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The American Academy of Psychiatry and the Law Practice Resource for Prescribing in Corrections

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1. Statement of Intent

This practice resource is intended as a review of the literature and expert opinion to give guidance and assistance in the provision of psychiatric treatment, with specific reference to psychopharmacology, in correctional facilities. It was developed by correctional psychiatrists with various backgrounds including clinical administration, system consultations, research, teaching, and direct patient care. Some contributors are actively involved in administration, oversight, and academic endeavors related to psychiatric prescribing in jails and prisons. The process of developing this document incorporated a thorough review that integrated feedback and revisions into the final draft.

The original version of this practice resource was published in 2018 as an online supplement to The Journal.[1] Since then, there have been substantial developments in the fields of psychiatry and correctional medicine. The Council of the American Academy of Psychiatry and the Law (AAPL) approved a workgroup to develop this revision on October 23, 2020.

This version was approved by the Council of the AAPL on January 24, 2022. It reflects a consensus among members and experts about the principles and practice of prescribing psychiatric medications in correctional settings. Although recommendations are sometimes articulated when backed by research evidence, ethical standards, or expert opinion, this document should not be construed as a practice guideline, nor as dictating the standard of care. Rather, it is intended to inform practice in this area. Practice guidelines published more than five years ago may require updating and are not considered current by the American Psychiatric Association (APA).[2,3] Yet, this document may cite sections of such practice guidelines when deemed to still be current, relevant, and applicable to correctional practice. Legal cases cited are jurisdiction specific, and the reader is advised to be aware of local laws and regulations.

This practice resource does not present all acceptable current ways of performing psychiatric assessment and treatment and adhering to the approaches and methods set forth herein will not ensure any specific outcome. Differing clinical factors, relevant institutional policies, and the psychiatrist's judgment determine how to proceed in individual clinical scenarios. The parameters discussed are not intended to represent all acceptable, current, or future methods of evaluating inmate patients for medical or mental health disorders and drawing conclusions about the appropriate psychiatric treatment. This practice resource is directed toward psychiatrists and other clinicians who are working in a clinical role in conducting evaluations and providing recommendations related to the treatment of mental disorders in a correctional setting. The terms "psychiatrist," "psychiatric provider," "provider," and "prescriber" are used interchangeably, although they are intended to refer to a professional authorized to

provide psychiatric services, including the prescription of medications. It is expected that any clinician who agrees to engage in psychiatric assessment and treatment has the appropriate qualifications. Nevertheless, physicians who specialize in psychiatry should lead treatment teams that are primarily responsible for the treatment of patients with psychiatric disorders.

2. Introduction and Legal Framework

Individuals with serious mental illness are overrepresented in correctional facilities, with rates in incarcerated persons ranging from 9 to 20 percent.[4] The consequences of undertreatment of serious mental illness are legion. In the community, these problems are linked with a greater risk for unemployment, homelessness, emergency medical care, hospitalization, substance use, suicide, being a victim of crime, engaging in violence toward others, and poor quality of life.[5,6] The life expectancy of persons with mental illness is shortened, most likely related to a combination of medical comorbidities, lifestyle, suicide, accidents, and victimization by others.[7] Although housing in a correctional facility may correct for some of these factors (e.g., access to health care), a higher mortality rate in this group is still observed when compared with incarcerated persons without mental illness.[8]

The management of mental disorders, including serious mental disorders, is optimized by a comprehensive, individualized treatment plan that may include prescribing medication. Besides the professional duty of psychiatrists and other mental health providers to relieve suffering, the treatment of incarcerated persons with mental illness, including pretrial detainees, is guaranteed by the Constitution through *Estelle v. Gamble* (1976) and its progeny.[9–11]

Determining precisely what is constitutionally required in terms of adequate treatment with psychiatric medications is more complicated. Although *Bowring v. Godwin* (1977) extended the holding in *Gamble* to mental health services, the 4th Circuit articulated that mental health treatment was not an absolute right for prisoners, and that "the essential test is one of medical necessity and not simply that which may be considered merely desirable" (Ref. 10, p 48). Furthermore, limitations on mental health treatment could be based on what may be provided at reasonable cost, both of money and of time.

Other appellate cases indicated concern with medications being used indiscriminately for the convenience of staff or prison officials. In *Ruiz v. Estelle* (1980),[12] the U.S. District Court of Southern Texas listed "the components of a minimally adequate mental health treatment program," and called unacceptable the "prescription and administration of behavior-altering medications in dangerous amounts, by dangerous methods, or without appropriate supervision and periodic evaluation" (Ref. 12, p 1339–40). In *Langley v. Coughlin* (1989),[13] the U.S. District Court of New York suggested that "failure to prescribe proper medication," "prescription of inappropriate medication," and "failure to provide any meaningful treatment other than medication" (Ref. 13, p 540) could all be insufficient care under the Constitution.

Health care, or lack thereof, may be considered in violation of constitutional rights when it shows deliberate indifference to a serious medical need.[11] This standard was found applicable to mental health treatment by *Bowring v. Godwin* (1977)[10] and *Guglielmoni v. Alexander* (1984).[14] Deliberate indifference establishes a high threshold for finding a violation of constitutional rights, requiring actual knowledge or reckless disregard of a danger.[15]

The American Psychiatric Association Task Force for Psychiatric Services in Correctional Facilities states that the goal for psychiatric treatment in correctional facilities is to provide the same level of care to incarcerated persons that should be available in the community.[16] Psychiatrists working to provide this level of care in jails and prisons face numerous challenges. In these settings, safety and security concerns typically take precedence over routine health care services. Confidentiality may be limited, whether by law, regulation, policy, or the proximity of correctional officers. Patient-related factors, such as a high rate of personality disorders[17] and malingering,[18,19] neither of which is mutually exclusive with serious mental illness,[20] complicate assessment and treatment. Psychiatrists working in these facilities must cope with operational limitations not typically seen in community settings, such as formulary restrictions that may be more limited than community settings; relatively inflexible structured times for medication administration; scheduled times for movement for school, work, or other programming; and unscheduled security lockdowns. When policies and procedures impact the quality of psychiatric treatment for patients with serious mental illness, especially when long-standing, those pursuing change may encounter resistance.

The goal of this practice resource is to provide a tool for psychiatrists and others prescribing psychiatric medications in correctional facilities. It summarizes the best available evidence for treating mental health problems in inmate patients, or applies guidelines intended for the general treatment of mental disorders to the context of correctional settings. When no evidence specific to incarcerated persons is available, expert consensus is employed.

3. Health Care Operations Related to Medication in Correctional Institutions

3.1. Medication Administration

Ensuring that the right medication is correctly administered to the right patient at the right time within a correctional facility is a challenging and complex process that involves coordinated efforts by medical, mental health, nursing, pharmacy, and custody staff. This section will focus on the essential components of medication delivery that involves the dispensing and distribution of prescribed medications without interruptions.[21]

Psychotropic medications are typically administered by nursing staff individually to each patient on a dose-by-dose basis (i.e., directly observed therapy or (DOT)). Yet, some states allow correctional officers to administer medications to inmates that have been dispensed from the pharmacy. If this is the case, the National Commission on Correctional Health Care (NCCHC) recommends that these staff be specially trained in matters of security, accountability, common side effects and documentation of administration of the medication.[22] Psychotropic medications are usually not "keep on person" (KOP) (i.e., self-administered), because of concerns regarding adherence and misuse, including hoarding for purposes of self-harm (see also sections 6.3., "Medication Nonadherence" and 6.5., "Misuse and Diversion of Psychotropic Medications").

In the authors' experience, several Departments of Corrections allowed select psychotropic medications (e.g., selective serotonin reuptake inhibitors (SSRIs) and serotonin–norepinephrine reuptake inhibitors (SNRIs)) to be provided KOP in the setting of the COVID-19 pandemic beginning in 2020 to reduce traffic at pill call lines and unnecessary encounters with staff. To date, this experience has been safe and effective, and at times may have a positive impact on adherence. We recommend that this practice be restricted to lower-risk medications, and to remain within the province of clinical discretion (e.g., that patients at risk for self-harm be directly observed taking their medication by nursing staff).

The actual setting where medication administration occurs depends primarily on the size of the facility, the patient's custody level, and the patient's housing location. Pill call lines may occur on a scheduled basis within the patient's housing unit or in a centralized location such as a medical clinic or infirmary. In restricted housing (or otherwise locked down) units, nursing staff often go from cell to cell for medication administration purposes. Alternatively, patients receiving medications are let out of their cell, one by one, to go to a nearby nurse's medication cart. Custody and nursing staff should work together during the medication administration process to ensure that the right person is receiving the right medication and that it is ingested.

