria for PTSD (Abrantes et al., 2004; Blodgett et al., 2015). Based on this evidence, it is reasonable to expect that about one in five persons entering either adult or adolescent detention centers has indications of PTSD.

Developmental approaches to the study of PTSD have emphasized the impact of childhood trauma as one of the key contributing factors to the development of this condition. In fact, earlier exposure to a traumatic event and exposure to a wider diversity of events have been associated with more PTSD symptom complexity among adults (Cloitre et al., 2009). Beyond the complications of symptoms, this body of work has also demonstrated that early exposure to adverse events can increase the risk of antisocial behavior or criminal activity later in life, making this an important consideration when working with adults in the criminal justice context (Heim and Nemeroff, 2001).

Theories of PTSD symptomatology and development have shown that traumatic experiences can have lasting influences on a wide array of psychological processes (Brewin and Holmes, 2003). For instance, this condition has been associated with memory, attention, cognitive-affective reactions, beliefs, coping strategies and social support (Andrews and Brewin, 2003; Buckley et al., 2000; Dunmore et al., 2001; Grey et al., 2001). Although a detailed discussion of the many theoretical models of PTSD is beyond the scope of the current study, it is important to recognize the extensive psychological impact of the condition because adults in local jails who present indications of the disorder are likely to suffer from many of them.

Most research on PTSD has been conducted among veterans and female participants, primarily due to the greater vulnerability to this condition observed among these groups. For instance, research on incarcerated veterans has shown a significant number suffer from trauma and an equally large number tend to meet criteria a PTSD diagnosis (Saxon et al., 2001). Many veterans with PTSD also experience incarceration, with anywhere from 43–63 percent of those diagnosed experiencing contact with the criminal justice system (Coker and Rosenheck, 2014).

Research also suggests that adults with PTSD are more likely to experience adverse outcomes compared to adults who do not meet the same criteria. Adults who met criteria for PTSD report a broader range of trauma, multiple arrests, higher levels of alcohol, cocaine and heroin misuse, financial distress due to substance misuse, comorbid mental health symptoms and poor general health, compared to those who do not meet criteria (Saxon et al., 2001). In addition, substance misuse is strongly associated with PTSD, which in turn is linked to an increased risk of recidivism (Timko et al., 2014). Some studies have also found that PTSD, especially when left untreated, is associated with criminal recidivism. To illustrate this point, men who reported a higher number of traumatic events also tended to engage in recidivism at higher rates relative to those who experienced fewer traumatic events (Kubiak, 2004).
PTSD has also been connected to aggressive behavior and violent crime. An examination of the condition and its relationship with emotional dysregulation, impulse control and physical aggression among incarcerated men determined PTSD symptomology and derealization were associated with an increased number of aggressive acts (Wahlstrom et al., 2015). Consistent results have also demonstrated PTSD symptomology to be a risk factor for arrest, substance misuse, criminal recidivism, aggressive behaviors and an increased rate of violent crime (Donley et al., 2012; Jawed, 2014; Kimbrel et al., 2014).

PD symptomology is also prevalent among adults involved in the criminal justice system and there may be connections between this condition and PTSD. While “panic attacks” are not a criterion for PTSD, panic itself can be a component of some PTSD criteria, such as “exaggerated startle response” and “involuntary distressing memories,” in addition to being a specifier for PTSD (APA, 2013). PD and PTSD symptomology are associated with an increased rate of anxiety sensitivity, as compared to other anxiety disorders, with PTSD symptomology having the strongest association with anxiety sensitivity (Olatunji and Wolitzky-Taylor, 2009). In the few studies that have investigated the prevalence of both PTSD and PD, many have demonstrated overlap between these two conditions. A study conducted with 1,740 veterans at one hospital, for example, found 28.7 percent of participants met criteria for PTSD and 6.1 percent met criteria for PD (Barrera et al., 2013). The greater the number of traumatic events experienced, such as extensive combat experience, the more likely participants were to be diagnosed with comorbid PTSD and PD. Findings also determined prior sexual and physical trauma, respectively, were related to an increased likelihood of a comorbid diagnosis. PD symptomology was especially concerning in the sample given its relationship with elevated levels of suicidal ideation and the number of suicide attempts. Another study, also conducted with veterans, demonstrated PTSD and depression symptomology were associated with distress and PD, social anxiety, specific phobias and obsessive-compulsive disorder (OCD) symptomology were associated with fear (Kimbrel et al., 2014). The distress factor, in turn, was significantly associated with an increased degree of suicidal ideation, an increased number of suicide attempts, and an increased rate of violent behavior.

