Insomnia management in prisons in England and Wales: a mixed-methods study

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SUMMARY
Insomnia in prison is common; however, research is limited regarding the management strategies that prison establishments employ. To address this knowledge gap, we conducted a survey to identify how insomnia is detected, diagnosed and treated in adult prisons in England and Wales. Telephone interviews with a purposive sample of health-care managers were then conducted. The survey was sent to all establishments holding adult prisoners, covering screening and assessment methods to detect insomnia; treatment options, both pharmacological and non-pharmacological; the importance of insomnia as a treatable condition; and staff training available. Eighty-four (73%) prisons completed the survey. Few had a stepped approach to insomnia management, as recommended by National Institute for Health and Care Excellence (NICE) guidelines. The most common treatments available were sleep hygiene education and medication, offered by 94 and 88% of respondents, respectively. Analysis of telephone interviews revealed four main themes: insomnia as a normal occurrence in prison; the problem of medication in prison; the negative impact of the prison environment; and effective management of insomnia in prison. The current findings suggest that logistical, ethical and security barriers and a lack of staff knowledge and training impact negatively on the management of insomnia in prison.

INTRODUCTION
Approximately a third of the adult population worldwide has insomnia at some point in their lives (Roth, 2007). Previous studies have highlighted factors associated commonly with insomnia. Insomnia may be a symptom of various medical and psychiatric conditions (Morin et al., 2015). Risk factors for insomnia include female sex (Zhang and Wing, 2006), stressful life events (Drake et al., 2014), comorbid mental and physical disorders (Abad and Guilleminault, 2005; Czeisler, 2015) and, to a lesser extent, substance misuse (Mahfoud et al., 2009) and prescription medication use (Ferguson, 2001). In some instances these relationships are bidirectional (Alvaro et al., 2013).

Prisoners have higher rates of most of these risk factors than the general population. Notably, prisoners are nine times more likely to have a drug dependency and three times more likely to have either an alcohol dependency or depression and anxiety than the general population (Singleton and O’Brien, 2000; Singleton et al., 1998). They are also more likely to have experienced stressful life events (Carlson et al., 2010). Furthermore, the prison experience can be inherently stressful, which can contribute to insomnia (Elger, 2004; Feron et al., 2005). For example, prisoners experience a complete upheaval from normal life, family and routine (Levin and Brown, 1975), forced contact with others and lack of autonomy (Royal College of General Practitioners and Royal Pharmaceutical Society, 2011), all of which can augment the stressful experience. Moreover, poor sleep hygiene, including daytime naps, boredom or paucity of daytime activity, is evident in prisoners (Elger, 2009).

Very little research has been conducted on insomnia in prison internationally. Reported prevalence rates range from 11 to 81%, although populations varied and many studies were beset with methodological problems, including small sample sizes, subjective insomnia assessment and the use of non-standardized measures (Dewa et al., 2015). Few studies have focused upon the impact of interventions on
insomnia in prison, such as consistent treatment guidance application and implementation of non-pharmacological treatment (Dewa et al., 2015).

All prisoners are entitled to health care that is equivalent to that of the general population, including treatment for insomnia (Elger, 2008a; Health Advisory Committee for the Prison Service, 1997). While the prescription of hypnotics forms part of the insomnia treatment pathway, their use in prisons is elevated compared to the general population. One study found significantly higher prescribing rates of hypnotics and anxiolytics for both men and women in prison (6.4 and 10.6%, respectively) compared to the community (1.1 and 2.2%, respectively) (Hassan et al., 2014). This is concerning, because of the potential for misuse and diversion of such medicines. Hypnotics have a high ‘currency value’ among prisoners and, under such circumstances, prescribing hypnotics can arguably create health and security risks (Ireland, 2002), including trading and selling (Penfold et al., 2005), bullying to obtain it from others and subsequent illicit use. Consequently, staff may question motivations for reporting insomnia and mistrust prisoners with medicines (Elger, 2008b), thereby adding strain to the staff– prisoner relationship.

Current National Institute for Health and Care Excellence (NICE) guidance in England recommends several sequential steps to manage short- and long-term insomnia (National Institute for Health and Care Excellence (NICE), 2015) in line with international guidance (Qaseem et al., 2016; Ramakrishnan and Scheid, 2007). In the first instance, if known, possible causes of insomnia should be addressed. Most patients should then be offered non-pharmacological treatment, such as cognitive–behavioural therapy for insomnia (CBT-I) that includes stimulus control, sleep restriction and cognitive therapy rather than medication (Qaseem et al., 2016). This is because of potential medication side-effects; for example, dependence, drowsiness and excess mortality (Kripke et al., 2012). However, medication, typically hypnotics, may be prescribed if a stressor is present, daytime impairment is severe and previous measures have been unsuccessful.

