

Psychiatr Clin N Am 29 (2006) 761-772

PSYCHIATRIC CLINICS OF NORTH AMERICA

An Overview of Correctional Psychiatry

Jeffrey Metzner, MD^{a,*}, Joel Dvoskin, PhD, ABPP^b

^aUniversity of Colorado School of Medicine, 3300 East First Avenue, Denver, CO 80206, USA ^bUniversity of Arizona School of Medicine, 3911 East Ina Road, Tucson, AZ 85718-1531, USA

The rapidly escalating rate of incarceration in the United States has been associated with an increasing number of imprisoned individuals who suffer from a mental illness [1–3]. Research indicates that as many as 20% of inmates in jail and prison are in need of psychiatric care for serious mental illness [4]. According to the US Bureau of Justice Statistics, an estimated 283,800 mentally ill offenders were incarcerated in US prisons and jails at midyear 1998 [5]. In response to the critical need for substantive discussion and policy development relevant to providing treatment for incarcerated persons with mental illnesses, the Council of State Governments established the Criminal Justice/ Mental Health Consensus Project. A 432-page report was issued by the Consensus Project during June 2002 that included detailed recommendations for improving responses to incarcerated persons with mental illnesses [6,7].

There are numerous agencies and organizations that provide a wealth of information relevant to correctional health care systems, including the US Department of Justice's Bureau of Justice Statistics, The National Commission on Correctional Health Care (NCCHC), and the American Psychiatric Association. It is no longer difficult to find literature specific to correctional mental health care, which will assist administrators and clinicians in establishing adequate mental health services within jails or prisons [4,8–12].

This article focuses on several evolving issues in correctional mental health care that are especially controversial and often inadequately addressed within correctional facilities.

SERIOUSLY MENTALLY ILL INMATES IN SUPERMAX PRISONS

During the past decade, many prison systems have constructed facilities (often called supermax prisons) or units with the specific purpose of incarcerating inmates under highly isolated conditions with limited access to programs, exercise, staff, or other inmates. Characteristics of such units generally include being locked in a cell for 23 hours per day for many months to years at

*Corresponding author. E-mail address: jeffrey.metzner@uchsc.edu (J. Metzner).

0193-953X/06/\$ - see front matter doi:10.1016/j.psc.2006.04.012 a time. Riveland [13] describes these facilities as representing a philosophical change in correctional management of troublesome inmates from a "dispersion" approach to a "concentration" approach. The underlying premise of the concentration approach is that general population prisons will be safer and more efficiently managed if the troublemakers are completely removed [13,14].

There are several different statuses that can result in segregation. Disciplinary segregation, typically ordered as punishment for an institutional infraction, is often of short duration. In contrast to this status, which is based on what the inmate has done, administrative segregation is typically imposed based on what the inmate might do. That is, administrative segregation is prospective in nature and designed to protect other inmates from a danger believed to be posed by the inmate. It is often administrative segregation, a classification status, which has now commonly led to the imposition of long-term segregation.

There are three situations that result in segregation status, and in our view they require different institutional responses. First are inmates who, either because they are unable or unwilling, fail to abide by institutional rules, thereby creating a danger to institutional order, security, or the safety of staff and inmates. For these segregation inmates, the purpose of segregation ought to be the creation of a safe learning environment in which an inmate can learn how to safely "do time." But today's long-term segregation environments not only fail to facilitate such learning; they virtually preclude it. Inmates are housed in conditions of such extreme control that they get to make few if any decisions, except perhaps whether to obey direct orders.

The second type of segregation inmate is one who knows well how to negotiate a correctional environment but whose wish for power and money lead him to join and even lead prison gangs in the perpetration of organized crime within the prison. These inmates, leaders or "shot-callers" of prison gangs, are believed to pose such an extreme danger to other prisoners that, so long as they remain gang affiliated, they can never return to the general population. This situation is especially common in California, where the gang problem is most severe.

Finally, in some states, inmates find their way into long-term segregation because their mental and intellectual limitations prevent them from following orders and successfully following prison rules. Placing such inmates, already mentally disabled and psychologically vulnerable, in segregation serves no useful purpose and should not occur. In other words, absent the most extraordinary circumstances, no one should ever be placed in long-term segregation because of their serious mental disability or its symptoms.