Although little work has been conducted with adults in the criminal justice system, and even less with jail inmates in particular, the existing evidence gathered largely from veterans shows PTSD diagnoses and symptomology may be related to issues in the criminal justice system. The primary finding from this body of work provides some evidence for a connection between PTSD and violence, but jail inmates rarely undergo systematic comprehensive mental health assessments which include PTSD and PD. If left unaddressed, PTSD and PD may contribute to behavioral problems in correctional facilities, violence and elevated likelihood of repeat offending following release.

The current study was designed to examine the nuances between PTSD, PD and offending patterns to better understand the connections between behavioral health needs of adult jail inmates and certain offense types. Based on the previous work in this area, there were two primary goals of the study. The first was to document the prevalence of PTSD and PD in a sample of adults recently admitted to a local jail. The second goal was to examine the associations between PTSD, PD, offense types and recidivism to ascertain whether these mental health conditions were linked to certain offending patterns. If PTSD and PD were indeed related to offending patterns, programs and practices must account for these connections to reduce recidivism.

Methods

Subjects

The sample for the current study included 283 participants, of which 200 were men and 83 were women. These participants were adults booked into a county jail in Western North Carolina. The average age was 32.9 years, ranging from 18 to 66. Most participants were White (84.5 percent), with the largest ethnic minority group self-identifying as Native American (9.9 percent). In terms of relationship status, approximately half (50.5 percent) of the sample reported being married, with 20.2 percent cohabitating with a partner and 27.9 percent reportedly separated or divorced.
Regarding education, nearly half (49.8 percent) of the sample reported receiving a high school diploma, with 34.2 percent having received an education below high school level and 17 percent having received secondary/higher education.

**Measures and procedures**

Participants were admitted to the jail 24–96 h prior to the diagnostic interview conducted by the research team. Detainees who were admitted to the jail within this period were added to the day’s eligibility list, which was cut into pieces and placed into a bag. After random selection, detainees were invited to participate in a study of behavioral health issues. Informed consent was obtained in accordance with the Institutional Review Board of the university with which the researchers were affiliated. Interviews were conducted by a researcher who was unaffiliated with the detention center to minimize the likelihood of response bias that has been found among detainees when they are interviewed by jail staff (Proctor et al., 2011). This researcher was specially trained in the administration of the clinical interview instrument by the author and following completion of the interview, detainees were thanked for their participation prior to being escorted back to their cell by a correctional officer. Detainees were not paid or compensated in any way for their participation in the study.

The objective was to capture information as soon after admission to the jail as possible. Detainees tend to spend short periods of time in local jails and delaying the interviews would introduce bias against getting information on as representative a sample as possible. This concern was well founded as a third of those interviewed were discharged within a week of booking. This means that studies delaying assessment or capturing data after adjudication (e.g. Lynch et al., 2014; Trestman et al., 2007) will not include information on a substantial proportion of persons entering detention centers.

The Comprehensive Addictions and Psychological Evaluation-5 (CAAPE-5) was administered to each inmate as a comprehensive assessment tool which collects a variety of information, such as demographics, symptomology and diagnostic criteria of other mental health disorders and indicators of specific substance use disorders (Hoffmann, 2013). The CAAPE-5 was the preferred instrument for the current study due to its comprehensive approach, compatibility with the most current diagnostic criteria, ease of use and efficiency. The CAAPE-5 takes approximately 30 min to conduct, depending on the frequency of positive responses. Information gathered during these interviews consisted of 13 questions that are consistent with the 24 symptoms and behaviors defining PTSD in the DSM-5. Cronbach’s \( \alpha \) for these 13 items was 0.85. PD was assessed with 11 questions that are compatible with the 13 DSM-5 indications for this condition. Cronbach’s \( \alpha \) for these 11 items was 0.70. The reliability and validity of this instrument has been widely assessed for use with correctional populations (Proctor and Hoffmann, 2012; Proctor et al., 2017; Tracy and Carkin, 2016).