It is not uncommon for correctional facilities to have only two pill calls daily with the second occurring in the late afternoon rather than at bedtime, which eliminates nighttime medications from being administered at the appropriate time. Limiting medication to two passes instead of three saves nursing time and workload as well as correctional officer escort and supervision time.[23] Still, this is problematic because some medications are appropriate for administration at bedtime for a variety of reasons. Prescribers should consider the medication administration workload of nursing staff and order medication administration consistent with the pharmacodynamics of the medications, clinical appropriateness, and available institutional pill call schedules. For example, medications that are appropriate for administration on a once-a-day basis are usually prescribed in that manner unless divided doses are clinically appropriate. When bedtime medication is clinically indicated, it is appropriate for the latest medication line to occur after 8 p.m., which means establishment of a third pill call for a limited number of inmates.

Considering the concern of misuse of medication in correctional facilities, medications are often ordered by either prescribers or by institutional policy to be crushed by the nurse and administered in liquid (i.e., floated) to minimize the risk of cheeking or palming the medication by the inmate for later use or diversion. (See also section 6.3., "Medication Nonadherence.") Crushing tablets is always time

consuming for nursing staff, may alter the pharmacokinetics of the medicine, increase the risk of adverse drug reactions, pose a danger to the nurse exposed to the particles, and be contraindicated by the manufacturer.[24] Although serious harm from this practice has rarely been described, we suggest that prescribers and institutions consult with a pharmacist prior to instructing a nurse to alter the form of the medication.[25] If a liquid form of the medication is available, this may be a reasonable alternative to "crush and float."

The medication administration process should be timely, efficient, and make allowances for operational barriers to optimize adherence.[23] Prescribers need to be familiar with the facility's policies and practices relevant to medication administration as well as the patient's programming assignments because they may have an impact on adherence. For example, if patients expect a long wait in a pill line during uncomfortable weather, many will choose to skip this experience. Staggering access to pill call lines by housing units and providing shading during the summer months can improve medication adherence. A job assignment could preclude a patient from attending a particular pill call line. It is appropriate to consider prescribing the medicine at a time compatible with the patient's work and programming schedule. Prescribers should also know the times that medication passes are scheduled and advocate for appropriate medication administration times if the current schedule is problematic. The timing of pill call should not interfere with meals, program assignments, visitation, or recreation, and should be jointly decided by the health care authority and facility administrator.[21,22]

Documentation via the medication administration record (MAR) contemporaneous with the administration of the medication is essential. The use of an electronic MAR (eMAR) facilitates such documentation and can be helpful in identifying medication nonadherence (see also section 6.3., "Medication Nonadherence"). Delays in the medication administration process can be caused by inmate questions, requests, and refusals. Knox[21] (2015) recommends that simple questions be answered during the medication administration process but complicated questions be deferred until after the pill call is over, or until later in the day, when the nurse has time to sufficiently address them.

Housing changes and unexpected lockdowns (e.g., emergency temporary closure of an area due to a facility disturbance) challenge the continuity of medication administration. Timely communication of housing changes by custody to nursing staff will reduce lapses in the medication administration process. Consistency of nursing staff, especially on mental health units (MHUs), will result in more efficient medication administration. Such consistency is difficult to accomplish when registry (i.e., per diem or locum tenens) nursing staff are used for relatively short periods of time, which results in frequent nursing turnover.

3.2. Pharmacy and Therapeutics Committees and the Formulary Process

In 2015, health care expenditures in state prisons totaled $8.1 billion, an estimated 20 percent of total state prison expenditures.[26] In an earlier survey, pharmaceutical costs comprised 14 percent of prison health care costs.[27] Most state departments of corrections and large jail systems use a formulary process for utilization management and cost containment.[28]

Pharmaceutical costs can be controlled without sacrificing the quality of correctional health care. For example, the Legislative Analyst's Office (LAO) from California during February 2005 reported that the California Department of Corrections was paying retail rather than wholesale prices for parolee medications.[29] Changing drug procurement practices, improving the administrative structure and management tools of the pharmacy program, and modifying the drug formulary process were among the effective recommendations made by the LAO.

Some correctional systems (e.g., the Texas Department of Criminal Justice and the New Jersey Department of Corrections) have been successful in partnering with eligible covered entities (University of Texas Medical Branch and Rutgers University Correctional Health Care respectively) to participate in the 340B Drug Pricing Program under Section 340B(a)[4] of the Public Health Service Act.[30] Covered entities under the Act include institutions other than hospitals, although correctional health systems cannot qualify for the 340B program on their own. Although participation in the 340B program is complex and requires dedicated resources, these partnerships allow organizations to obtain covered outpatient medications at significantly reduced prices. Partnerships are often designed to drive down costs and improve services related to major cost drivers such as HIV antiretrovirals, hepatitis C antivirals, and psychotropic medications.

An effective Pharmacy and Therapeutics (P&T) Committee will help to ensure the safe, rational, evidence-based, economical, and standardized use of medications in addition to providing overall direction to pharmacy services. Perhaps the most important role of the P&T Committee in corrections is developing, managing, reviewing, and updating the medication formulary for medical, dental, psychiatry, and specialty services. Correctional formularies have been the subject of litigation, although courts have generally sided with facilities as long as they allow for appropriate medication options to treat serious medical needs.[31]

A formulary is a living document and the current preferred list of medications for the institution approved for use by physicians and other prescribers. Having a formulary does not prohibit the use of nonformulary medications when they are determined to be clinically necessary. Designated formulary medications may have restrictions on their use (e.g., opioids and other narcotics for pain management, psychostimulant medications for attention-deficit/hyperactivity disorder (ADHD), and the use of medications for opioid use disorder (OUD)). Preauthorization for nonformulary medications may be required related to either their cost, safety, or if prescribed by nonspecialists.[32] Besides cost, factors to consider include frequency of dosing, medication formulation (immediate or sustained release), storage (shelf life, expiration, and temperature), adverse drug reactions, medication errors, efficacy compared with other agents (through medication use evaluations), and correctional specific concerns such as the risk of misuse or diversion, and safety (e.g., a glass container or sharp that could be used as a weapon). Thoughtful formulary decisions are expected to improve the quality, safety, and effectiveness of the health care provided. When a medication is made less accessible to correctional providers for any reason, it is appropriate for P&T committees to make viable alternative medications readily available to physicians and other prescribers.

Other roles for the P&T Committee include development of clinical guidelines related to medication management; monitoring medication utilization; reviewing, developing, approving, revising, and monitoring compliance with pharmaceutical policies and procedures; management of manufacturer drug shortages; reviews of medication errors; development and revisions to disease management guidelines; development and promulgation of patient education materials; and periodic reviews of medication use evaluations and denied applications for nonformulary agents. Policies and procedures may address selection, procurement, prescribing, storage, security, compounding, distribution, and administration of medication. Sometimes an order for "crush and float" is promulgated by a P&T committee to address a medication's risk for misuse or diversion. (See also section 3.1., "Medication Administration.") A general order of this nature can be predicted to have a large-scale impact on nursing time and may present occupational risks from exposure to the crushed product. The pharmacologic properties of the medication for individual patients will also be altered. All general orders originating from P&T committees should be carefully considered, continually re-evaluated, and allow for clinical exceptions.

The P&T committee is typically established by the agency's health care policies and procedures, which should clearly articulate the authority of the P&T committee to carry out the aforementioned functions.[32,33] The core membership of the P&T committee may include a health care executive, the medical director, the director of nursing, the chief psychiatrist, the chief dentist, and the director of pharmacy. Other members may include frontline clinicians, perhaps on a rotating basis to be more inclusive, to inform the committee about facility-specific concerns, and to educate the line staff regarding the P&T process. It is not unusual for the P&T committee to consult with specialists on an as-needed basis or to form subcommittees to develop disease management guidelines or other matters that require specific expertise.[33]

When a nonformulary medication is indicated, the prescribing clinician should complete a request form designed to specify the prescriber's justification for use of the requested medication. A formal process for submitting and reviewing such requests should be established by the P&T committee. It is clinically appropriate to have a process in place that allows patients to continue nonformulary medications prescribed in the community until these can be reviewed by a prescriber, especially psychotropics with more unique methods of action or with pharmacokinetics that do not safely allow immediate substitution.

The P&T committee may participate in systemic quality improvement (QI) by reviewing the usage of formulary medications, tracking the percentage of nonformulary requests that are approved as well as the percentage of inmates on medications who are receiving a nonformulary medication, and monitoring off-label

prescribing (see also section 3.3., "Quality Improvement"). The P&T committee may choose to restrict certain medications, perhaps even for specific indications, based on developments in research and practice guidelines.