Untreated insomnia can affect daytime functioning and work productivity negatively and can influence adverse prisoner behaviour; for example, exacerbating irritability or aggression (Ireland and Culpin, 2006; Roth, 2007). There is therefore a need to establish a range of evidence-based interventions which impact upon the unique clinical, social and environmental characteristics experienced by prisoners. Moreover, imprisonment should offer an opportunity to engage an unhealthy and hard-to-reach population with health-care services (Reed and Lyne, 2000). To address this knowledge gap, the current study sought to identify how insomnia is detected, diagnosed and managed currently in prisons in England and Wales.

METHODS

There were two stages to the study. First, questionnaires were sent to health-care managers in all adult prisons in England and Wales. Secondly, semi-structured interviews were completed with prison health-care staff.

Survey

Based on findings from an integrative review (Dewa et al., 2015), we designed a questionnaire to elicit screening and assessment methods used, available treatment options, staff views of the scale and importance of the problem and any training available on insomnia and its management.

The questionnaire was piloted in two prisons and modified according to feedback. It was then sent to all health-care managers in prisons holding adult prisoners (those aged 18 years and older) in England and Wales. Respondents were given the option to complete and return surveys in paper format, via e-mail or online (i.e. SurveyMonkey). If questionnaires were not returned within 4 weeks, a telephone call was made to the health-care manager to offer a further copy and/or to be completed with the first author over the telephone. This approach reflected best practice evidence in achieving high completion rates for postal surveys (Edwards et al., 2002).

Semi-structured interviews

Following questionnaire data analysis a purposive sampling strategy was adopted, inviting a selection of health-care managers to participate in an additional telephone interview to glean more in-depth data. We sampled sites intentionally according to their questionnaire responses, including a range of prison types. Participating prisons included six prisons in which structured insomnia management was already established and six in which it was less developed. Prisons were classified as having established treatment practices that met at least two of the following criteria: offered a non-pharmacological intervention recommended by NICE, had written guidance and/or had clear methods for identifying sleep problems. Prisons with less developed insomnia management practices met none or one criterion only. Topic guides were utilized for the interviews. Discussion areas included the current context, effectiveness and future direction of insomnia management.

Research governance and ethics

Ethics and governance approvals were obtained from the National Health Service (NHS) ethics (REC for Wales; reference: 13/WA/0249) and National Offender Management System (NOMS; reference: 2013-208).

Analysis

Data from returned questionnaires were entered, cleaned and analysed in spss version 22 (IBM Corp, 2011) using description statistics (counts and percentages). Missing data

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were small throughout (<10%) and were excluded from analysis. Totals reflect number of responses.

With respondents' consent, interviews were recorded. They were then transcribed verbatim and data transferred into NVivo version 10 (QSR International Pty Ltd, 2014). Thematic analysis was applied (Braun and Clarke, 2006). Following familiarization with the data, initial codes were generated, based on anticipated categories and emerging areas of interest. Simultaneously, several interview transcripts were read, reviewed and coded by the second author to encourage inter-rater reliability. All codes were then reconsidered, checked and finalized. Data extracts and quotations were matched to each theme, building evidence into the results.

RESULTS

Survey

Data collection started in December 2013 and ended in December 2014. Initially, 120 prisons for adult men and women were operational in England and Wales. Five closed during the study period, resulting in a maximum potential sample of 115 prisons. Overall, 84 prisons (73%) responded. Response rates by prison type are shown in Table 1.

The importance of insomnia in clinical management was rated on a Likert scale (range: 1–10, with 10 being very important). The majority of respondents gave a score of 5 or above, indicating some importance (88%; n = 70). The vast majority indicated that they did not include questions about sleep problems in the initial health screening performed on all prisoners upon their initial reception into prison (98%; n = 78) (Table 2). Typically, insomnia diagnoses were made by general practitioners (GPs) (93%; n = 78), followed by mental health nurses (60%; n = 50) and psychiatrists (56%; n = 47). A minority indicated that they used locally derived proforma to diagnose insomnia (23%; n = 19). Only one prison used a recommended standardized measure (Insomnia Severity Index; ISI) (Bastien et al., 2001).