The prevalence of probable PTSD and PD were generated from the CAAPE-5 data in accordance with the DSM-5 criteria for these respective conditions. While PD can exist as a primary condition, it is considered a modifier when it coexists with PTSD. Therefore, the data were coded to assess whether or not PTSD in combination with PD is a distinct condition, and whether PTSD in combination with PD is more severe than PTSD reported in the absence of symptoms consistent with PD.

Offending data were also gathered for detainees who agreed to participate in the clinical interview. These data were extracted from the jail’s electronic database and included previous arrest records for the 12-month period prior to the administration of the clinical interview. Information regarding the number of charges, the type(s) of offenses and the severity of these offenses was also collected from the jail’s records. Adults who were currently detained for a violent offense were coded “1” and those admitted to the jail for other types of offenses were coded “0.” In a similar fashion, adults currently detained for a felony offense were coded “1,” and those who were currently in custody for a misdemeanor offense were coded “0.” Adults with multiple prior arrests and those with multiple prior jail bookings, not including the current admission to the jail were coded “1,” while those with no prior arrests or jail admissions were coded “0.”
Results

Prevalence rates for PTSD and PD are presented in Table I. Almost half (48.1 percent) of the aggregate sample endorsed items in all five PTSD criteria groupings, which is consistent with probable diagnosis of the condition. Among adults who met these criteria, an average of approximately 11 of the 13 items received positive endorsements. This evidence indicates adults who reported indications of PTSD were likely to experience a fairly high number of symptoms. A smaller proportion (29.3 percent, \( n = 83 \)) of the aggregate sample met criteria consistent with PD, but those who did meet this threshold reported experiencing approximately eight of the 11 items addressing this condition. In terms of co-occurring PTSD and PD, almost half (48.8 percent, \( n = 65 \)) of the aggregate sample who met criteria for PTSD also displayed symptoms consistent with PD. This represented approximately one out of five (23.0 percent or 65 of 283) of the detainees included in the study. Closer examination of the cases who reported criteria consistent with PD indicated more than three quarters (78.3 percent, \( n = 65 \)) also met criteria for PTSD. Another important finding related to the prevalence of PTSD, PD, and a severe substance use disorder. Almost one quarter (23.7 percent, \( n = 67 \)) of the sample met criteria for all three of these conditions.

Examination of these rates among the 200 male detainees demonstrated 44.0 percent (\( n = 88 \)) had similar indications of a probable PTSD diagnosis based on positive findings within all five PTSD criteria groupings. Male detainees who endorsed criteria consistent with PTSD reported an average of 11 of the 13 items (\( M = 11.1, SD = 1.7 \)), evincing fairly severe levels of the condition. Panic attacks with sufficient physical symptoms to qualify for PD were observed in one quarter (25.5 percent, \( n = 51 \)) of the male detainees with the average number of positive items approaching eight (\( M = 7.7, SD = 1.7 \)) of the 11 total. Only six male detainees reported a panic attack without sufficient physical symptoms to qualify for a PD. Of those reporting panic attacks and symptoms sufficient for a diagnosis of PD, 78.4 percent (\( n = 40 \)) of male detainees also met the criteria for PTSD. In comparison, within the group of male detainees who met criteria for PTSD (\( n = 88 \)), 45.5 percent (\( n = 40 \)) were positive for panic attacks. About one third (32.2 percent, \( n = 48 \)) of all male detainees were positive for PTSD without meeting criteria for PD.

A similar pattern was observed among the 83 female detainees. Positive PTSD indications were presented among 57.8 percent (\( n = 48 \)) and 38.6 percent (\( n = 32 \)) reported symptoms consistent with PD. Among female detainees who met criteria for PTSD, more than 11 of the 13 items (\( M = 11.6, SD = 1.3 \)) received positive endorsements, on average. Regarding positive endorsements for PD, the average number of positive items among female detainees exceeded eight (\( M = 8.2, SD = 1.5 \)) of the 11 items. At a rate similar to male detainees, 78.1 percent (\( n = 25 \)) of female detainees who met criteria for a PD also reported positive symptoms for PTSD, and 52.1 percent (\( n = 25 \)) of those with PTSD also reported panic attacks. Among female detainees, 30.1 percent (\( n = 25 \)), met criteria for both PTSD and panic attacks. No female detainees in the sample reported a panic attack without sufficient physical symptoms to qualify for a PD.