3.3. Quality Improvement

A QI process is an essential component of an adequate correctional mental health system.[34,35] A significant discrepancy often exists between what a clinician or health care administrator believes is or is not occurring within the health care services and what is actually occurring. This is particularly true in the context of the medication management system as there are multiple variables that impact whether the right inmate is correctly being administered the right medication at the right time. Such variables include, but are not limited to, the following:

- scheduling the patient for an evaluation by a psychiatrist (or another appropriate prescriber)
- timely completion of a psychiatric evaluation
- issuance of a medication order
- processing of the order by nursing staff
- receipt and processing of the order by the pharmacist
- receipt of the medication by the nursing staff
- administration of the medication to the patient intended by the order

If any of these steps did not occur, it is likely that the patient did not receive the appropriate medication in a timely manner. The reason that a step was omitted or delayed requires further exploration in a QI process to determine whether the underlying problem is systemic or related to other factors (e.g., individual errors, training needs, etc.) In general, there are multiple possibilities for a failure in this chain of events. For example, medication might be dispensed in a timely manner from the pharmacy, but the patient may not receive it due to failure to show for pill call, refusal, transfer to a different facility, a lockdown, nursing staff shortage, or other reasons.

Other examples of QI indicators specific to medication management include:

- new medication orders that are administered in a timely manner (e.g., within 24 hours of receiving the order)
- continuity of medication administration (e.g., medications administered without interruption following a patient's transfer to a different unit or facility or medications ordered on discharge from the mental health infirmary that were continued without interruption)
- documentation on the MAR of medications that were ordered but not dispensed
- prompt reporting of incidents of medication nonadherence to the psychiatrist, with appropriate follow up
- medication renewal on schedule
- appropriate follow-up re-examinations prior to medication renewal
- ordering, reviewing, following up, and documenting appropriate laboratory tests
- tracking of nonformulary requests to include percent of all prescriptions, percentage approved, time required for approval, and reasons for rejection
- informed consent (e.g., timeliness and documentation)
- documentation of the clinical indication for the medication at the prescribed dose
- use of the abnormal involuntary movement scale (AIMS) as clinically indicated
- medication errors, including type, frequency, causes, and adverse reactions
- medication administration (e.g., wait times, protection of patients from extreme weather conditions, mouth checks, proper nursing identification of patients prior to medication administration, correct preparation and administration, and MAR documentation of administration)
- reconciliation of MARs with chart medication orders
- laboratory screening at appropriate intervals for specific medications (e.g., serum levels for lithium or anticonvulsants, metabolic monitoring, and electrocardiograms in the setting of starting antipsychotics prone to QT prolongation or when cardiac risk factors are present[36])

Some QI reviews or initiatives may be addressed by P&T committees, although a separate QI committee may also be appropriate. Representation from custody and administration staff is valuable in addressing some quality concerns such as medication diversion (including issuance of disciplinary infractions for medication misuse).

Whenever possible, line staff may be encouraged to participate in local QI initiatives. Health care staff may not be familiar with the actual mechanics required to perform a proper QI project, so it is of

value to provide training on methods such as Plan-Do-Study-Act:[37]

- identify the problem, form a performance improvement (PI) team, and collect baseline data
- brainstorm solutions and implement changes
- collect follow-up data
- if improvement occurs, act on and report findings

The reader may find the revised 2021 correctional managed health care QI plan from the Texas Department of Criminal Justice System to provide a useful framework for a correctional-based QI system.[38]

A robust QI process will facilitate an effective and efficient medication management process within the correctional facility.[39]

4. General Prescribing Matters

4.1. Continuity of Care

A fundamental goal of correctional psychiatry is to provide timely access to mental health services and psychotropic medication treatment to patients who need them, regardless of custody level, disciplinary or legal status, and housing location. Mental health treatment involves more than just prescribing psychotropic medication, and psychiatrists should not be limited to this role.[16] Inmate patients need access to appropriate psychiatric treatment equivalent to what should be available in the community.[16]

Ensuring continuity of psychotropic medications is a major challenge in correctional settings. For example, during receiving (i.e., intake) screening, transfer screening for intra-system transfers (e.g., a transfer from an intake unit to a permanent unit), or initial health assessment, patients with mental disorders may not be able to provide complete or accurate information regarding their medication history (e.g., medication names, dosages, and schedules). Information from community providers and pharmacies rarely accompany a patient on such transfers. Typically, a signed release of information is required to request treatment records. Intake staff may be able to contact the community pharmacy to verify the current prescription before the patient is seen by a provider.[32] Although electronic medical records may facilitate communication between providers, unless an inter-agency agreement for sharing of information exists, there may be delays in verifying psychotropic medications, diagnoses, and recent treatment dates.

Both NCCHC standards[22,39,40] and APA guidelines[16] require that incoming inmates receive an appropriate mental health screening and that those with positive screens receive a mental health evaluation. Mental health screening includes asking about current treatment with psychotropic medications. Some psychoactive agents are not immediately available in all jails and prisons, which may affect medication continuity for incoming inmate patients. Many correctional systems restrict the prescribing of controlled medications such as benzodiazepines (except for limited uses such as alcohol and benzodiazepine withdrawal) and psychostimulants that pose a high risk for misuse, dependence, and diversion. Many correctional systems use formulary management or other strategies to limit the availability of agents with a high potential for misuse, and to reduce the significant cost of psychotropic medications when equally effective but lower-cost alternatives are available (see also sections 3.2., "Pharmacy and Therapeutics Committees and the Formulary Process" and 6.5, "Misuse and Diversion of Psychotropic Medications"). When a specific psychotropic medication is clinically indicated but not available, the correctional psychiatrist needs to either identify an appropriate alternative or advocate for access to the medication (such as via a backup pharmacy) to preserve continuity of care.

Delays in continuing treatment with psychotropic medications when patients with serious mental illness enter a correctional facility may result in clinical deterioration, a mental health emergency, or other adverse events. Those reporting recent mental health treatment require timely assessment by health care staff and referral when appropriate for a psychiatric evaluation.[16] Medical or psychiatric staff can order bridging medications, if indicated, prior to that evaluation. Nevertheless, this practice requires caution when staff are unable to verify a patient's self-reported medication history. Although changes to an established treatment regimen should be based on an appropriate assessment and sound clinical reasoning (see also section 4.4., "Assessment"), incarceration provides an opportunity to evaluate the necessity or appropriateness of psychoactive agents that a patient was receiving in the community.[41]

Occasionally, medications are not transferred with inmates when they move between facilities (e.g., from jail to prison, vice versa on remand, or from a prison intake unit to a permanent unit). This can inappropriately interrupt medication continuity until the

medication is transferred or the pharmacy dispenses a new supply. The latter scenario may require a new order and additional time to fill, package, and ship the medication to the new facility. There is increasing recognition of the need for effective pharmacy operations within correctional systems. Delays in processing or delivering prescriptions by correctional pharmacies can contribute to medication discontinuity and clinical decompensation.[21,42] A well-managed correctional pharmacy needs a backup plan to timely obtain medications that they do not stock from an off-site pharmacy.

In some cases, incarcerated persons in a mental health crisis may be transferred to a local emergency department, community psychiatric hospital, or state hospital for evaluation or inpatient treatment. Similarly, defendants housed in jails might be sent to a state hospital or other off-site forensic facility for evaluation or restoration of competency to stand trial. Doctor-to-doctor communication, either verbally or via a written transfer document, may improve outcomes by helping the receiving facility to be aware of the current treatment and recent changes that might have contributed to the need for transfer. The return of inmate patients from off-site psychiatric settings often poses challenges to medication continuity. For example, medication formularies or procedures for involuntary treatment may differ between the facilities. The psychiatrists for such returning patients are advised to obtain a discharge summary from the sending facility.

