Prisoners' insomnia: to treat or not to treat? Medical decision-making in places of detention

ELGER, Bernice Simone

Abstract

Insomnia is a frequent reason for medical and psychiatric consultation in prisons. Medical decision-making in correctional health care should be based on the same principles as outside correctional institutions. In places of detention, principles should be balanced according to the same criteria as outside correctional institutions, while taking into account the unique harm-benefit ratios related to the specific context. The aim of this paper was to examine the existing attitudes and ethical issues related to decision-making about insomnia evaluation and treatment in places of detention. An analysis of the ethical issues and an evidence-based review of the consequences of different attitudes and treatments with regard to prison medicine were carried out. Insomnia is a public health problem and requires adequate evaluation and treatment to avoid more serious health consequences both within and outside correctional institutions. Insomnia treatment in places of detention is an ethical dilemma, but there is no evidence-based reason to avoid benzodiazepines in prison completely and to use only neuroleptics and antidepressants, [...]
Prisoners’ insomnia: to treat or not to treat? Medical decision-making in places of detention

Bernice S. Elger, MD PhD MA (theol)
Médecine légale, Centre Médical Universitaire (CMU), Geneva, Switzerland

Correspondence: Prof. Bernice Elger, Centre Universitaire Romand de Médecine Légale, 9, av. de Champel, 1211 Geneva 4, Switzerland Email: Bernice.Elger@hcuge.ch

ABSTRACT
Insomnia is a frequent reason for medical and psychiatric consultation in prisons. Medical decision-making in correctional health care should be based on the same principles as outside correctional institutions. In places of detention, principles should be balanced according to the same criteria as outside correctional institutions, while taking into account the unique harm-benefit ratios related to the specific context.

The aim of this paper was to examine the existing attitudes and ethical issues related to decision-making about insomnia evaluation and treatment in places of detention.

An analysis of the ethical issues and an evidence-based review of the consequences of different attitudes and treatments with regard to prison medicine were carried out.

Insomnia is a public health problem and requires adequate evaluation and treatment to avoid more serious health consequences both within and outside correctional institutions. Insomnia treatment in places of detention is an ethical dilemma, but there is no evidence-based reason to avoid benzodiazepines in prison completely and to use only neuroleptics and antidepressants, which might represent more dangerous and less efficient treatment.

In prison medicine, should we even treat insomnia? Widely accepted ethical strategies of decision-making indicate that we should. Institutional guidelines on insomnia should be based on ethically sound decision-making that takes into account the available evidence.

INSOMNIA TREATMENT
Balancing ethical principles in the correctional health care context
Medical decisions in places of detention should be made according to the same principles that govern healthcare decisions in both in-patient and out-patient facilities outside the prison context (Elger, forthcoming). In the 1980s, the principle of equivalence of healthcare in prison was articulated in international recommendations (United Nations, 1982, 1990; Wilson, 2004; Elger, 2004). In their publication, Principles of Medical Ethics relevant to the Role of Health Personnel, the United Nations state (principle 1):

“physicians [...] have a duty to provide them [prisoners] with protection of their physical and mental health and treatment of disease of the same quality and standard as is afforded to those who are not imprisoned or detained. [...] There may be no derogation from the foregoing principles on any ground whatsoever, including public emergency” (United Nations, 1982).

Insomnia is a frequent reason for medical and psychiatric consultation in prisons: at least 40% of all prisoner patients complain of difficulty in sleeping (Elger, 2004b). The burden resulting from these complaints for healthcare workers in places of detention (Elger et al., 2002; Feron et al., 2005) has been considered important enough to address this issue specifically during the prison medicine section of the fourth international conference in legal and social medicine (Elger, September 1998). In spite of the importance of this problem, publications on insomnia in correctional institutions are rare and healthcare professionals have a variety of very different approaches to deal with the complaints. Attitudes of healthcare personnel have ranged from extensive prescriptions of benzodiazepines and tranquillizers in France (Jaeger and Monceau, 1996), often considered by others to be an over-
prescription, to completely prohibiting the prescription of certain hypnotics in many correctional facilities in the US (Lund et al., 2002; Crane et al., 2005). Some permit patients complaining of insomnia access to a consultation by a physician only after the complaints have persisted for at least four weeks (Oral statement, September 1998).