A training prison gives prisoners the opportunity to take part in various activities including education, workshops and offender behaviour programmes; local prisons serve directly from courts and receive remand and post conviction prisoners, prior to their allocation to other establishments; in general an open prison holds prisoners considered low risk to absconding and low or have little risk to the public because of the nature of their offence; female establishment only holds women but can be a local, training or closed (i.e. medium to long sentences) prison; high security prisons admit the most dangerous people (i.e. mainly those serving life sentences for violent and sexual offences); YOI takes people aged 15–21 only. Usually those aged 15–17 and 18–21 are held separately; other prisons includes male/female inmates together, resettlement prison, foreign nationals and therapeutic prisons.

Most prisons used medication to treat insomnia (88%; n = 74), with zopiclone used most commonly, followed by anti-histamines, the anti-depressants mirtazapine and amitriptyline and the anti-psychotics olanzapine and quetiapine (Table 3). Just more than half of respondents prescribed 7.5 mg of zopiclone (54%; n = 40) and two-fifths prescribed for 3 days (42%; n = 31; range: 1–28 days). Anti-histamine prescription duration varied (range: 3 days to long-term) and mirtazapine and amitriptyline were typically prescribed long-term.

Most prisons offered non-pharmacological interventions (86%; n = 72), mainly basic sleep hygiene advice (94%; n = 68); however, this varied greatly in terms of content, timing and duration. Twenty-eight prisons (39%) offered CBT, although this was often primarily for co-existing disorders such as anxiety and not specifically for insomnia alone. Only one prison indicated they used CBTi. A minority offered alternative therapies such as auricular acupuncture (8%; n = 6), Indian head massage (3%; n = 2), mindfulness (1%; n = 1) and malty milk drinks (1%; n = 1). In nine of 10 prisons

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Table 1 Survey statistics, n (%)

<table>
<thead>
<tr>
<th></th>
<th>Completed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender, male/female</td>
<td>79 (94)/5 (6)</td>
<td>103 (89)/12 (10)</td>
</tr>
<tr>
<td>Prison type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training</td>
<td>30 (77)</td>
<td>39</td>
</tr>
<tr>
<td>Local</td>
<td>23 (77)</td>
<td>30</td>
</tr>
<tr>
<td>Open</td>
<td>10 (83)</td>
<td>12</td>
</tr>
<tr>
<td>Female</td>
<td>5 (46)</td>
<td>12*</td>
</tr>
<tr>
<td>High security</td>
<td>5 (63)</td>
<td>8</td>
</tr>
<tr>
<td>Young Offender Institutions</td>
<td>4 (67)</td>
<td>6</td>
</tr>
<tr>
<td>Other</td>
<td>7 (78)</td>
<td>9*</td>
</tr>
<tr>
<td>Total</td>
<td>84 (73)</td>
<td>115</td>
</tr>
</tbody>
</table>

*One prison holds men and women prisoners, and thus is represented in both figures. Therefore, total prisons will add up to 116.

Table 2 Survey responses of insomnia management, n (%)

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insomnia included in first health screening</td>
<td>2 (3)</td>
<td>78 (98)</td>
</tr>
<tr>
<td>First night arrangements in place for prisoners with insomnia</td>
<td>6 (7)</td>
<td>78 (93)</td>
</tr>
<tr>
<td>Locally derived tools used for diagnosis</td>
<td>19 (23)</td>
<td>64 (77)</td>
</tr>
<tr>
<td>Recommended sleep measures used*</td>
<td>1 (1)</td>
<td>77 (99)</td>
</tr>
<tr>
<td>Insomnia referral procedure</td>
<td>25 (30)</td>
<td>58 (70)</td>
</tr>
<tr>
<td>Provided training</td>
<td>8 (10)</td>
<td>75 (90)</td>
</tr>
<tr>
<td>Medication for insomnia available</td>
<td>74 (88)</td>
<td>10 (12)</td>
</tr>
<tr>
<td>Offered non-pharmacological treatment for insomnia</td>
<td>72 (86)</td>
<td>12 (14)</td>
</tr>
<tr>
<td>Sleep hygiene advice offered</td>
<td>68 (94)</td>
<td>4 (6)</td>
</tr>
</tbody>
</table>

*See Buysse et al., 2006.
(89.3%), training on sleep management was not offered to health-care staff (see Table 2). Where available, training was performed routinely in-house (e.g. part of initial staff training).

**Semi-structured interviews**

Four main themes emerged from the thematic analysis: insomnia as a normal occurrence in prison, the problem of medication in prison; negative impact of the prison environment and effective management of insomnia in prison.