Records of outside prior treatment can be integral to clinical and risk assessments. In jails, where length of stay can be relatively short, obtaining such documentation in a timely manner can be challenging. Longer lengths of confinement in prisons can provide the opportunity to obtain more extensive records. In jails where a rapid return to the community is common, effective communication among psychiatrists is an integral part of continuity of care. This is particularly the case in handoffs upon entrance to or exit from a correctional facility and when release occurs before clinical resolution of substance intoxication, substance withdrawal, acute psychosis, or suicidal states. Open communication with community clinicians can significantly improve the quality of care as well as the process of re-entry from jails and prisons.[43]

Ensuring medication continuity after inmates return to the community is essential to reducing the risk of relapse. A study of a Midwest jail system found that planning for medication continuity for released inmates was uncommon, and that staff saw a need for increased communication between these facilities, human services agencies, and community providers.[44] Discharge planning for inmate patients returning to the community may be difficult, especially when releases happen precipitously (e.g., from jails), but it is not optional. In *Charles v. Orange County* (2019), the 2nd Circuit found that discharge planning by correctional facilities for the seriously mentally ill is a serious medical need protected under the Constitution.[45]

Discharge planners should arrange for a supply of psychotropic medications or refills to last until the patient can be seen by a community mental health provider. The methods utilized to enhance the likelihood of medication continuity in the community include stabilizing a patient's mental health prior to release, using psychotropic medications that are available and not cost prohibitive in the community, and using long-acting medication formulations.[16,21] For patients anticipated to leave on parole status, it may be possible to coordinate with the parole department to make adherence with mental health treatment a condition of parole. Transition planners should link those with serious mental illness with timely appointments for long-term, community-based mental health programs.[46] Community-based case management services can help released offenders continue to receive long-term mental health services.[47] Growing evidence indicates that community re-entry initiatives play a vital role in improving continuity of care for inmate patients with mental illness.[48]

4.2. Coordination with Custody Staff

Delivering psychiatric care in correctional facilities requires active collaboration with custody personnel to effectively navigate the complex matrix of official and unofficial rules, roles, relationships, and communications. Efforts to develop positive relationships with custody staff can yield significant dividends for psychiatrists and their patients. Collaborative relationships contribute to lowering barriers to providing care, including ready access to security escorts, flexibility in scheduling appointments with inmates, expedited movement of the clinician within a facility, and obtaining information to enable the psychiatrist to work more effectively with patients and other staff.

Effective collaboration requires a foundation of mutual respect, cooperation, and ongoing communication.[49] The key elements necessary to build successful working relationships with custody staff include respecting safety and security, valuing the multidisciplinary approach, and appreciating the challenges faced by correctional officers. Relationships between psychiatrists and custody personnel can become strained when clinical interventions run counter to standard correctional practices.[16]

Psychiatrists navigating in the correctional environment need to successfully communicate and interact with staff who operate in a structured chain of command. This chain includes a hierarchy, from line officers to supervising officers, with progressive ranks up to the facility warden or chief administrator. Interactions between inmates and custody staff occur regularly in general population settings, specialized housing (e.g., Mental Health Units), special watch statuses (e.g., mental health watch), and in restricted housing units (see also section 6.1., "Special Settings"). Competent and effective communication supports both security and clinical missions.

Patients in correctional settings are entitled to confidentiality in terms of their mental health care, although with exceptions, some shared with community settings and some unique to corrections. Limits of confidentiality may or may not be defined by state statute, regulations, or institutional policy. Reasonable examples that might require a breach of confidentiality include danger to self or others, inability to care for self, or posing a threat to security (e.g., escape, riot, or drug distribution). When necessary, disclosure of otherwise confidential information to nonclinical staff should be limited to the minimum necessary standard.[16]

Successful coordination with custody staff stems from being available for consultation and attempting to align on mutual goals. Inmates with active psychiatric symptoms can affect the safety and efficiency of day-to-day operations in a correctional facility. Suboptimal adaptation of inmates to the correctional environment can lead to behavioral dysregulation and disruption, which taxes staff resources, creates stress for officers, and increases the risk of injury for inmates and staff. Problem solving is most effective when communication underscores shared responsibility.[50] Psychiatrists have much to contribute in helping to stabilize the environment for the benefit of both inmates and officers. Officers

and psychiatrists can serve as resources for each other, and in doing so, develop positive relationships built on confidence and trust.

Psychiatrists may be involved in formal or informal training to help officers understand common symptoms and signs of mental illness in incarcerated persons, along with psychological and behavioral manifestations of stress in both inmates and staff. Psychiatrists can provide valuable information to help the officer identify when an inmate is having troubles that go beyond an expected reaction to typical stressors in the correctional environment and thus may pose a risk to self, peers, or staff. Alleviating symptoms of mental illness reduces the stress level of both inmate patients and the correctional staff that work with them.

Custody may serve as a resource to psychiatrists in a variety of ways. Health care staff have relatively little contact with inmate patients, in contrast with custody staff who are present in the facility 24 hours a day. Thus, officers can serve as the psychiatrist's "eyes and ears" within the institution and are typically the first to spot changes in routines and behaviors. The information provided by officers can assist the psychiatrist with diagnosis, implementation of treatment plans, and ongoing risk assessment and management for patients. Useful information includes observations of interpersonal interactions, adaptive and maladaptive responses to events, attitude, personality style, and hygiene. The interpretation of officers' observations can alert psychiatrists to signs of neurovegetative symptoms and medication side effects (e.g., akathisia or dyskinesia). Information from custody staff may illuminate the consistency between a self-report and observed behavior, thus aiding in narrowing a differential diagnosis. In many correctional settings, officers accompany nursing staff during medication administration on the cell blocks or at pill calls, allowing them the opportunity to interact daily with those receiving psychotropic medications. Officers can provide information about medication adherence, use (or misuse) of KOP medications stored in the inmate's cell, and behaviors that may increase the risk of self-harm, including hoarding over-the-counter medications.

Officers can provide additional information that may clarify the context, circumstances, and conditions impacting an inmate's experience. This includes changes in institutional security classification, results of cell searches, reports of personal and professional visits, and the content of shift and behavior logs.

Reports of stressors are particularly important, including the inmate's receipt of distressing news or changes in behavior during or following phone calls and scheduled visitations.

Monitoring for illicit substance use in correctional settings is a complex process that involves correctional and healthcare staff. One means of detecting illicit substance use in correctional facilities is toxicology, which typically involves obtaining urine samples but also may involve the collection of saliva, hair, or blood. There are many steps from the point of collection to final interpretation of results and subsequent security actions. Depending on facility policies governing toxicology screening, the role of the psychiatrist may be nebulous. Given that disciplinary sanctions may result from toxicology results, correct interpretation is important. To minimize dual agency or the appearance thereof, we recommend that an independent medical officer consult with the correctional facility about false positives. In systems that lack a designated medical professional who is competent in the interpretation of toxicology screens, the psychiatrist may be asked whether a positive result could be explained by the inmate patient's prescribed medications. Although psychiatric medications are not the only class of pharmacologic agents that can cause false-positive results in urine toxicology screens, they are frequent culprits. In such a situation, the psychiatrist should obtain consent from the patient (preferably written, if practicable) and disclose the minimum amount of information necessary. Correctional facilities, when obtaining a sample for forensic purposes, may seek consent in advance for such limited communication if needed.

Several psychiatric medications can cause false-positive results in immunoassay drug screens.[51] Bupropion, chlorpromazine, and trazodone have been associated with false-positive amphetamine or methamphetamine screens.[51] Amisulpride, sulpiride, quetiapine, chlorpromazine, clomipramine, and thioridazine have been associated with false-positive opiate screens.[51] Sertraline has been associated with false-positive results for benzodiazepines.[51] Lamotrigine and venlafaxine have been associated with false-positive phencyclidine results.[51] Quetiapine may also cause a false-positive for methadone.[52] The list of psychiatric medications that cause false-positive LSD results includes amitriptyline, benzphetamine, bupropion, buspirone, chlorpromazine, desipramine, doxepin, fluoxetine, haloperidol, imipramine, risperidone, sertraline, thioridazine, and trazodone.[51]

A distinction should be made between the aforementioned discussion of forensic (i.e., for the purpose of determining whether an inmate has committed a crime or a rule infraction) and clinical (i.e., for the purposes of diagnosis and treatment) toxicology testing. The NCCHC prohibits the participation of health care staff from collecting information for forensic purposes.[53] Clinical toxicology testing will be ordered by a medical professional for medical purposes and is protected by confidentiality unless otherwise specified in statute, regulation, or institutional policy. Should confidentiality not be guaranteed in this scenario, this should be disclosed to the patient prior to testing.

4.3. Coordination with Other Professionals

Correctional psychiatrists do not work in a vacuum. Many other noncustody professionals provide services and are key partners in delivering care and treatment to their patients. The mental health team may include psychologists, counselors, mental health nurses, and mental health assistants. The broader health care team may include primary care physicians, specialty consultants, nurse practitioners, physician assistants, nurses, nursing assistants, pharmacists and pharmacy technicians, and medical records personnel. Psychosocial services may also be provided by noncustody corrections personnel such as case managers, social workers, recreation staff, educational staff, vocational trainers, civilian work supervisors, and chaplains. Volunteers from the community may provide tutoring, pastoral counseling, religious services, leisure activities, and services in support of Alcoholics and Narcotics Anonymous programs. The professional staff that interact with incarcerated persons can provide valuable information to assist in diagnosis, implementation of treatment plans, and ongoing risk assessment and management.