| Table I | Prevalence rates and number of positive criteria for PTSD and panic disorder |
|---------|---------------------------------|----------------------|----------------------|
|         | Aggregate sample \( (n = 283) \) | Male inmates \( (n = 200) \) | Female inmates \( (n = 83) \) |
| PTSD    |                                  |                      |                      |
| Prevalence | 48.1% \( (n = 136) \) | 44.0% \( (n = 88) \) | 57.8% \( (n = 48) \) |
| Number of positive criteria (M, SD) | 11.3, 1.6 | 11.1, 1.7 | 11.6, 1.3 |
| Panic disorder |                                  |                      |                      |
| Prevalence | 29.3% \( (n = 83) \) | 25.5% \( (n = 51) \) | 38.6% \( (n = 32) \) |
| Number of positive criteria (M, SD) | 7.9, 1.6 | 7.7, 1.7 | 8.2, 1.5 |
| PTSD with PD | 48.8% \( (n = 65) \) | 45.5% \( (n = 40) \) | 52.1% \( (n = 25) \) |
| PTSD no PD | 52.2% \( (n = 71) \) | 32.2% \( (n = 48) \) | 45.1% \( (n = 23) \) |
| PD with PTSD | 78.3% \( (n = 65) \) | 78.4% \( (n = 40) \) | 78.1% \( (n = 25) \) |
| PD no PTSD | 21.7% \( (n = 18) \) | 21.6% \( (n = 11) \) | 21.9% \( (n = 7) \) |
Further analyses were conducted to assess the differences in prevalence rates of PTSD alone, PTSD in combination with PD, and neither condition between male and female detainees. These results indicate a larger proportion of female detainees endorsed criteria consistent with PTSD alone or PTSD in combination with PD relative to their male counterparts ($\chi^2 (1) = 6.59$, $p = 0.037$). This evidence demonstrates female detainees are likely to report criteria consistent with PTSD and PD at rates higher than male detainees. Analyses were also conducted to assess the differences in the number of positive items endorsed among male and female detainees who met criteria for both PTSD and PD. These results indicated female inmates who met criteria for both conditions did not endorse a significantly greater number of PTSD-related items ($t(63) = -0.68$, $p = 0.499$) or PD-related items ($t(63) = -0.50$, $p = 0.623$) relative to male detainees who met similar criteria. Although female detainees may be more likely than male detainees to meet criteria for PTSD alone or in combination with PD, the severity of these conditions appears to be equally high between male and female detainees.

The final set of analyses examined the associations between endorsement of PTSD criteria, PD symptoms, and offending data with results presented in Table II. There were several significant differences between detainees who met criteria for PTSD alone, PTSD in combination with PD, and those who did not report symptoms consistent with either of these conditions. For instance, a significantly larger proportion of inmates who met criteria for PTSD in combination with PD was booked for a violent offense relative to inmates who met criteria for PTSD alone or neither condition ($\chi^2 (2) = 10.59$, $p = 0.005$). A significantly larger proportion of detainees who met criteria for both PTSD and PD was booked into the jail on multiple prior occasions relative to detainees who met criteria for either PTSD alone or neither condition ($\chi^2 (1) = 5.97$, $p = 0.050$). Interestingly, a larger proportion of detainees with PTSD alone had been arrested on multiple prior occasions compared to detainees who met criteria for both PTSD and PD as well as those who did not meet criteria for either condition ($\chi^2 (1) = 6.32$, $p = 0.042$). There were no differences between detainees in terms of PTSD, PD and the likelihood of being booked into the jail for a felony offense ($\chi^2 (1) = 2.55$, $p = 0.280$). In sum, adults who met criteria for both PTSD and PD were more likely to be booked for violent offense and were more likely to experience multiple prior bookings compared to their counterparts who did not meet similar criteria. Additionally, detainees who met criteria for PTSD alone experienced a greater number of prior arrests compared to their peers.