**Theme 1: Insomnia as a normal occurrence in prison**

The general consensus among respondents was that sleep problems were considered a normal part of prison life and thus seen as low priority:

‘If somebody had an acute mental health problem they’d [mental health team] see them, if it was just about sleep they’d tip right back to the bottom of the list’ (senior clinical matron)

To many staff members, insomnia was identified as secondary to other health conditions, including depression, anxiety and physical issues, or related to prison-related factors; for example, noise or cell sharing. Staff reported insomnia as common among prisoners with substance misuse problems. One staff member identified these prisoners as being more likely to request hypnotics:

‘Predominantly it’s about patients that are coming off substance misuse in a detox programme that request sleeping tablets’ (mental health manager)

While, in interview, insomnia appeared relatively unimportant to staff and/or considered secondary to other conditions, some acknowledged that it may be a precursor to other conditions and therefore may merit attention.

**Theme 2: The problem with medication in prison**

Interviewees discussed their difficulties repeatedly, distinguishing between genuine symptoms of insomnia and those who feigned complaints to obtain medication. Some interviewees expressed a desire for proof of the sleep problem before offering treatment. For example, one interviewee said:

‘I don’t think we often come across many genuine sleep problems. We do work closely with the prison so if we have … concerns that someone says they are not sleeping we can put them on a sleep chart, where … officers can go … and observe them discreetly throughout the night to see if they’re actually sleeping’ (clinical lead)

Verifying insomnia was viewed commonly as difficult. One interviewee stated initially that they could identify prisoners who were having genuine problems sleeping; for example, when they were falling asleep during the day at work. However, they then referred to another issue, which clouded the diagnostic problem faced currently by prisons, adding:

‘The people that fall asleep at work is because they’ve taken spice² the night before, not because they can’t sleep’ (mental health manager)

Particular concerns were expressed where staff felt that the primary motivation for treatment was to receive sleeping medicines in order to misuse, sell or trade. Most interviewees acknowledged that hypnotic medications had a high currency value in prison:

‘It’s usually high risk as it’s usually used and marketed within the prison, they’ll sell it, swap it, give it to other people etc. It’s high tradable value’ (mental health manager)

In contrast, some interviewees commented that prisoners believed that medication was the only treatment that could help the prisoners’ sleep problems; staff described medicines as providing instant gratification or a ‘quick fix’. Staff reported that prescribers felt pressure to prescribe, and would often comply with demand:

‘There’s a lot of bargaining going on in [confrontational] periods … this is what we think should happen and this is what the patient wants’ (mental health manager)

Seemingly, as a consequence of such beliefs about wider motives for seeking medication, it was acknowledged that prescribers also faced the opposite pressure from their colleagues not to prescribe too readily, perhaps at the expense of those with genuine health concerns:

‘There’s a lot of prisoners out there, who will take any medication they can get their hands on … because obviously amongst all of it we have got to find out the people who have the genuine issues as well. And that’s the difficulty we have’ (mental health manager)

Staff felt that medication prescribing was inappropriate for many prisoners, particularly those with chronic insomnia.

<table>
<thead>
<tr>
<th>Medication</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zopiclone</td>
<td>70 (95)</td>
</tr>
<tr>
<td>Anti-histamines</td>
<td>35 (47)</td>
</tr>
<tr>
<td>Mirtazapine</td>
<td>19 (26)</td>
</tr>
<tr>
<td>Amitriptyline</td>
<td>8 (11)</td>
</tr>
<tr>
<td>Melatonin</td>
<td>8 (11)</td>
</tr>
<tr>
<td>Zolpidem</td>
<td>6 (8)</td>
</tr>
<tr>
<td>Trazodone</td>
<td>5 (7)</td>
</tr>
<tr>
<td>Diazepam</td>
<td>4 (5)</td>
</tr>
<tr>
<td>Valerian</td>
<td>2 (3)</td>
</tr>
<tr>
<td>Olanzapine</td>
<td>1 (1)</td>
</tr>
<tr>
<td>Temazepam</td>
<td>1 (1)</td>
</tr>
<tr>
<td>Quetiapine</td>
<td>1 (1)</td>
</tr>
</tbody>
</table>

2Synthetic cannabinoid.
One staff member mentioned the disagreement between the prescriber and staff member who administered the medication:

‘It’s a constant battle … sometimes you [go to] give them medication in the night and they are sleeping so you are waking them up to give them sleeping tablets’ (health-care manager)

The same staff member expressed his frustration regarding GPs continuing to prescribe medication, despite the fact that the prisoner had been observed to sleep well.