From the principle of equivalence of care, it follows that medical decisions in prison should be based on sound ethical arguments and clinical facts as is the recommended practice for medical decisions in liberty. According to the most widespread tradition of prima facie principles (Beauchamp and Childress, 2001), patient autonomy should be respected as well as the principles of beneficence, non-malevolence and justice. Providing beneficial treatment and avoiding harm requires careful evaluation of the possible consequences. These are predicted according to the available evidence, in line with the approach of evidence-based medicine which is characteristic in contemporary medical practice.

In this paper we describe briefly the clinical aspects of insomnia complaints and treatment based on studies of sleep problems in places of detention. In the light of the scarcity of studies examining insomnia in the prison environment, we consider available evidence on sleep disorders obtained from patients or populations at liberty. Taking these facts into consideration, we carry out an ethical analysis based on the four already mentioned ethical principles: respect for autonomy, beneficence, non-malevolence and justice, in order to answer the question: in correctional health care, should we even treat insomnia?

The importance of insomnia as a public health problem: what do we know from studies on non-detained patients?

Although the prevalence of insomnia among inmates of correctional institutions is probably higher than the prevalence of this disorder outside places of detention, it should be noted that even in the general population insomnia affects between 5% to 35% of individuals, depending on the methods and definitions used in epidemiological studies (Sateia et al., 2000). The American Academy of Sleep Medicine commissioned a working group to foster research diagnostic criteria (Edinger et al., 2004) and the Institute of Medicine has recently qualified insomnia as a public health problem and started a project on sleep medicine and research. As part of this project, the Institute of Medicine proposes to convene an ad hoc committee of experts in areas such as public health and health sciences research to (i) quantify the public health significance of sleep loss and the contribution of sleep disorders to poor health and early mortality; (ii) to identify gaps in the public health system relating to the understanding, management, and treatment of sleep loss and sleep disorders; (iii) to identify barriers to, and opportunities for, education and training of practitioners in sleep health, sleep disorders, and sleep research; and (iv) to develop a plan for enhancing sleep medicine and sleep research in order to improve public health (Institute of Medicine, 2007).

According to the most recent evidence obtained from studies outside correctional institutions, identification, systematic assessment, and appropriate treatment of insomnia are clearly beneficial to patients (Sateia and Nowell, 2004).

CHARACTERISTICS AND CAUSES OF INSOMNIA IN PLACES OF DETENTION

To most people it might not be surprising that one sleeps badly in jail or prison. It seems evident that the conditions of detention play an important role (Bourgeois, 1997; Andersen et al., 2000; Vasseur, 2001). Suspected contributing factors to insomnia can be grouped into four categories.

1. External environmental conditions

These are conditions such as noise, an uncomfortable temperature, light, overcrowding, forced promiscuity and lack of physical activity. The night for a detainee is long since cells are often locked for the night starting early in the evening. Due to fewer surveillance personnel, the night can be very dangerous. Many detainees are forced to share their cells at night with unchosen roommates who might suffer from psychiatric illness and are therefore perceived as, or are, objectively dangerous. In addition,
sexual abuse, violence or different forms of threats can easily make night-time a nightmare. Former detainees have not infrequently reported (Ross and Richards, 2002) that those who are raped, or who don’t support promiscuity, find that an isolation cell is the only way to sleep; therefore they behave ‘badly’ in order to be punished and thus be alone at night.

2. ‘Internal conditions’ or psychological reactions
Difficulties in falling asleep are often caused by anxiety related to the situation, in particular to the incarceration and the impending trial (Harding and Zimmermann, 1989). Reactive depression following arrest is often accompanied by insomnia. The long nights invite ruminations about the future in general and about the forthcoming criminal procedure in particular. Most suicides among adult detainees, as compared with juvenile detainees, take place during the night (Hayes, 2004).