The size and breadth of the health care team depends on the size of the facility and inmate population. Large jails and prisons may have extensive teams, while smaller facilities may have only a solo medical practitioner. Primary care clinicians may evaluate inmate patients in acute care, general, or chronic care disease-based clinics (e.g., diabetes, infectious disease, respiratory, cardiac, renal, and anticoagulation clinics). Correctional systems may contract with specialty physicians to run clinics onsite, via telemedicine, or

may transport inmate patients into the community for services.

Pharmacists and particularly specialty trained psychiatric pharmacists strengthen the medical and mental health team by providing additional expertise in chronic disease clinics and psychotropic medication therapy management. Thomson *et al.*[54] (2019) suggested that pharmacists in correctional facilities may work with psychiatrists to ensure that medications prone to misuse are prescribed appropriately, citing a prison study that showed that such collaboration reduced the use of benzodiazepines by 37 percent.

Ideally, psychiatric care in correctional facilities is delivered in a collaborative multidisciplinary context. Clear and open communication between the primary care medical team and the psychiatrist is a critical component of effective, quality-driven health care. Psychiatrists in correctional settings may be consulted by the medical team for reasons including distress related to medical problems, emerging psychiatric symptoms, and (when in doubt) an inmate patient's capacity to give (or decline) informed consent. Psychiatrists may collaborate in the care of complex medical conditions that co-occur with emotional and psychological symptoms including hepatitis C and its treatment. Conversely, primary care clinicians may assist in monitoring and managing complications and side effects of psychiatric treatment (e.g., metabolic complications and constipation).

Communication and collaboration with nursing staff is essential. Nurses are typically the medical staff members with the most frequent clinical contacts with patients and are in an advantageous position to relay important observations and information to the psychiatrist. Nurses typically conduct "sick call" clinics to screen requests for care, to provide appropriate initial treatment, and to make any necessary referrals. This triaging process can be a significant source of referrals to the psychiatrist. Nursing staff dispense medications that are designated keep on person (KOP), and they administer DOT medications during pill calls. Nurses may also see patients during health care rounds in general population or restricted housing units. Nurses may relay information such as lab test results, behavior of inmate patients on observation, medication adherence, and response to treatment.

Nonprescribing mental health staff are important partners in delivering and monitoring care. These professionals may provide screening services for inmates at admission, upon inter-facility transfer, and at critical times such as transfer from general population to restricted housing. They may also be responsible for rounds in restricted housing, an important component of surveillance for decompensation in this environment. Mental health clinicians may provide psychotherapy either as a crisis intervention or as part of the overall treatment plan. These additional clinical contacts can be an important source of information about medication response, medication adherence, and adaptive functioning.

Nonclinical correctional professionals have a significant influence on incarcerated persons and can be important additional allies in providing relevant clinical information. Educational staff offer classroom and individual instruction. With their frequent contacts, teachers may be in the best position to describe an inmate patient's cognitive and behavioral abilities, attention, and response to treatment (i.e., for ADHD). Correctional case managers monitor sentence length and release dates, and work with incarcerated persons to develop re-entry plans and support networks inside and outside the facility. Recreational staff can share valuable information about physical limitations and behavior with peers. Correctional chaplains play a vital role in the spiritual lives of inmates who request their services. They provide pastoral and supportive counseling in a manner consistent with the individual's faith and belief system. It is important to understand the meaning of spirituality and the role of religious practice for an inmate patient receiving psychiatric treatment and to make appropriate referrals to this important source of support. Consultation with the chaplain may be appropriate when a religious practice (e.g., fasting) potentially interferes with treatment. A well-trained and clinically sensitive chaplain can be an integral part of the wider treatment team.[16]

4.4. Assessment

Appropriate decision-making regarding prescribing (including a decision to not prescribe) is dependent upon quality assessment. Although psychiatric evaluations in jails and prisons may be challenging because of operational and clinical aspects that differ from community settings, a comprehensive and well-formulated assessment should still be the intent. This section describes the elements of the psychiatric assessment of greatest importance for identifying and documenting a patient's medication needs when they are incarcerated. It is not intended to describe all the elements of a full

psychiatric assessment. Guidance regarding evaluations for administrative (e.g., program placement) or forensic (e.g., competency to stand trial) purposes, and how to conduct a complete assessment of suicide and violence risk, is beyond the scope of this practice resource but can be found in the AAPL's Guideline for the Forensic Assessment;[55] the American Psychiatric Association's Task Force Report on Psychiatric Services in Correctional Facilities, Third Edition;[16] and the American Psychiatric Association Practice Guideline for the Psychiatric Assessments of Adults, Third Edition.[56]

A referral for a psychiatric evaluation can originate from many sources: custody, administration, medical providers, nursing staff, other mental health clinicians, family members, legal advocates, or a self-referral. Prior to the initiation of a psychiatric evaluation, a medical screening assessment should be completed by facility nursing or medical staff that includes vital signs and a focused physical examination as necessary. This is particularly important in jail settings where individuals are admitted directly from the community and may demonstrate behavioral changes for a variety of nonpsychiatric reasons (e.g., head injury, diabetic ketoacidosis, and renal failure) as well as substance-related intoxication or withdrawal.

The important goals for initial psychiatric evaluation include preliminary diagnostic impression, assessment of suicide and violence risk, and treatment recommendations. Besides history from the patient, valuable information may be gleaned from the referral source, the institutional medical record, the physical exam, diagnostic tests, custody or classification records, community care providers, and collateral sources, such as family members and legal advocates.

The setting of the evaluation is an important first consideration (see also section 6.1., "Special Settings"). Reasonable steps should be taken to optimize patient confidentiality while also respecting the safety of the psychiatric evaluator and others. For example, an individual housed in a dorm setting or cell block should be evaluated in a separate office or room rather than bedside or cellside. For restricted housing settings, where out-of-cell movement is more controlled, arrangements may need to be made in advance with custody for the evaluation to occur in a confidential setting. When applicable, the impact of telepsychiatry on the assessment must also be considered.[57]

When the patient does not speak the same language as the psychiatrist, the resulting communication barrier presents a substantial clinical challenge.

A common practice in correctional settings is to use bilingual inmates or nonclinical staff for interpretation. The dangers of this approach include a lack of confidentiality, reluctance of the patient to share information via a nonconfidential interpreter, undue influence conferred by an interpreter, and poor quality of interpretation.[58] Considering these risks, for nonemergency psychiatric evaluations, the utilization of either clinical staff or a qualified, confidential interpreter, either in person or with a certified telephonic interpreter is recommended. Interpretation for hearing-impaired patients may be more challenging, although it may be achieved with an American Sign Language interpreter, either in person or via Health Insurance Portability and Accountability Act-compliant video conferencing, or by using a captioned telephone.

We suggest that the psychiatrist perform as comprehensive an evaluation as the circumstances allow. While interviewing the patient, important elements of history to obtain from the patient include

- presenting problems
- current stressors, including interactions with cellmates and other peers, correctional officers, and other staff; lack of access to desired health care; bad news from the community; disciplinary infractions; dissatisfaction with housing; and gang involvement
- current and historical psychiatric disorders and associated symptoms
- comprehensive substance use history, including misuse of alcohol, tobacco, illegal drugs, prescription medications, and nontraditional illicit substances such as synthetic cannabinoids
- if substance use disorder (SUD) is identified: recent use of substances; history of withdrawal symptoms, abstinence, and treatment (including medications to treat SUDs); and relationship (if any) between substance use and psychiatric symptoms
- psychiatric treatment history, including emergency, inpatient, and outpatient care
- psychiatric medication treatment history (e.g., type, duration, dosages, efficacy, and side effects)
- history of medication nonadherence and involuntary medication treatment
- current medications, allergies, and chronic medical conditions
- history of head injuries and any sequelae

- family history of mental illness, SUDs, and suicide
- social history, including cultural origins, educational level, occupational history, sexual and reproductive history, and military service
- trauma history, including adverse childhood events, physical or sexual assault as an adult, and chronic sociocultural trauma, such as from poverty, racism, or incarceration
- criminal and juvenile justice history (including prior experience with and adjustment to incarceration)
- history of self-harm and suicide attempts
- history of violence towards others

Psychiatric providers should perform a mental status examination to assess for the individual's appearance, behavior (including involuntary movements), speech, mood and affect, thought content (e.g., hallucinations, delusions, obsessions, compulsions), thought processes, insight, and cognitive functioning.[59]

Environmental factors in correctional settings are relevant to diagnostic formulation. Sleep deprivation, fear, anxiety, mistrust, and mood symptoms are potential responses to incarceration and may resolve or reduce in intensity once an individual has acclimated to the environment. Diagnosis and prescription of medication based on time-limited symptoms may expose an individual to unnecessary treatment, side effects, and potentially stigma. In contrast, mistrust of health care personnel is common in correctional settings, especially where the health care and custody staff are employed by the same agency. Incarcerated individuals with such misgivings may underreport or hide symptoms.