It is the authors' opinion that the use of supermax confinement is overused within correctional facilities in the United States [15]. Because of its extreme limitations on liberty and its potential for harm, use of this type of program should be reserved for cases in which there is no less restrictive way to remedy an unsafe situation. Further, with few exceptions, inmates should not be placed in long-term lockdown housing units for prolonged periods of time without at least some reasonable opportunity of being able to work their way out via a behaviorally oriented system with definable, measurable, and achievable outcomes. Such a system should include some ability for each inmate to control, by displaying prosocial behaviors, the conditions of his confinement. These conditions include the ability to watch educational videos, recreation television, to have a radio or a fan in the room, or to have additional time out of cell. At higher levels, it may also include the ability to exercise with other inmates, so long as security concerns (eg, rival gang membership) are taken into account.

There are a small number of inmates whose violence has been so extreme as to preclude the opportunity to ever return to the general population. Examples would be inmates serving life sentences who have assaulted staff with a deadly weapon or attempted to perform contract murders for a prison gang. However, even for these inmates, having some control over their living conditions is desirable for the prison. Abiding by the rules of the segregation environment ought to result in some improvement in the inmate's living conditions; otherwise, inmates may lose any motivation at all to behave properly, thereby endangering the staff who must work with them.

In one state prison system, one of the authors (JD) helped staff to develop such a behavioral system. Before the system was even implemented, the inmate behavior changed so significantly that the incident rate on the segregation unit reportedly dropped by 80%.

There is only sparse literature on the impact of long-term segregation on psychological functioning. There are few, if any, adequate scientific studies concerning the impact of locking an inmate in an isolated cell for an average of 23 hours per day with limited human interaction, minimal or no programming, and in an environment that is designed to exert maximum control over the individual. There is general consensus among clinicians that placement of inmates with serious mental illnesses in these settings is contraindicated because many of these inmates' psychiatric conditions will clinically deteriorate or not improve [16]. In other words, many inmates with serious mental illnesses are harmed when placed in a supermax setting, especially if they are not given access to necessary psychological and psychiatric care. In addition to potential litigation, this is one of the main reasons that many states (eg, Ohio, California, Illinois, and Wisconsin) exclude inmates with serious mental illnesses from admission to supermax facilities [17].

The standard of care relevant to supermax prisons and inmates with serious mental illnesses is becoming clearer as the result of clinical experience and litigation. First, it is clear that, except in the most extraordinary and dangerous circumstances, no one should be housed in segregation while they are acutely psychotic, suicidal, or otherwise in the midst of a psychiatric crisis. Though the response to segregation varies from person to person, there are certain conditions that increase the likelihood that an inmate will have an extreme and negative psychological response to segregation. Foremost among these conditions are serious mental illnesses such as schizophrenia.

Though there may be exceptions, the standard of care appears to now require either exclusion of seriously mentally ill inmates by way of mental health screening processes or transfer to a specialized mental health program within a supermax. For inmates with a serious mental illness who legitimately need an extremely high level of security, the specialized mental health program should offer at least 10 to 15 hours per week of out-of-cell structured therapeutic activities in addition to at least another 10 hours per week of unstructured exercise or recreation time. Because these inmates may still require supermax classification, the correctional officer staffing should be sufficient to comply with security regulations (eg, two correctional officers may be required to escort each inmate who is removed from their cell) [17–22].

Controversies surrounding these treatment guidelines include the use of metal enclosures that are designed to allow inmates to participate in group social or therapeutic activities while physically separated from other inmates and staff. These holding cells are variously known as "therapeutic modules," "programming cells," or, by their detractors, as "cages." These cells are similar in shape to an old-fashioned telephone booth, but when properly constructed are about twice the size, with ample lighting, a seat, a shelf, adequate ventilation, and good visibility for purposes of group therapeutic activities in a setting with adequate sound privacy. Well-constructed therapeutic cubicles in one large eastern prison system are 4.5 feet deep, 4 feet wide, and 7.5 feet tall, but are expensive (approximately \$18,000 each). Typically, 6 to 10 cells are placed in a semicircular fashion to allow appropriate group interaction during scheduled therapeutic activities. Inmates are not cuffed while in these cells, which allows for active participation in various therapies, such as art, music, and journaling, as well as increased physical comfort (in contrast to being cuffed during 1 to 2 hours of continuous therapy). It has been the experience by one of these authors (IM) that these programming cells, when properly constructed and used, have been well accepted by most inmates using them.