3. The type of ‘population’ found in places of detention
The prevalence of substance abuse and psychiatric disease is high (Zimmermann and von Allmen, 1985; McElrath, 1994). Both disorders are known to cause secondary insomnia. According to studies conducted outside prisons, people who are less educated, unemployed, separated or divorced and those who have recently experienced stress show higher rates of insomnia (Kupfer and Reynolds, 1997; Sateia and Nowell, 2004). The prisoner population is comprised of an important percentage of individuals with these socio-economic characteristics.

4. Behavioural factors
These are often summarized as ‘bad sleep hygiene’ (Anonymous, 1999). A heightened level of arousal late at night is caused by watching television until late, by thinking about the crime and the trial in the evening and by writing to one’s lawyer during the night. Detainees are at risk of changing their normal sleep routine due to inactivity (Levin and Brown, 1975). There is a tendency to nap during the day and consequently sleep less at night.

Sleep deprivation
In addition to the four categories of factors that are generally admitted, a fifth category should be kept in mind. Sleep deprivation has been used in the past and is still used during interrogation to destabilize or ‘break’ detainees. Sleep deprivation has severe health consequences. It is internationally considered a form of torture (European Committee for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment (CPT), 2008) and must be reported. Although torture is prohibited without exception in international law, evidence exists that it is practised systemically in many or even most states worldwide. According to the special reporter on torture of the UN Commission on Human Rights (Nigel Rodley) torture is practised in 77 of 175 states worldwide and according to Amnesty International in 140 states. Sleep deprivation belongs to the techniques that can be described as modernized torture. While easily recognizable forms of classical torture such as falaka, hanging, burns and strokes are less frequently used, modernized torture has become more frequent. Besides asphyxia, background noise, sexual humiliation, threats and disorientation and sleep deprivation are typical techniques of modernized torture. In addition, sleep disturbances are general sequelae of torture (Hougen et al., 1988).

Consequences of insomnia, in places of detention or in liberty, are well known (Sateia and Nowell, 2004). Chronic insomnia with sleep deficit leads to day time sleepiness, irritability, aggressiveness, difficulty concentrating, depression, anxiety, diffuse somatic complaints such as tension headache, abdominal aches and eye pain, and request for hypnotic prescriptions.

TREATMENT OF INSOMNIA OUTSIDE AND INSIDE PRISONS
Successful treatment of insomnia is dependent on accurate identification of precipitating causes and perpetuating factors. Treatment options comprise pharmacological and non-pharmacological treatment. Pharmacological treatment has been widely used for decades. Little doubt exists about the effectiveness of
hypnotic drugs for short-term treatment of acute insomnia. However, long-term effectiveness is not proven. Most studies had a duration of less than six weeks (Nowell et al., 1997). Evidence shows that the effects of short-term pharmacotherapy trials degrade over time in patients with chronic insomnia. Almost all types of hypnotics typically cause habituation, tolerance, and potential complications and their use is more frequently criticized (Sateia and Nowell, 2004).

Non-pharmacological treatments alone, or possibly in combination with drugs, produce clinically significant and long-lasting improvement as growing evidence suggests. Cognitive-behavioural treatments are durable and robustly effective on long-term follow-up (six months or longer). A particular characteristic of non-pharmacological treatments is that they are effective even in the management of patients with secondary insomnia problems, i.e. insomnia attributable to medical or psychiatric illness (Kupfer and Reynolds, 1997; Sateia and Nowell, 2004).

In general, detainees’ experience with non-pharmacological treatments is very limited as compared with pharmacological treatment. In a study that explored perceptions of detainees in France (Jaeger and Monceau, 1996) the inmates said during interviews that hypnotics and tranquillizers, typically benzodiazepines, are very important for them because they help them to survive in places of detention. This is meant literally. Detainees are convinced that these medications not only reduce suffering, but also suicide. In addition, inmates mention that hypnotics and tranquillizers reduce violence because they help inmates to sleep at night and to calm down during the day. Many detainees said that they did not take sleep medication before being imprisoned. Those who take them while in prison said: ‘Some support prison without medication. They are psychologically stronger.’