The American Psychiatric Association Diagnostic and Statistics Manual suggests that greater suspicion for malingering is appropriate in a medicolegal context,[60] and studies have identified high rates of malingering in jails[18] and prisons.[19] Inconsistencies between symptoms and behavior, atypical symptoms, and rational ulterior motives for presenting symptoms (e.g., housing changes, special privileges, avoiding culpability or punishment for institutional infractions, and obtaining medications for nonclinical purposes) may alert correctional psychiatrists that the patient may be feigning or exaggerating illness. Malingering is a diagnosis of exclusion in any setting. Referral for psychological testing, if possible, may help to clarify whether malingering is present.[55] Yet, malingering and serious mental illness are not mutually exclusive,[61] and malingering mental illness may be an adaptive method to seek help for legitimate institutional problems (e.g., harassment or other conflicts with peers or custody staff).

The psychiatric assessment should be clearly and concisely documented in a timely manner and in a format that is easily accessible to other members of the health care team. Treatment recommendations for medication, medication monitoring, and frequency of follow-up visits with a psychiatrist should align with the diagnostic assessment, clinical formulation, and institutional policies.

Clinical judgment may guide the frequency of follow-up visits. We suggest having more frequent contacts with patients having active psychiatric symptoms or side effects, recent medication changes (including discontinuation), known serious institutional or outside stressors, or medications prescribed over objection in accordance with institutional policy.

4.5. Patient Education and Psychotherapeutics

The effectiveness of psychotherapy for many psychiatric disorders, either as monotherapy or as an adjunct to medication, has been well established. Positive outcomes for combined treatment with both medication and psychotherapy have been demonstrated for mood disorders,[62] anxiety disorders,[63] adult attention-deficit disorder,[64] and personality disorders,[65] among others. Psychotherapy can be of value even for the most serious mental illnesses, including schizophrenia.[36,66]

Providing psychotherapy in jails and prisons presents several unique challenges.[67] Facility staffing patterns may not be sufficient for providing meaningful psychotherapy beyond merely monitoring of the prisoner's clinical status. Frequent patient turnover (due to releases, interfacility transfers, or intrafacility relocations) is expected to disrupt long-term treatment. Limitations on real or perceived confidentiality, staff turnover, and general distrust may be barriers for engagement.[68]

Nevertheless, the available treatments for psychiatric disorders in correctional settings cannot be restricted to medications alone.[13] In a county jail survey, patients there found group therapies to be positive, an opportunity to pass time and get out of the cell, and (when not redundant or irrelevant) an opportunity to facilitate learning.[68]
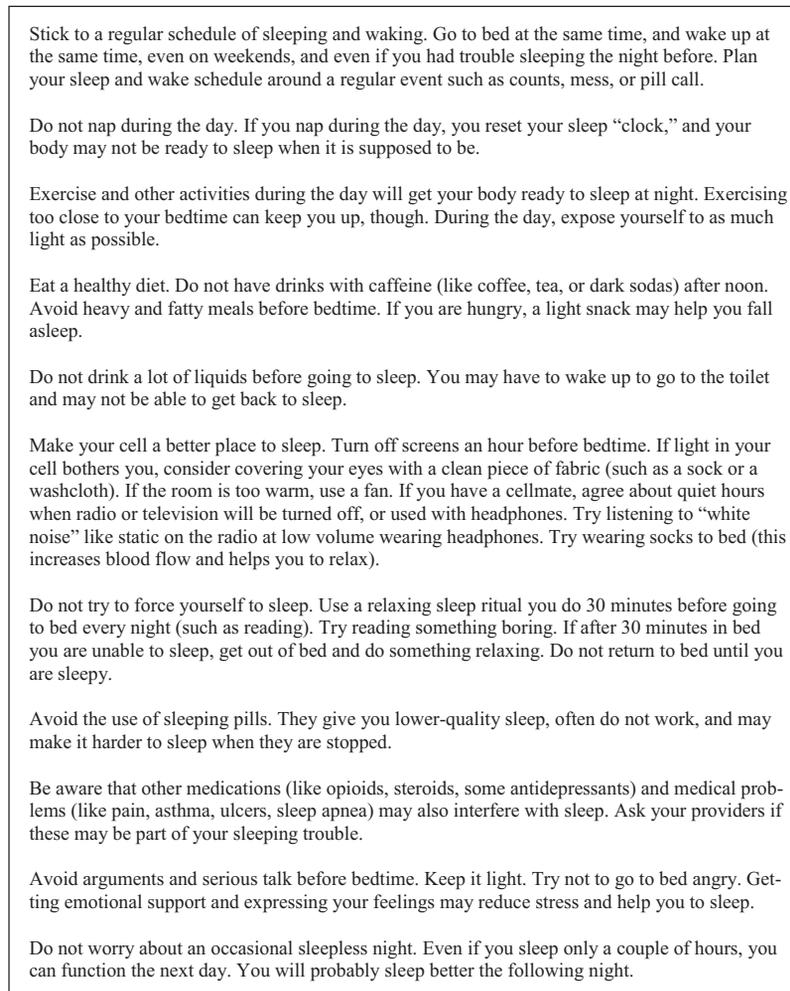
Stick to a regular schedule of sleeping and waking. Go to bed at the same time, and wake up at the same time, even on weekends, and even if you had trouble sleeping the night before. Plan your sleep and wake schedule around a regular event such as counts, mess, or pill call.

Do not nap during the day. If you nap during the day, you reset your sleep "clock," and your body may not be ready to sleep when it is supposed to be.

Exercise and other activities during the day will get your body ready to sleep at night. Exercising too close to your bedtime can keep you up, though. During the day, expose yourself to as much light as possible.

Eat a healthy diet. Do not have drinks with caffeine (like coffee, tea, or dark sodas) after noon. Avoid heavy and fatty meals before bedtime. If you are hungry, a light snack may help you fall asleep.

Do not drink a lot of liquids before going to sleep. You may have to wake up to go to the toilet and may not be able to get back to sleep.

Make your cell a better place to sleep. Turn off screens an hour before bedtime. If light in your cell bothers you, consider covering your eyes with a clean piece of fabric (such as a sock or a washcloth). If the room is too warm, use a fan. If you have a cellmate, agree about quiet hours when radio or television will be turned off, or used with headphones. Try listening to "white noise" like static on the radio at low volume wearing headphones. Try wearing socks to bed (this increases blood flow and helps you to relax).

Do not try to force yourself to sleep. Use a relaxing sleep ritual you do 30 minutes before going to bed every night (such as reading). Try reading something boring. If after 30 minutes in bed you are unable to sleep, get out of bed and do something relaxing. Do not return to bed until you are sleepy.

Avoid the use of sleeping pills. They give you lower-quality sleep, often do not work, and may make it harder to sleep when they are stopped.

Be aware that other medications (like opioids, steroids, some antidepressants) and medical problems (like pain, asthma, ulcers, sleep apnea) may also interfere with sleep. Ask your providers if these may be part of your sleeping trouble.

Avoid arguments and serious talk before bedtime. Keep it light. Try not to go to bed angry. Getting emotional support and expressing your feelings may reduce stress and help you to sleep.

Do not worry about an occasional sleepless night. Even if you sleep only a couple of hours, you can function the next day. You will probably sleep better the following night.

Figure 1. Sleep hygiene tips.