Some interviewees suggested that prisoners believed mirtazapine, an anti-depressant, was a ‘sleeper’ due to the common practice of prescribing anti-depressants, and in some cases anti-psychotics, due to their sedative components. While GPs may have prescribed these drugs for depression or psychosis, some may have been prescribed for insomnia alone.

‘When you ask them [prisoners] why they are on it, they say for their sleep’ (clinical lead)

**Theme 3: Negative impact of prison environment**

The prison environment was identified as having a substantial adverse influence on insomnia and its management. Many interviewees found this to be a difficult setting in which to implement NICE guidelines. Some highlighted that the guidance was intended for people who have autonomy and control over their routines. Staff emphasized that prisoners lacked these capabilities:

‘I think the issue is there’s a lot of emphasis from NICE … there’s a lot about health and diet and exercise, prisoners don’t have much choice in that really … especially at the moment with the number of lockdowns3 we are having and that impacts on a prisoner’s health. [Being] locked up they’ll probably lie on their beds and sleep during the day’ (health-care manager)

Similarly, staff recognized difficulties in implementing good sleep hygiene in prison compared to the general population. For example, staff described particular barriers to adopting the full range of recommended actions:

‘You can’t tell them to have a bit of exercise, have a shower … hot bath or something … then go to bed’ (mental health manager)

However, one staff member proposed that, although some specific strategies were not possible in prison, the general principles could be applied:

‘Some of it might be amusing like having a warm bath before bed. But many principles of what is in there can be applied to the setting’ (mental health manager)

To reduce trading and misuse, hypnotic medications were given routinely to prisoners under the supervision of healthcare staff. Because of the prison regime, security issues and limited evening activity, the last medication rounds were often during the late afternoon (approximately 17:00 hours). As a consequence, staff said that prisoners were then falling asleep during the early evening and had early morning awakenings:

‘The biggest problem we have with supervised medication is that the last dispensing is done usually around 5 o’clock in the afternoon’ (mental health manager)

One interviewee was passionate about the need to change such practice, not only for improved sleep but to give prisoners back autonomy and control over their own medication. He believed prisoners should be trusted to store and administer their own medication in line with community practice:

‘They are adults, treat them like adults. If they were in the community, apart from supervised methadone, I’m unaware of any medication that gets given out supervised by pharmacists’ (mental health manager)

**Theme 4: Effective management of insomnia in prison**

Interviewees were asked ‘what good sleep management should look like’. Several respondents, particularly those from prisons using more developed insomnia management practices, mentioned that they felt they were using NICE guidance, without necessarily referring to it as such. This took the form of using a stepwise approach: identifying sleep problems, examining potential causes of insomnia and treating insomnia holistically along with mental health, recent stressful events and lifestyle problems.

‘It’s not one single thing it’s the whole approach, you know? Supporting the healthy lifestyle, you know. Diet, sleep, exercise—all very important’ (clinical lead)

Some acknowledged that their staff had limited knowledge about sleep, insomnia and its treatment. Five staff described the need for better education and understanding of sleep and its treatment in prison. When staff were asked about ways of improving insomnia management in prison, one respondent noted the need for a more formal pathway for insomnia that incorporated information distribution, referral to appropriate teams and to examine underlying causal factors.

**DISCUSSION**

**Management of insomnia in prisons—current status**

To the authors’ knowledge, this is the first examination of the identification, management and treatment practices for insomnia in adult prisons in England and Wales. We have shown that the majority of prisons did not use standardized
measures of assessment. Sleep hygiene education and hypnotic medication were the most commonly used interventions for insomnia. Qualitative analysis revealed that staff considered insomnia to be a normal part of prison life, often secondary to a range of mental and physical health issues. Several issues were thought to impact negatively upon insomnia management, including the prison regime, difficulty in the detection of insomnia; prisoners’ beliefs about, and motivations to obtain, medication and a lack of adherence to NICE guidelines on sleep management.

Unique aspects of the prison setting
Respondents found it difficult to distinguish between genuine insomnia symptoms and those who feigned complaints to obtain medication in order to misuse, sell or trade. To reduce trading and misuse, hypnotics were administered routinely under supervision, often at inappropriate times of the day, causing further disruption of sleep patterns. Prisoners therefore lack autonomy on when to initiate sleep. This is concerning, given that taking hypnotic medication in the afternoon and subsequent forced sleep onset at the wrong time of the day can seriously disrupt the natural sleep-wake cycle and circadian rhythm (Lemmer, 2007). This can encourage negative daytime consequences, including daytime sleepiness, concentration problems and irritability (Freedman et al., 2001).