Interestingly, inmates’ perceptions about the relationship between hypnotics or tranquillizers and suicide don’t seem to be completely wrong, since recent studies on suicide showed that acute anxiety is a main factor leading to successful suicide attempts (Crane et al., 2005). Benzodiazepines, the classical category of hypnotics and tranquillizers, are still the most efficient treatment for acute anxiety.

The following conclusions can be drawn from all studies on insomnia in detention: insomnia is frequent (40% of detainee patients) (Jaeger and Monceau, 1996; Elger, 2004b) and cannot be reduced to a secondary problem due to substance abuse and mental illness, but is an independent problem clearly related to the particular situation of incarceration (Zimmermann and von Allmen, 1985; Bourgeois, 1997; Rogers et al., 2003). Correctional healthcare physicians’ evaluation of insomnia is insufficient (Elger, 2004a). Drug prescription works well in some patients but has a limited effect to completely relieve insomnia in others (Elger, 2004a). A need for additional non-pharmacological treatment is identified.

**Management of insomnia in detention – to treat or not to treat: ethical aspects of decision-making**

According to the principle of justice, a detainee has the right to receive the same treatments as any other patient in liberty for any medical problem diagnosed, including insomnia. Since insomnia has been recognized to represent an important public health problem that requires evaluation and treatment, it follows from the principle of equivalence that this attitude should also be adopted in correctional health care. In line with the principle of justice, insomnia treatment should not be denied in places of detention because of cost, containment decisions and lack of physician time.

The principles of beneficence and non-malevolence require physicians (i) to make the right diagnosis, (ii) to provide treatment that acts on the cause of insomnia and (iii) to avoid harm, which could result either from unwanted effects of medications or from health risks due to untreated insomnia.

The principle of autonomy indicates that a patient’s judgment about what constitutes for him the best harm-benefit ratio should be respected. Moreover, a patient whose opinion is discussed and as far as possible respected has a better treatment outcome because compliance in increased. Respect for autonomy also includes respect of a patient’s refusal to
have treatment. On the other hand, it follows from the autonomy rights of physicians that patients don't have an absolute right to receive a treatment if no medical indication exists.

How should medical decision-making proceed in the case of a detainee complaining of insomnia? To answer this question we will look more closely at the details of both benefits and harm that can result from different decisions.

**Making the right diagnosis**

Little doubt exists that making the right diagnosis is beneficial, whereas an incorrect diagnosis causes harm, not only to the patient but eventually to the healthcare system because of a failure to provide efficient treatment. Making the right diagnosis in line with the principle of beneficence means that a prison physician must ask about insomnia complaints, take these complaints seriously, and evaluate them correctly by taking a comprehensive and adequate history based on recommendations in the literature (Kupfer and Reynolds 1997; Anonymous 1999; Sateia and Nowell 2004). In correctional healthcare, these recommendations need to be completed by questions related to the prison context, especially with regard to the factors explained above, including the possibility of intentional sleep deprivation being used by the justice system, the police or security personnel as a means of putting pressure on detainees.

Making the right diagnosis also implies the need to address the underlying problems in the prison. If, for example, the insomnia is due to fear of being raped then the solution is separation of prisoners, not treatment of insomnia.

If insomnia persists, a thorough psychiatric evaluation is important in order to identify underlying psychiatric disorders that are typically accompanied by insomnia, such as schizophrenia, borderline personality disorder, depression and neurobiological dysfunctions.

Providing beneficial treatment that acts on the causes of insomnia implies that pharmacological treatment is employed whenever the benefit-harm ratio has been shown to be high. Examples of such high benefit-harm ratios, in line with evidence-based medicine, exist with respect to the treatment of insomnia secondary to substance abuse. Benzodiazepines are an efficient treatment for alcohol withdrawal and, in addition, have the least serious side effects. Studies have also shown that in the case of opiate addiction, methadone is the safest efficient treatment, not only for withdrawal symptoms, but also to prevent relapsing through methadone maintenance programmes (Haig, 2003; Dolan et al., 2003). A high benefit-harm ratio also exists for the pharmacological treatment of insomnia secondary to a number of psychiatric diseases, including psychoses such as schizophrenia, depression and anxiety disorders (Ford and Kamerow, 1989; Schramm et al., 1995).