An inmate patient may receive psychotherapy from a psychiatrist, psychologist, social worker, counselor, or other appropriately trained professional mental health staff member.[69] (See also section 4.3., "Coordination with Other Professional Staff.") Consistent with national trends in the community,[70] psychiatrists in jails and prisons are less likely to provide psychotherapy than they are to prescribe medication. In correctional facilities, a nonphysician directly providing psychotherapy is the norm when this modality is available. The psychiatrist should play a leadership role in an inmate patient's treatment team.[71] Whether the formal relationship with the nonphysician mental health provider is supervisory, consultative, or collaborative, coordination of care in a split-treatment model such as this is critically important.[72]

Mental health staff in correctional facilities, and especially psychiatrists, should engage patients in psychoeducation about diagnosis and treatment. Patient education on some subjects, for examples sleep hygiene (see Figure. 1), behavioral activation, and depression self-management activities (see Figure. 2), may in some cases minimize or eliminate the need for pharmacotherapy. Mental health providers may choose to facilitate this process by selecting or creating handouts. We suggest that education materials provided for incarcerated persons are developed by or in consultation with a psychiatrist, are sensitive to the limitations on the freedom of the patient, use plain speech and avoid the use of jargon, and are approved for distribution to inmates by an authorized administrator.

4.6. Informed Consent

A prescriber in ordinary circumstances has an ethical and legal duty to disclose the information reasonably

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Depression happens to a lot of people behind bars. Helping you feel better is an important goal of your treatment team. YOU are part of this team, and there are plenty of things you can do between appointments to help feel better. You may not be able to do all these things, but even doing a few of them will help. Start your day by planning to do something you usually enjoy.

Increase your physical activity
- Unless your doctor says no, try walking, jogging, or sports.
- If you already do these things, try doing them more.

Plan fun things to do
- Read a book.
- Watch a movie or a favorite television program.
- Write a letter.
- Call a friend or family.
- Plan a visit.
- Play a game.
- Write about your feelings in a private journal.

Do more to relax
- Take a shower.
- Listen to music.
- Meditate.
- Breathe deeply.
- Go outside for fresh air.

Participate in your treatment plan
- Take medication as directed, if prescribed by a doctor.
- Attend all assigned individual and group therapy sessions.

Stay busy
- Staying busy is good for your self-esteem.
- If you are on a work detail, do the best job you can do.
- Keep your cell neat and clean.
- Help someone else.

Good sleep habits
- Have regular sleep and wake times – avoid napping during the day.
- Avoid caffeine and chocolate, especially after noon.
- Quit or cut back on cigarettes.
- Do not lie in bed except to sleep.
- Avoid exercising, eating, or drinking a lot of fluids just before bed.
- Avoid sleeping pills.

Eat healthy foods
- Avoid junk food.
- Eat more fruits and vegetables.
- Do **not** use alcohol or drugs.

Spirituality
- If it is your tradition, pray, read scripture, and attend religious services.
- If it is not, think about the people, ideas and things that are important to you and give your life meaning.

Figure 2. Depression self-management tips.

necessary for a patient to make an intelligent, voluntary, and competent decision regarding a recommended psychotropic medication.[73] Working with incarcerated persons does not abrogate this responsibility.[74] Federal appellate decisions have supported the right of inmates to provide informed consent before being prescribed psychotropic medications,[75–77] although in *White v. Napolean*, the Third Circuit Court qualified that "prisoners may not bring treatment to a halt, insisting on answers to questions that are unreasonable, time-wasting or intended to turn the doctor-patient relationship into a battle for control over treatment" (Ref. 77, p 113). In *Pabon v. Wright*, the Second Circuit Court concurred, indicating that a prisoner's right to information about a proposed treatment was "far from absolute" (Ref. 79, p 250).

Whether truly voluntary consent can be obtained in a correctional environment given the inherently coercive nature of these settings is controversial.[74] Limited education, restricted access to information (e.g., Internet access), and inconsistent prior access to health care services may put incarcerated persons at a disadvantage when compared with typical patients in the community making medication decisions. Also, privacy limitations may influence an inmate patient to decline indicated medication as they may be concerned about being viewed as mentally ill by peers and correctional officers when they go to mental health appointments and pill calls. Formulary restrictions, language and cultural barriers, limited time with patients, and conflicting duties to the institution may all constrict the discussion about treatment options and risks.

Despite these challenges, dialogue that promotes informed consent is a necessary and important component of every clinical interaction involving prescribing in nonemergency situations. At a minimum, this conversation includes the indication for the treatment, common and serious risks, and alternative options including reasonable nonformulary treatments and no medication, if appropriate. The interaction need not be substantially different from that in a community setting, although additional information relevant to medication administration in the facility may be needed (e.g., a set early evening pill call that could complicate the prescription of a

sedating medication). Failure to sufficiently document informed consent could generate liability.[78] A formal consent form will facilitate adequate documentation and minimize liability risk; an individualized chart note outlining the discussion with the inmate patient is an acceptable alternative.[79]

Off-label prescribing is a common practice in correctional settings. For example, a survey of charts from 13 federal Canadian prisons found that 36.2 percent of psychotropic medications were prescribed off label, most commonly anxiolytics and hypnotics (see also section 5.10., "Insomnia and Sleep-Wake Disorders").[80] We recommend disclosure of off-label prescribing, if applicable, during the informed consent process.

If medication is prescribed involuntarily on an emergency or nonemergency basis with appropriate authorization (see section 6.4., "Treatment Over Objection"), informed consent is not required. Nevertheless, we suggest that the prescriber attempt to discuss elements of medication consent including indications and risks to the extent possible consistent with safety and professional judgment. In this context, when possible, simple consent (i.e., assent to take medication, regardless of full capacity to understand risks and benefits) may improve patient cooperation, staff safety, and therapeutic alliance, and could be a prelude for later informed consent.

5. Evidence-Based Prescribing Practices in Correctional Institutions

A large review of prisons in England found that the rate of prescribing psychotropic medications to male prisoners was four-times higher than the age-adjusted rates seen in the community (and six times higher for women prisoners). Off-label prescribing was observed in a third of cases, usually to treat low mood or character pathology.[81] On the other hand, a Swedish registry study linked undertreatment of mental illnesses with violent reoffending, at least for former incarcerated persons treated with antipsychotic medications, psychostimulants, and medications for SUDs.[82] These studies generally validate the observations of the authors (who practice in the United States and Canada). We have seen many examples of both overtreatment and undertreatment in these settings. It is our intent that prescribers in jails and prisons will use these sections to preferentially make prescribing decisions based on the best available evidence.

5.1. Psychiatric Emergencies

The capacity for correctional facilities to provide in-house emergency medical and psychiatric care, including emergency psychiatric medications, is more difficult to achieve in smaller systems with limited resources and staffing, such as jails, lockups, and smaller prisons. According to a Bureau of Justice Statistics report, more than 1,000 deaths occurred in jails in 2016, and half of these were deemed preventable as they were attributed to suicide (primarily), homicide, drug or alcohol intoxication, and accidents.[83] When a correctional facility does not have the capacity to provide 24-hour emergency psychiatric care, provisions should be made in policy for transfer to a setting capable of competently managing these situations. Training correctional officers about psychiatric emergencies improves their ability to recognize them and to quickly enlist appropriate health care services.[84]

Agitation

The management of many psychiatric emergencies, such as agitation, does not differ substantially in the correctional setting from an outpatient or an emergency room setting. For example, the 2009 revision of the Schizophrenia Patient Outcome Research Team (PORT) study recommended that for the treatment of acute agitation in schizophrenia, an oral or intramuscular antipsychotic, alone or in combination with a rapid-acting benzodiazepine, should be used.[85] Medications used in the community to manage psychiatric emergencies should be available in jails and prisons if they have appropriate facilities and qualified staff to administer them safely. The risk for misuse of benzodiazepines is not a sufficient reason to avoid using them in correctional settings.

The PORT study also recommends, "If possible, the route of antipsychotic administration should correspond to the preference of the individual" (Ref. 87, p 98). Patients with agitation typically prefer an oral treatment and there is little difference in terms of outcomes when comparing oral and injectable medications.[86] Intramuscular injections of benzodiazepines or antipsychotics if clinically necessary and appropriate to manage behavioral emergencies may require coordination with custody for safety reasons.

Use of Force

Oleoresin capsicum ((OC), i.e., pepper spray) is sometimes used for nonlethal use of force by law

enforcement officers, including correctional officers. OC is not indicated for and should never be used for health care restraint. OC is a respiratory irritant and may cause difficulty breathing, with rare deaths in custody reported, usually associated with co-occurring asthma.[87,88] If the patient has been exposed to OC or similar agents, the psychiatrist should avoid using benzodiazepines until the patient is not in respiratory distress.