Assessment
Improved assessment of insomnia is a necessity. Clinical screening can uncover a sleep problem and distinguish between transient and chronic issues (Espie et al., 2014). Existing guidance is currently followed by few prisons, possibly because of logistical, ethical and security challenges that make this a unique environment in which to manage any health-care issue. However, it is conceivable that the generic guidance principles could be applied in an adapted manner (e.g. sleep hygiene, stimulus control, etc.) through the development of prison specific comparable stepped-care pathway, offering equivalence to community health care.

Treatment
In general, prisons lacked the appropriate means to manage insomnia. The most commonly offered treatments were medication or sleep hygiene education via verbal or written methods. There is, however, limited evidence that sleep hygiene improves poor sleep when used alone (National Institute for Health and Care Excellence (NICE), 2015). Almost all prisons offer medication, and it is of concern that there is much less availability of psychological therapies. Our recent cross-sectional study of 237 prisoners indicated that the majority of prisoners who had possible insomnia disorder were classified as chronic (90%) (Dewa et al., 2017); thus, if most prisoners have chronic insomnia, medication is not the appropriate course of treatment.

Few prisons, even among those with more developed management insomnia practices, followed NICE guidance formally for managing insomnia. One of the main advantages of the NICE stepped-care approach is that people have access to low-intensity interventions as an alternative to medication, within a structured pathway approach that is self-explanatory, manageable and coherent (Richards et al., 2010).

Limitations of the study
There are limitations to this study. Descriptions of treatment and management practices were based on self-report only and may have been subject to reporting bias. We did not access clinical records or prescribing data to verify management practices for insomnia, although this is being addressed as part of an ongoing complementary study. There was also potential concern about participant bias. In the first instance, health-care managers were approached to complete the survey and interview because of their probable more comprehensive view of prison insomnia management. However, in some instances, data came from other health-care professionals including mental health managers, clinical matrons and psychiatrists, whose knowledge may have been less comprehensive. The survey and interviews also reflected individual perspectives of insomnia management strategies. However, given that this was usually the health-care manager, it is assumed that they would have good knowledge of practices in their prisons.

Future directions
The general consensus among respondents was that sleep problems were considered a normal part of prison life and thus not necessarily a treatment priority. Insomnia in prison is common (Dewa et al., 2015); therefore, in order to achieve change, it needs to be considered worthy of treatment in its own right, due to its significant impact on quality of life, adaptation to custody and engagement in rehabilitative educational, vocational and treatment activities. Therefore there is, arguably, a need for a general cultural change and staff education on sleep problems and their treatment, especially regarding appropriate GP prescribing practice. Additionally, the prison environment and potential challenges of the prison regime require insomnia management and its guidance to be tailored for prison use. The use of an appropriate pathway could encourage staff to be less reluctant to become involved and take sleep problems more seriously. Thus, a reduction in prescribing could be conceivable, particularly because most prisoners have a chronic problem (Dewa et al., 2017).
CONCLUSION
Our findings indicate the need for more psychological therapies for long-term chronic insomnia experienced in prison. Staff indicated lack of knowledge and training in insomnia and treatment and few followed guidance on insomnia. This highlights the need for better education and training for staff that could be conducive to more efficient management practice. Further research is needed to assess the application and delivery of an adapted stepped-care approach that includes screening, assessment and psychological therapies for insomnia in prison.

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CONFLICT OF INTEREST
The authors have indicated no financial conflicts of interest.

AUTHOR CONTRIBUTIONS
Full access to study data, responsibility of the integrity of data and analysis: LD; interpretation of data: LD, LH, JJS and JS; drafting and critical revision of manuscript: LD, LH, JJS and JS; approved final version of paper: LD, LH, JJS and JS.

APPENDIX
Sample of survey questions
1. On a scale of 1–10, how important are sleep problems in your clinical management? (1 being unimportant to 10 being very important)
2. Is any training (internal or external) in assessment and care of individuals with sleep problems/insomnia offered to staff working within your establishment?
3. Does your establishment use standardized measures in your assessment of insomnia?
4. Is medication part of the sleep problems/insomnia management?
   (a) If yes, what medications are used?
   (b) Does your establishment offer non-pharmacological interventions for sleep problems/insomnia?
   (c) If yes, what non-pharmacological interventions are available?

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