According to the available evidence, providing beneficial treatment that acts on the causes of insomnia means that non-pharmacological treatment should be part of correctional healthcare. Healthcare providers need to receive adequate training to offer these treatments. Furthermore, distribution of written material about sleep hygiene is a low cost measure that should be initiated in all prison settings.

The most difficult part of acting on the causes of insomnia, but also one of the most important, is related to the first two categories of factors promoting insomnia in places of detention: the ‘external’ conditions of imprisonment and its ‘internal’ consequences. Clearly, stress and anxiety due to detention and its conditions should be addressed and treated by the available pharmacological and non-pharmacological means. However, it has to be added that the principles of beneficence and non-malevolence could imply further action. According to the United Nations’ Standard Minimum Rules for the Treatment of Prisoners Art. 25 (2), it is part of the responsibility of a correctional healthcare practitioner to examine conditions of detention: ‘the medical officer shall report to the director whenever he considers that a prisoner’s physical or mental health has been or will be injuriously affected by any condition of imprisonment.’ This includes the reporting of any suspicions that sleep deprivation is being used deliberately to put pressure on detainees.

Although a number of factors, such as the...
danger of rape at night, overcrowding, heat or cold and noise can be changed, other factors can not. The trial procedure itself is often a source of considerable stress. Limited means are available to healthcare personnel to treat this stress in a causal fashion: referring the detainee to a social worker or clergy for help in finding the best available lawyer and offering coping strategies through relaxation and psychotherapy, as well as providing symptomatic pharmacological treatment, constitute a range of solutions to which a process of ethical decision-making may lead in these particular circumstances.

Avoiding harm
Not providing an adequate diagnosis and not providing treatment is harmful. The harm caused by withholding pharmacological treatment if indicated ranges from unnecessary suffering to avoidable morbidity and mortality, expressed by suicide and violence. Prescribing pharmacological treatment instead of non-pharmacological treatment, if non-pharmacological treatment has the same or a better outcome in the long run, results in harm ranging from the risk of suffering from avoidable side effects of the medication and dependence on hypnotics, to possible overdoses.

To determine how best to avoid harm requires a careful analysis of the possible benefits and harms, which then need to be balanced. In the following ethical dilemmas, we use this method for decision-making concerning several controversial issues that exist with regard to insomnia treatment.

An attitude frequently encountered is: Do not treat insomnia, especially do not prescribe hypnotics – detainees over-consume hypnotics just to escape boredom and to avoid confronting their punishment.

What are the consequences of this attitude? Studies have shown that 50% of insomnia patients are drug addicts (Elger, 2004b). Drug addiction is a disease that is not under the control of most patients. If drug addiction is not correctly treated, the risk of harm through illegal substances is high as well as the risk of transmission of blood-born infectious agents such as HIV and hepatitis viruses to others who will consequently also be harmed. Furthermore, a high percentage of detainees are suffering from other types of mental disorders before arriving in detention. These disorders require correct treatment, not only to avoid insomnia and other forms of disease-related suffering for these patients, but also to avoid possible harm to all those in contact with these patients who, if untreated, not only might commit suicide but also become violent.

Other forms of insomnia that are not related to substance abuse or psychiatric disease cause harm not only to the individual prisoners who, at best, might only be tired and less well able to defend his or her cause during the trial, but also to others because of an increased risk of violence and fatigue-related accidents. Last, but not least, somatic complaints caused by untreated insomnia could cause more costs to the healthcare system than correctly diagnosed and treated insomnia. To finish with a non-consequentialist argument: the punishment of an offender is the deprivation of liberty: the deprivation of sleep – if treatment exists – is not ethically justified and can be considered as inhuman and degrading treatment.

Some people defend their attitude against certain types of insomnia treatment with the two following arguments. The first is: Do not prescribe hypnotics: detainees will store them and this will increase the risk of suicides carried out using the accumulated medication. The second widely used argument is: Do not prescribe hypnotics: detainees ask for a prescription for hypnotics only to obtain the medication in order to make money by selling it to other drug addicted detainees. A response which often follows this position is the following: incorrect prescribing of medication can be avoided if we first uncover feigning or malignant behaviour which can be observed in antisocial persons.