**Table II**  
Offending data by PTSD and PD criteria

<table>
<thead>
<tr>
<th>Condition</th>
<th>*Violent offense</th>
<th>Felony offense</th>
<th>*Multiple prior bookings</th>
<th>*Multiple prior arrests</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% (n)</td>
<td>% (n)</td>
<td>% (n)</td>
<td>% (n)</td>
</tr>
<tr>
<td>Neither PTSD or PD</td>
<td>12.3 (15)</td>
<td>43.3 (55)</td>
<td>36.2 (46)</td>
<td>18.9 (24)</td>
</tr>
<tr>
<td>PTSD alone</td>
<td>7.5 (9)</td>
<td>54.3 (38)</td>
<td>41.4 (29)</td>
<td>34.3 (24)</td>
</tr>
<tr>
<td>PTSD + PD</td>
<td>26.3 (17)</td>
<td>51.6 (53)</td>
<td>54.7 (53)</td>
<td>29.7 (19)</td>
</tr>
</tbody>
</table>

Note: * $p < 0.05$

Discussion

Several important findings have emerged from this preliminary study of PTSD, PD and offending patterns. The first demonstrates the high rates of PTSD and PD detailed among adults recently admitted to this small, rural detention facility. Although little research has been conducted specifically on the mental health needs of adults detained in local jails, the work that has been completed in this area has shown significantly higher rates of PTSD and anxiety disorders (which included PD) among jail detainees relative to state and federal prison inmates (Bronson and Berzofsky, 2017). This limited work has also focused more on PTSD, indicating a wide range of prevalence rates between less than one percent and 48 percent (Prins, 2014). Although the rate in the current study was consistent with the high end of this range, there are many possible explanations for the overall divergence in observed PTSD rates in this area of study. First, research conducted with state and federal prison inmates is likely to demonstrate
systematically lower rates because all adults who are arrested are filtered through jails while only those who are sentenced are counted among prison populations. In other words, adults who had an opportunity to enter a community release program due to their mental health needs, or those who were able to obtain a custodial placement other than prison, such as a therapeutic community, are typically not included in these studies. Second, much of this work relies on broad screening procedures with only a few items designed to capture overall mental health rather than specific diagnostic categories, which do not lend themselves to making such detailed assessments of PTSD or PD. Finally, there is a possibility that the CAAPE-5, which was used in the current study, captured a higher prevalence due to the inability to rule out certain types of PTSD cases. These areas warrant additional work to identify possible disparities in prevalence rates between certain incarcerated populations with regard to the use of different types of clinical interview instruments.

Another noteworthy result indicates adult jail detainees manifesting symptoms of both PTSD and PD tend to exhibit more problematic offending patterns compared to detainees who do not present similar conditions. Although prior research has not directly examined the relationships between PTSD, PD and offending, there is some evidence demonstrating distinct associations between violent offending and the symptomology of both disorders. One underlying reason for this connection may be related to the way in which PTSD can promote hypervigilance, which can enhance the likelihood of violent outbursts (Fleming et al., 2013). Additionally, panic attacks have been found to promote violent behavior, due in part to the misinterpretation of surrounding activities as harmful even when they may not be inherently dangerous (Mitchell and Gilchrist, 2006). This work highlights the importance of considering the ways in which PTSD and PD may contribute to detainees’ propensity for violence, but additional research should be conducted with this special population to develop a more comprehensive understanding of these mechanisms.

Another important finding is related to the connections between PTSD, PD and recidivism as indicated by a greater likelihood of multiple jail admissions among detainees who presented symptoms of both conditions. One possible explanation for this relationship is found in the high prevalence rates of mental health needs which go unmet among adult jail detainees. Considering nearly half of detainees presented symptoms and the high number of symptoms reported, it is obvious that severe mental health conditions need to be addressed in this population. It is estimated that between two and six percent of arrestees who enter US jails report receiving some form of mental health treatment (Office of National Drug Control Policy, 2014). With so few adults having these needs addressed as they enter and exit local jails, these patterns will persist until there is a change in current practices.