Assuming that supermax inmates have been properly classified, the decision regarding the nature of the security required during treatment should be a collaborative one, involving attention to custody and therapeutic concerns. Unquestionably, the safety of staff and inmates is the highest priority, and the ultimate responsibility for institutional safety falls on the institutional warden or equivalent. It is the authors' experience, however, that when there is good interdisciplinary communication, it is easy to accommodate both interests. Ultimately, good treatment enhances institutional security, and vice versa.

For example, it would not be appropriate for custody staff to require the presence of a correctional officer in the room during therapy sessions if such sessions could be safely done without them present. If a traditional therapy setup is deemed to be too dangerous, the therapist and the correctional staff should collaboratively decide on an acceptable alternative, which might include the use of therapeutic modules as previously described, some type of restraint, or even the presence of correctional staff member that is trusted by the inmate.

The authors' recommendation of 10 to 15 hours of structured therapeutic activity in such units is based on experience with six large correctional systems involved in systemwide class-action litigation that focused on the adequacy of the mental health system. Because of the variability in the conditions of confinement in supermax prisons across the county and the varying needs and capabilities of inmates with serious mental illness, it is meant as a guideline only. Institutional conditions include the nature of the physical plant, staffing, security practices, access to televisions and radios, group recreational yard, duration of confinement, allowable property, and educational and program opportunities. The intention is to provide enough healthy social interaction for treatment purposes as well as to prevent a person with a serious and disabling mental illness from potentially getting worse because of the absence of normal social interaction.

Less clear and more controversial is the psychological impact of long-term confinement on inmates who do not have preexisting mental illness. Despite claims to the contrary, it is not currently clear whether, how often, and under what circumstances such confinement causes persons to develop serious mental illness (eg, psychotic symptoms and disabling depressive or anxiety disorders). The literature, in addition to being sparse, provides conflicting perspectives on this question [23–28]. This question is also appropriately raised in housing units that are essentially lockdown units, even if they are not labeled supermax. Commonly known as administrative segregation, disciplinary segregation, or punitive segregation, it is not uncommon for inmates to be housed in such units for many months or even years at a time.

Mental health clinicians working in such facilities report that it is not uncommon to observe many inmates who do not have preexisting serious mental disorders develop irritability, anxiety, and other dysphoric symptoms when housed in these units for long periods of time. This is consistent with the finding that many non-mentally ill inmates in supermax settings respond favorably to weekly (or more frequent) rounds by mental health clinicians for monitoring purposes, especially when provided with copies of crossword puzzles, reading materials, or simply friendly conversation. Further, these rounds in segregation allow mental health professionals to detect psychological deterioration much earlier and prevent the more severe exacerbations of psychoses, depression, or anxiety that can cause the most severe discomfort to inmates and disruption to the correctional environment.

Claims that long-term segregation necessarily causes particular kinds of psychological harm, often described as being scientifically proven, have been published and presented in journals and educational meetings, and verbalized in legal testimony [24–26]. In the authors' opinion, most of these claims significantly overstate what is known about the psychological impact of long-term supermax confinement, especially on inmates who do not have preexisting mental illness. Though many of these advocates have made a significant contribution to improving mental health services in correctional facilities, in part by raising these issues, the long-term psychological effects of such environments are not known, and the basis for such claims lacks scientific support.

Grassian [25] observed that rigidly imposed solitary confinement may have substantial psychopathological effects, which may form a clinically distinguishable syndrome. His observations were based on 30-minute interviews of 14 inmates housed in a segregation unit (Block 10) at Walpole Correctional Institution in Massachusetts around late 1979. These interviews were conducted by one of two plaintiffs' psychiatric experts in the context of a class-action suit challenging their conditions of confinement. There was no control group of any kind for this study. Dr. Grassian himself had been retained by counsel for the plaintiffs, a fact that was known to each inmate in the study. Finally, and most importantly, each of these inmates was a plaintiff in class-action litigation against the state of Massachusetts. That is, they had an obvious interest in presenting pathology to their own retained expert witness (Dr. Grassian). Despite the obvious limitations of these observations, Grassian's suggestion that the use of what he called "solitary confinement" carries major psychiatric risks was a significant contribution to the literature in that it raised an important though still unanswered question about the effects of these environments over time.