What are the known facts concerning the two types of cited consequences? Benzodiazepines are associated with a lower risk of harm than many other types of medication because they have limited severe side effects as well as lower toxicity and symptoms of intoxication are easily reversed with flumazenil. With other types of medication, the risk of suicide is higher if a sufficient quantity of the
medication is accumulated. Although security personnel have found medication stored by detainees in quantities greater than daily doses, studies on suicide have not provided evidence that accumulation of hypnotics is an important factor increasing the number of completed suicides (Zega, 1996; Liebling, 2003).

Concerning the risk that medication might be sold, the evidence is that even in the most severely controlled places of detention, illegal drugs circulate or detainees manufacture their own, often very toxic substances (Seal et al., 2004). Both types of products are more dangerous to the health of those who take them than typical prescribed hypnotics that they might be able to buy from other inmates. For those suffering from cocaine withdrawal which might last for up to six months and for which no medical substitution treatment exists, the availability of hypnotics of relatively low toxicity in prison can play a protective role and diminish the need to rely on more dangerous illegal substances. So far, no proof exists that hypnotics are sold in significant quantities and that the possibility of hypnotics being sold presents a significant risk of harm, whereas evidence about the health risks of untreated insomnia is well founded.

Last, but not least, failure to identify feigning and malignant behaviour in detainees does not imply significant harm to those patients as long as benzodiazepines and not more toxic substances are prescribed. The threshold for avoiding misuse does not need to be high in the case of relatively safe medication. Rather, can we justify depriving patients in need of pharmacological treatment for insomnia just because so far no valid method exists to distinguish them infallibly from some other patients who are feigning a need?

A hands-up survey among a sample of correctional healthcare personnel at a recent conference in the US showed that a majority of them follow institutional recommendations not to prescribe benzodiazepines for insomnia (Crane et al., 2005). Instead, neuroleptics and antidepressants are used to treat severe insomnia. To decide whether these institutional decisions are ethically sound, we studied the benefit-harm ratios of the different types of medication.

Benzodiazepines (BZD) and related medication such as zolpidem, zaleplon and other non-BZD hypnotics

The benefits of this group of substances are related to their proven hypnotic and anxiolytic action, at least during short term use. By reducing tension and anxiety they can lessen suicide and violence in places of detention. As already mentioned, a further advantage of these substances is that they have few side effects, especially no severe side effects. They can prevent the use of more dangerous illicit substances circulating in prisons and jails which are often injection drugs (Anonymous, 2004; Seal et al., 2004). In this respect, BZD can be part of a HIV/hepatitis harm reduction strategy.

The risks of this group of medication result from their potential to cause addiction. European countries have different attitudes towards this risk. Most leave it to the discretion of physicians to determine the length of prescription. However, in the UK, BZD hypnotics are only licensed for use for six weeks after which they are considered to become ineffective because of tolerance and biological addiction. Even within the restrictive frame of BZD prescription that exists in the UK, it is implied that prisoners who suffer from transitory insomnia at prison entry or in the period before and during their trial should have access to insomnia treatment, which could be BZD, for up to six weeks. Those who disapprove of BZD prescription because addiction might be induced in patients who receive it in prison for the first time in their life should know that a high percentage of detainees have previously taken BZD according to the existing evidence (Elger 2004a, 2004b). In these patients, the chances of curing this addiction in prison are extremely low. But it also means that no new harm is added when prescribing these medications to those that have already been extensively exposed to them. The unproven risks of abuse, selling and overdose have already been discussed. Compared with other groups of medication, the risk of serious harm from these events is relatively low.

Neuroleptics and antidepressants

These groups of medication are clearly beneficial in the presence of certain types of psychi-
atric disease. Benefits cited by those who use neuroleptics and antidepressants to treat insomnia in the prison context without the presence of psychiatric disease are the absence or reduction of addiction potential and the reduced risk that detainees will trade these drugs since they are in general considered among the inmate population as having unpleasant effects.