These findings also highlight the significant overlap between PD and PTSD. Given such a high number of detainees reporting panic attacks were also positive for a probable PTSD diagnosis, clinicians working with this population should routinely explore indications of PTSD, especially when panic attacks are reported. Failure to probe further could easily result in glossing over a probable PTSD diagnosis, which could increase the likelihood of misconduct and volatile behavior within the facility (Gottfried and Christopher, 2017; Houser and Belenko, 2015).

As with many preliminary studies, this research must be considered with regard to its limitations. First, the sample size was relatively small, which could have contributed to reduced statistical power to assess small to moderate effect sizes. Second, the CAAPE-5, while being compatible with the DSM-5 and providing a valid assessment of many mental health conditions, does not include an exhaustive list of all possible diagnostic criteria for PTSD. Thus, it is possible that some PTSD positive cases are not recognized, but this likelihood is small given the high number of items endorsed among detainees. The CAAPE-5 also does not address the potential of clinicians to rule out certain aspects of PTSD that only a trained professional can evaluate. It is also important to recognize the sample was drawn from a single rural detention facility in a racially and ethnically homogeneous area. Thus, the results may be limited in their ability to generalize to a more diverse population. Finally, PTSD has been observed at higher prevalence rates among veterans involved in the criminal justice system, but information regarding prior military service was not collected in the current study. The results should be generalized to jail detainees with military experience in a cautionary manner.
Despite the limitations, the current study underscores a set of critical issues for research and clinical practice. Future research is required to examine the ways in which PTSD and PD contribute to violence and repeat offending to reduce these occurrences, enhance public safety and more efficiently allocate criminal justice resources to address these issues. In clinical practice, systematic behavioral health assessments must be conducted to identify these conditions, especially in concert with one another in the forensic context. Without this information, jail administrators will not be aware of the potential risk behaviors among detainees with PTSD and PD. Additionally, finding indications of one condition should result in exploration of the other, especially since detainees suffering from PTSD who also have panic attacks are likely to have a more severe condition and demonstrate a propensity for violent behavior. Failure to address these needs with appropriate behavioral health services will see adults suffering from these conditions persistently coming into contact with local law enforcement agencies. Not only will addressing these underlying conditions significantly enhance the safety of victims of violent behavior, but it will also promote the safety of law enforcement officers in the community and in the detention facility.

References


Bronson, J. and Berzofsky, M. (2017), "Indicators of mental health problems reported by prisoners and jail inmates", 2011-12, NCJ 250612, US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, Washington, DC.


James, D.J. and Glaze, L.E. (2006), Mental Health Problems of Prison and Jail Inmates, US Department of Justice, Washington, DC.


Corresponding author
Albert Kopak can be contacted at: amkopak@wcu.edu

For instructions on how to order reprints of this article, please visit our website:
www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: permissions@emeraldinsight.com
Backfiles Collections

Preserving over 100 years of management research online

A lifetime investment for your institution, Emerald Backfiles will significantly enhance your library’s offering by providing access to over 125,000 articles from more than 260 journals dating back to 1898.

Visit emeraldinsight.com

Get Backfiles Collections for your library

Recommend Backfiles to your librarian today.
Find out more: emeraldpublishing.com/backfilescollections
Optimising opioid substitution therapy in the prison environment
Farrukh Alam, Nat Wright, Paul Roberts, Sunny Dhaidley, Joanne Townley and Russell Webster

A model for sustainable laser tattoo removal services for adult probationers
Victoria D. Ojeda, Laura Romero and Arisa Ortiz

Problem gambling and support preferences among Finnish prisoners: a pilot study in an adult correctional population
Kalle Lind, Anne H. Salonen, Johanna Järvinen-Tassopoulos, Hannu Ahlo and Sari Castrén

Prisoners’ ambivalent sexism and domestic violence: a narrative study
Ines Testoni, Giulia Branciforti, Adriano Zamperini, Livia Zuliani and Felice Alfonso Nava

Access to a quality healthcare among prisoners – perspectives of health providers of a prison infirmary, Ghana
Terrylyna Baffoe-Bonnie, Samuel Kojo Nitow, Kwasi Awuah-Werekoh and Augustine Adomah-Atari

Posttraumatic stress, panic disorder, violence, and recidivism among local jail detainees
Elizabeth Combs, Kaitlin Guston, Albert Kopak, Alyssa Raggio and Norman G. Hoffmann