Despite these possible reasons for reporting symptoms, Grassian [25] noted that inmates denied having these symptoms, but after continued questioning by Dr. Grassian, eventually acknowledged that these symptoms existed.

In a 1986 article, Grassian and Friedman [29] proposed a solitary confinement syndrome based on "the Walpole observations, the recent literature, and the older German reports." The alleged symptoms of this syndrome included massive free-floating anxiety, perceptual distortions and hallucinations in multiple spheres, difficulty with concentration and memory, acute confusional states, persecutory ideation, and motor excitement. This syndrome has subsequently been named the SHU syndrome by Grassian in the context of the supermax Pelican Bay State Prison's security housing unit (SHU) [26]. Kupers [26] has expanded the constellation of symptoms that are consistent with this so-called syndrome, which has also been the theoretical basis for the so-called "Death Row syndrome" [14,30].

Haney [24] provides a review of the literature and cites his own research at the Pelican Bay State Prison's security housing unit to support the concept of a SHU syndrome. Haney's literature review, although useful, is significantly flawed. Specifically, he writes the following: "To summarize, there is not a single published study of solitary or supermax-like confinement in which nonvoluntary confinement lasting for longer than 10 days, where participants were unable to terminate their isolation at will, that failed to result in negative psychological effects. The damaging effects ranged in severity and included such clinically significant symptoms as hypertension, uncontrollable anger, hallucinations, emotional breakdowns, chronic depression, and suicidal thoughts and behavior . . ." [24].

Haney references an article by Suedfeld et al [27] as supporting adverse symptoms occurring in prisoners exposed to supermax confinement. However, closer reading of the article included the following conclusions: "Our data lend no support to the claim that solitary confinement, at least as practiced in this sample of North American prisons, is overwhelmingly aversive, stressful, or damaging to the inmates ... on the whole, this first attempt at an empirical evaluation of the effects of solitary confinement indicates that the situation is tolerable and in some cases may even be perceived as beneficial, although it clearly has unpleasant features. Prisoners who have been in solitary confinement showed no deterioration in personality or intellect ... " [27]. The authors do indicate that their study had some shortcomings that make its conclusions less than definitive. It appears, then, that Suedfeld et al [27] have not answered this question; this study is described as an example of the inaccuracy of Haney's claim about the research in this area. At this time, the question has yet to be answered; that is, no one knows the long-term psychological effects of segregation on inmates, especially those with no preexisting serious mental illness.

The January 2001 issue of *Canadian Journal of Criminology* included a 36-page article titled "The Psychological Effects of 60 Days in Administrative Segregation," which concluded that, overall, segregated prisoners had poorer mental health and psychological functioning as compared with nonsegregated prisoners, but "there was no evidence, however, that, over a period of 60 days, the mental health and psychological functioning of segregated prisoners significantly deteriorated" [28]. This issue of the journal also included three articles submitted in response to the study by Zinger, Wichmann, and Andrews [28] that challenged their findings. Admittedly, the 60-day time period is significantly less than in many supermax prisons. It is not clear that these conditions, over time, do not cause psychological harm. It may be that the effects are not yet known.

Whether one agrees with Zinger et al's findings [28], their article, like Haney's 2003 article [24], provides a useful literature review relevant to existing research on the mental health effects of segregation. They point out the literature in this area is conflicting, filled with speculations, and often based on far-fetched extrapolations and generalizations. Methodological shortcomings apparent from reviewing the literature include reliance on anecdotal evidence, wide variation regarding the conditions of confinement present in different prisons, and an overreliance on field and laboratory experiments pertinent to sensory deprivation.

Haney [24] cites his own research to estimate the extent to which prisoners confined in supermax-type conditions suffer resultant adverse effects. He reports that in his Pelican Bay study, a random sample of 100 SHU prisoners were assessed in face-to-face interviews. He asserts that the data was representative of and, within the appropriate margins of error, generalizable to the entire group of prisoners at the supermax facility. His findings were described as being consistent with Grassian's SHU syndrome (also known as reduced environmental stimulation (RES)) in addition to demonstrating adverse psychological effects of supermax confinement. At least two significant flaws in his methodology question the validity of his conclusions. First, this study was performed in the context of class-action litigation challenging the adequacy of the mental health system at the Pelican Bay State Prison (PBSP). Dr. Haney was one of the plaintiffs' experts in this case. Second, a significant percentage of the SHU inmates had preexisting serious mental illnesses, which should have resulted in separate analyses of adverse psychological effects of supermax confinement for inmates without preexisting mental illnesses as compared with inmates with such illnesses. Haney [24] also cited evidence in his article that it was likely that inmates with serious mental illnesses were overrepresented in supermax housing units, which was likely at PBSP during the time of his study.