However, the overall benefit-harm ratio for the use of neuroleptics in the treatment of insomnia in the absence of any other indication is not established and their use as hypnotics only is therefore not advisable. With some variations according to the exact substance, neuroleptics have severe side effects. They lower the threshold for convulsions, cause extrapyramidal symptoms and cardiac rhythm abnormalities.

Recently, several deaths from the side effects of neuroleptics in US prisons and jails have lead to lawsuits (Wilcox, 2005). Tricyclic antidepressants are considered dangerous and are rarely prescribed in prisons in Switzerland and France (Jaeger and Monceau, 1996; Elger et al., 2002) in particular because of their serious side effects, narrow therapeutic window, and the difficulty in treating overdoses. Moreover, the efficiency of antidepressants in the absence of depression as a cause of insomnia is not proven. Sedative effects disappear in general after three weeks (Sateia and Nowell, 2004; Roehrs and Roth, 2007). In addition, most of these medications, especially newer molecules, are very expensive. Although no studies exist on this issue in prison, it follows from detainees' preferences that these medications are clearly less valued than BZD. They do not seem to influence in any way the risk of use of other more serious illegal substances circulating in correctional institutions.

THE ETHICAL DILEMMA IN ITS CONTEXT
This ethical analysis might seem of little use to physicians working in a prison lacking the personnel to realize adequate psychiatric and neurologic diagnosis of disorders that typically are accompanied by insomnia. Our analysis might also seem of questionable use to physicians working in a prison where the prescription of BZD is not allowed as a consequence of governmental or prison policy. Practical issues might need to be solved such as how to obtain funds to employ more prison physicians or how to change the environment and attitudes of staff members in order to facilitate favourable conditions for sleep. However, one should keep in mind that physicians working outside prisons also frequently see patients whose disease is due to unhealthy environmental conditions, but generally their reaction will not be to refuse to treat the patient's symptoms just because ideally one should first try to change the external factors, e.g. the patient should be re-employed or start a new relationship. The scope of this article is not to solve all practical issues and all existing problems related to the prison context but to encourage reflection of the ethical issues related to insomnia treatment in prisons. It is meant as a first step to encourage the development of international guidelines in this area. Such guidelines would be a valuable asset to prison doctors in defending ethically sound policies and attitudes in their working environment.

CONCLUSIONS
Medical decision-making in correctional healthcare should be based on the same principles as outside correctional institutions. In places of detention, principles should be balanced according to the same criteria as outside correctional institutions, while taking into account the unique harm-benefit ratios related to the specific context.

In the immediate future, there is a risk that correctional healthcare services may not provide for efficient cognitive-behavioural insomnia treatment because this is time-consuming and the personnel involved need first to receive adequate training. However, the results of not treating insomnia at all with the available pharmacological means, at least in the short term, could be to invite suffering and important health risks related to secondary anxiety, violence, and suicide.

Insomnia treatment is an ethical dilemma, but there is no evidence-based reason to use more dangerous and less efficient treatments and to avoid benzodiazepines in prison completely, if they are still prescribed in the community. More evidence is needed to justify
such important differences in treatment inside and outside prison. Some of the differences found between the use of BZD in French and US prisons might be explained by the fact that the pattern of use in prison follows the pattern of use in the community. However, there appears to be much variation in the standards of practice regarding BZD use for insomnia. Although it is frowned upon for chronic use in the US and even practitioners outside the prison context more often shy away from using it than practitioners in other countries, decisions should be made based on the internationally available evidence which does provide sound arguments in favour of its use (Jindal et al., 2004).

Institutional guidelines on insomnia should be based on ethically sound decision-making that takes into account the available evidence. We think that categorically avoiding benzodiazepines and zolpidem or zaleplon is not justified, since other medications generally have more side effects and treating insomnia incorrectly can have serious consequences.

Insomnia is a public health problem that requires proper evaluation and treatment to avoid more serious health consequences both inside and outside correctional institutions.

In prison medicine, should we treat insomnia? Yes, widely accepted ethical strategies of decision-making indicate that we should.

ACKNOWLEDGEMENT
The author thanks Marion Danis for her comments on a previous version of this manuscript.
Funding was provided by a research fund of the Swiss Research Foundation.

REFERENCES