Despite the criticism of Haney's article, the authors agree strongly with his conclusion that "there are better and worse supermax prisons, and we should take steps to ensure that all such facilities implement the best and most humane of the available practices. In general, far more careful screening, monitoring, and removal policies should be implemented to ensure that psychologically vulnerable—not just mentally ill—prisoners do not end up in supermax in the first place, and that those who deteriorate once there are immediately identified and transferred to less psychologically stressful environments. In addition, prison disciplinary committees should ensure that no prisoner is sent to supermax for infractions that were the result of pre-existing psychiatric disorders or mental illness."

Another problem in the literature and expert testimony is the comparison between confinement in a supermax-like setting to experimental models related to sensory deprivation, prisoner-of-war (POW) experiences, polar habitation, or nineteenth-century German experience with solitary confinement in prisons [29,31]. Most supermax-like settings are more dissimilar than similar to such conditions. The use of the term "solitary confinement" is a misnomer because in these facilities inmates can see and communicate with correctional officers and fellow inmates. Many inmates in such circumstances are housed with roommates. It is not uncommon to have access to radios and televisions, which contrasts dramatically with sensory deprivation tank experiments and many POW experiences. This of course does not belie the obvious and severely stressful nature of such confinement. As Haney [24] and others have pointed out, the social interactions in such settings are anything but normal. In the authors' opinion, learning about the effects of these settings is important, and requires objective, even-handed, and accurate social science.

Zubek, Bayer, and Shephard [32] conceptualize segregation units to have three main characteristics: social isolation, sensory deprivation, and confinement. Each of these elements can vary significantly as do inmates' responses to the segregation experience. In general, the decreased/altered social interactions for inmates in supermax facilities appear to be more of a problem from a mental health perspective in contrast with sensory deprivation. Many of the milieus in such facilities are characterized by sensory overstimulation (eg, inmates yelling for communication purposes or for other reasons), which causes distress for inmates, especially during evening hours. The conditions of confinement, which include not only the physical plant and imposed property restrictions but also the nature of the inmate's interactions with correctional officers, are obviously important variables relevant to an inmate's adjustment.

NEEDED RESEARCH

The Colorado Department of Corrections [33] published a useful study that provided basic statistics relevant to the Colorado DOC's administrative segregation population. This study also sought to help shape the design for a subsequent prospective research project to determine if supermax-like confinement causes psychological harm to inmates, with and without preexisting mental illness. The authors recommend that such a study include the following components: (1) Repeated measures designed to determine whether inmates decompensate over long periods of lockdown status, (2) A control group to help assess whether any significant psychological changes are due to the lockdown environment specifically or simply associated with the general prison environment, (3) The repeated measures should cover a variety of psychological dimensions (eg, suicidal ideation, hopelessness, or psychotic symptoms), and (4) Assessments should be based on multiple sources (eg, inmate self-report, clinician, or correctional officer) [33].

MENTAL HEALTH INPUT INTO THE DISCIPLINARY PROCESS

Dvoskin et al [34] discuss the case of Powell v Coughlin (953 F2d 744 (2d Cir. 1991)) in which the court held that inmates had no right to formal evaluations by prison mental health staff before undergoing disciplinary hearings. Though formal evaluations are not required, however, these authors strongly recommend mental health input into disciplinary proceedings. This is important for three reasons. First, it allows consideration of an inmate's ability to stand hearing. Second, it allows for consideration of the inmate's culpability and thus the appropriateness of the punishment. Finally, mental health input allows identification of those inmates whose mental illness would make the same segregation punishment more unpleasant than it was intended to be.

Except for a useful article by Krelstein [35], little else has been written about mental health clinicians providing input into the disciplinary process, especially when inmates with serious mental illnesses have committed a rule infraction. It is useful for mental health staff to be notified when caseload inmates receive serious (ie, major) rule violations because their actions leading to the violations are often clinically significant. A procedure should be in place that results in timely notification to mental health staff of such occurrences, which should facilitate mental health input to the disciplinary process, when indicated, relevant to issues of competency to proceed with the disciplinary hearing, mitigating factors, and dispositional recommendations. Mental health staff should also be available to the disciplinary hearing officers for consultation purposes, when a non–caseload inmate appears to be demonstrating symptoms of a serious mental illness [36].

The authors recommend that the mental health input into the disciplinary process not address issues related to responsibility (eg, the equivalent of an insanity plea) [34]. Similar to the low rate of successful "not guilty by reason of insanity" pleas in the nonincarcerated population, it is rare that inmates would meet most nonresponsibility standards in prisons that have constitutionally

adequate mental health services if the assessment was made by a forensically experienced mental health clinician. In general, inmates meeting such criteria are usually diverted out of the disciplinary system process to a structured psychiatric setting. The use of valuable clinical resources for these forensic assessments is hard to justify in a correctional mental health system with limited clinical resources [34].

Clinicians providing mental health input into the disciplinary process need special training relevant to such assessments, and hearing officers need training on how to use such information obtained from the mental health clinicians. Though the ultimate issue of competence to stand hearing or culpability is up to the hearing officer, in the authors' experience, relevant, simple, and competent psychological consultation is helpful in reaching a just result. An ongoing training and quality improvement process should occur relevant to this area because of frequent changes in hearing officers and rotation of clinicians to other program areas.

SUMMARY

Supermax facilities may be an unfortunate and unpleasant necessity in modern corrections. Because of the serious dangers posed by prison gangs, they are unlikely to disappear completely from the correctional landscape any time soon. But such units should be carefully reserved for those inmates who pose the most serious danger to the prison environment. Further, the constitutional duty to provide medical and mental health care does not end at the supermax door.

There is a great deal of common ground between the opponents of such environments and those who view them as a necessity. No one should want these expensive beds to be used for people who could be more therapeutically and safely managed in mental health treatment environments. No one should want people with serious mental illnesses to be punished for their symptoms. Finally, no one wants these units to make people more, instead of less, dangerous. It is in everyone's interests to learn as much as possible about the potential of these units for good and for harm.

Corrections is a profession, and professions base their practices on data. If we are to avoid the most egregious and harmful effects of supermax confinement, we need to understand them far better than we currently do. Though there is a role for advocacy from those supporting or opposed to such environments, there is also a need for objective, scientifically rigorous study of these units and the people who live there.

References

- Harrison P, Beck A. Prison and jail inmates at midyear 2004. Washington (DC): US Department of Justice, Bureau of Justice Statistics Bulletin NCJ 206801; April 2005.
- [2] Harrison P, Beck A. Prisoners in 2004. US Department of Justice, Bureau of Justice Statistics Bulletin NCJ 210677; October 2005.
- [3] Bonczar T. Prevalence of imprisonment in the US population, 1974–2001. Washington (DC): US Department of Justice, Bureau of Justice Statistics Bulletin NCJ 197976; April 2003.

- [4] American Psychiatric Association. Psychiatric services in jails and prisons. 2nd edition. Washington (DC): American Psychiatric Association; 2000.
- [5] US Department of Justice. Mental health treatment of inmates and prisoners. Washington (DC): US Department of Justice, Bureau of Justice Statistics Bulletin NCJ-174463; 1999.
- [6] Criminal Justice/Mental Health Consensus Project. Council of State Governments, June 2002. Available at: http://consensusproject.org/. Accessed November 19, 2005.
- [7] Thompson M, Souweine M, Reuland D. Mental health consensus: improving responses to people with mental illness. Crime Deling 2003;49:30–51.
- [8] Dvoskin J, Spiers E, Metzner J, et al. The structure of correctional mental health services. In: Rosner R, editor. Principles and practice of forensic psychiatry. 2nd edition. London: Arnold; 2003. p. 489–504.
- [9] Metzner JL, Dvoskin J. Psychiatry in correctional settings. In: Simon RI, Gold LH, editors. Textbook of forensic psychiatry. Washington (DC): American Psychiatric Press; 2004. p. 377–92.
- [10] Wettstein RM, editor. Treatment of offenders with mental disorders. New York: Guilford Press; 1998.
- [11] National Commission on Correctional Health Care. Standards for health services in jails. Chicago: National Commission on Correctional Health Care; 1996.
- [12] Scott CL, Gerbasi JB, editors. Handbook of correctional mental health. Arlington (VA): American Psychiatric Publishing, Inc.; 2005.
- [13] Riveland C. Supermax prisons: overview and general considerations. Washington (DC): National Institute of Corrections; 1999.
- [14] Collins W. Supermax prisons and the constitution: liability concerns in the extended control unit. National Institute of Corrections, 2004. Available at: http://www.nicic.org. Accessed November 25, 2005.
- [15] Toch H. The future of supermax confinement. Prison Journal 2001;81:376-88.
- [16] Work Group on Schizophrenia. American Psychiatric Association Practice guidelines: practice guideline for the treatment of patients with schizophrenia. Am J Psychiatry 1997;154(Suppl):1–63.
- [17] Metzner J. Class action litigation in correctional psychiatry. J Amer Acad Psychiatry Law 2002;30:19–29.
- [18] Bevan G. Offenders with mental illnesses in maximum and super maximum security settings. In: Scott CL, Gerbasi JB, editors. Handbook of correctional mental health. Arlington (VA): American Psychiatric Publishing, Inc.; 2005. p. 209–27.
- [19] Haddad J. Treatment for inmates with serious mental illness who require specialized placement but not psychiatric hospitalization. Correctional Mental Health Report 1999;59: 60–2.
- [20] Metzner JL. An introduction to correctional psychiatry: part III. J Am Acad Psychiatry Law 1998;26:107–16.
- [21] Metzner JL. Mental health considerations for segregated inmates. In: Standards for health services in prisons. Chicago: National Commission on Correctional Healthcare; 2003. p. 241–5.
- [22] Metzner JL. Trends in correctional mental health care. In: Moore J, editor. Management and administration of correctional health care. Kingston (NJ): Civic Research Institute; 2003. p. 12-2–12-18.
- [23] Pizarro J, Stenius V. Supermax prisons: their rise, current practices, and effects on inmates. Prison Journal 2004;84:248–64.
- [24] Haney C. Mental health issues in long-term solitary and "supermax" confinement. Crime Deling 2003;49:124–56.
- [25] Grassian S. Psychopathological effects of solitary confinement. Am J Psychiatry 1983;140: 1450–4.
- [26] Kupers T. Prison madness: the mental health crisis behind bars and what we must do about it. San Francisco: Jossey-Bass; 1999.

- [27] Suedfeld P, Ramirez C, Deaton J, et al. Reactions and attributions of prisoners in solitary confinement. Crim Justice Behav 1982;9:303–40.
- [28] Zinger I, Wichmann C, Andrews DA. The psychological effects of 60 days in administrative segregation. Can J Criminol Crim 2001;43:47–84.
- [29] Grassian S, Friedman N. Effects of sensory deprivation in psychiatric seclusion and solitary confinement. Int J Law Psychiatry 1986;8:49–65.
- [30] Schwartz H. Death row syndrome and demoralization: psychiatric means to social policy ends. J Am Acad Psychiatry Law 2005;33:153–5.
- [31] Affidavit of Stuart Grassian, MD. Lee v Coughlin and Mahoney. Case No. 93-CIV-8417 (SS). US District Court, Southern District of New York, October 10, 1996.
- [32] Zubek J, Bayer L, Shephard J. Relative effects of prolonged social isolation and confinement: behavioral and EEG changes. J Abnorm Psychol 1969;74:625–31.
- [33] O'Keefe M. Analysis of Colorado's administrative segregation. Colorado Springs (CO): Department of Corrections; 2005.
- [34] Dvoskin JA, Petrila J, Stark-Riemer S. Powell v Coughlin and the application of the professional judgment rule to prison mental health. Ment Phys Disabil Law Rep 1995;19:108–14.
- [35] Krelstein M. The role of mental health in the inmate disciplinary process: a national survey. J Am Acad Psychiatry Law 2002;30:488–95.
- [36] Metzner J. Commentary: the role of metal health in the disciplinary process. J Am Acad Psychiatry Law 2002;30:497–9.