When restraint is required to administer emergency medications, protocols for clinical monitoring by appropriate staff are necessary, especially given the established risk of death and other adverse outcomes in these circumstances.[89–91] A complete discussion of restraint in correctional settings is beyond the scope of this document, although interested readers are referred to the AAPL's resource document on the use of restraint and seclusion in correctional mental health care.[90]

Emergency involuntary medication is appropriate in correctional settings for the same reasons as it is elsewhere. Such care does not require inmate consent, although should be limited to what is medically necessary, and should only be for a limited length of time.[92] (See also section 4.6., "Informed Consent.") Emergency involuntary medication should not be confused with nonemergent forced medication, which is addressed in section 6.4., "Treatment Over Objection."

Substance Intoxication and Withdrawal

As is often encountered in inmate patients having recently been in the community, withdrawal from alcohol or benzodiazepines is a medical emergency with significant risk for morbidity and mortality. Long-acting benzodiazepines are the medications most often used for supervised withdrawal from alcohol and benzodiazepines.[93] For patients with cirrhosis, benzodiazepines that are shorter acting (e.g., clonazepam) or have fewer metabolites (e.g., lorazepam or oxazepam) may be appropriate. As previously mentioned, the risk for misuse of benzodiazepines is not a sufficient reason to avoid using them in correctional settings. Such risk may be mitigated by clinically appropriate time-limited protocols and supervision of administration on a medical unit. Wakeman and Rich[94] (2015) recommend a symptom-based (as opposed to a pre-emptory taper) strategy using a long-acting benzodiazepine to safely and more quickly manage withdrawal risk in patients while minimizing the overall use of medications in a correctional setting. Fluids and thiamine are important adjunctive treatments for acute alcohol withdrawal, the latter to prevent neurologic sequelae.[93,95]

The recognition and treatment of withdrawal from other substances in correctional settings is clinically appropriate and humane. Although opioid withdrawal is widely regarded as not life threatening, a classic paper on heroin-dependent individuals in Great Britain reported the deaths of four prisoners from suicide in the context of withdrawal.[96] For opioid withdrawal, options include agonist medications such as methadone or buprenorphine, or alpha 2-adrenergic receptor agonists like clonidine.[94] Management of withdrawal from other substances is largely supportive.[95]

It is appropriate to consider intoxication for patients presenting with an acute change of mental status, especially for those with fewer risk factors for delirium. The limited access to controlled or illegal substances in jails and prisons does not exclude them as a factor. Also, legitimately prescribed medications may be either hoarded for personal recreational use or diverted to peers. Tricyclic antidepressants (TCAs) are an example of a potentially diverted medication with a substantial risk for morbidity or mortality in overdose and may be readily discovered by testing serum levels (see also section 6.5., "Misuse and Diversion of Psychotropic Medications"). Clinical screening for illicit substances is appropriate in otherwise unexplained cases of delirium (see also section 4.2., "Coordination with Custody Staff").

We note a substantial increase in synthetic cannabinoid (e.g., K2, K3, Spice, Kush, etc.) use and intoxication in correctional facilities in recent years. Patients may present with agitation, delirium, acute psychosis, anxiety, severe and labile vital sign abnormalities, and seizures. When emergent, such intoxication should be managed in a setting with adequate medical resources. Hospitalization or intensive care is sometimes required, and death from synthetic cannabinoid intoxication is possible.[97] Although treatment is largely supportive, limited research suggests the use of benzodiazepines for agitation, anxiety, and seizures.[98] Antipsychotic medication, specifically quetiapine, has been shown to be of benefit in cases of acute synthetic cannabinoid-related psychosis.[99] Psychiatrists should reassess the need for such treatments after resolution of the crisis.

Hunger Strikes

Hunger strikes occur more frequently in prisons than in most other psychiatric settings. The reason for a hunger strike often has little to do with a psychiatric illness and is more often intended to achieve a desired outcome from the correctional system. As most hunger strikes are brief, only a small percentage are life threatening.[100] An adequate review of the ethical and clinical dilemmas involved in psychiatric management of hunger strikes is beyond the scope of this document. If called upon to evaluate voluntariness of food refusal, decision-making capacity, or advance directives for hunger striking patients, the correctional psychiatrist is advised to be aware of the international guidelines for physician management of hunger strikes.[101] Although these situations are generally managed administratively and medically, it is important to confirm that there are no psychiatric symptoms, such as depression or psychosis, contributing to this behavior. Feelings of lethargy and poor concentration, for example, may be sequelae of decreased sustenance. Still, symptoms such as anhedonia, suicidal ideation, guilt, depressed mood, and decreased self-worth are unlikely to be a direct effect of the hunger strike and may suggest an independent mood disorder.[101]

When a psychiatric diagnosis is thought to be contributing to food-refusal behavior, it is useful to consider medications that can be given intramuscularly (should it become necessary to administer psychotropic medication on an emergency or nonemergency basis), if a nasogastric tube has not been placed. It is important to consider the risks of administering psychiatric medications to a malnourished or dehydrated patient. Examples of medications requiring special caution include bupropion (risk of seizures in patients with an eating disorder), TCAs (risk of aggravating orthostatic hypotension), and lithium (risk of toxicity in the setting of dehydration). When administering medications with greater risk for QTc prolongation, such as certain antipsychotics, electrocardiogram monitoring is advisable.[102] Similarly, if the patient is already on psychiatric medications, the safety of continuing them in the setting of the hunger strike must also be considered.

Acute Trauma

As discussed in section 5.6., "Trauma- and Stressor-Related Disorders," incarcerated persons, especially those with mental health problems, are at high risk for being physically or sexually victimized. Acute stress symptoms, including anxiety, agitation, irritability, depression, insomnia, or exacerbation of an existing mental illness are commonly seen in the context of physical or sexual assault, and when severe should be managed as a psychiatric emergency. Assessment for immediate patient safety and making reports following institutional policy are important first steps. Symptomatic pharmacologic management of the acute physiologic and emotional symptoms related to an acute trauma may be clinically appropriate.[103] If symptoms are less urgent, community guidelines suggest that active monitoring (i.e., watchful waiting) is an appropriate approach in the first four weeks after a trauma. The NICE guideline specifically discourages the use of benzodiazepines as ineffective in preventing posttraumatic stress disorder (PTSD).[104]

Mental Health Watch

Mental health watch is usually used to manage high suicide risk but could also be used to address any clinical situation that requires close observation for safety. According to NCCHC standards, when the danger is acute, mental health watch should be via continuous observation. Interventions such as closed-circuit television and the use of inmate observers may supplement, but not substitute for, direct observation by staff. When the danger is nonacute, observations should be unpredictable by the patient, with documented check-ins at regular intervals not to exceed 15 minutes.[22]

Although some incarcerated persons may try to use mental health watch to maladaptively address an institutional stressor, large studies in this setting found high rates of PTSD, psychosis, affective disorders, and personality disorders.[105,106] Mental health watch can be an unpleasant experience for patients, include social isolation, the loss of clothing and property, and limited, if any, access to visitation and programming. This may have the undesired effect of discouraging the disclosure of safety concerns. We encourage a focus on treatment, not merely confinement, for these patients. Although some crises can be managed nonpharmacologically, psychiatric consultation is often of benefit and sometimes necessary. Early involvement by a psychiatrist is important in cases of acute psychosis, agitation, change of mental status, and active self-injury. If delirium is suspected, medical consultation is essential. It may be appropriate to defer

initiation of nonemergency psychiatric interventions such as antidepressants or maintenance medications for alcohol or opioid use disorders (OUDs) pending an adequate assessment. When psychiatric medications were started or considered as part of the process of crisis management, consideration for transfer to an MHU capable of closer follow up would be appropriate. (See also section 6.1.2., "Mental Health Units")

5.2. Schizophrenia and Other Psychotic Disorders

The appropriate identification and management of schizophrenia and other psychotic-spectrum disorders is an essential component of an adequate correctional mental health care system. According to a meta-analysis of the prevalence of serious mental disorders in prisons, rates of 3.7 percent for males and 4 percent for females suggest that psychotic disorders are several-times more prevalent in incarcerated settings compared with the community.[107]

Evidence from community samples suggests that untreated or undertreated psychosis is associated with poor quality of life, lower life expectancy, violence, victimization from others, self-injury, and treatment resistance.[6,7,108] Nevertheless, there is substantial risk of morbidity and even mortality from antipsychotic medications[108] (see also section 6.2., "Adverse Effects of Medications"). A well-reasoned diagnosis based on an adequate assessment will better ensure appropriate treatment and reduce the risk of unnecessary prescribing of antipsychotic medication. Environmental factors in jails and prisons may complicate the assessment of psychotic symptoms. Suspiciousness, for example, may be reality based and potentially adaptive. In distinguishing psychotic disorders from feigned illness, it is valuable to take note of objective signs such as negative symptoms, formal thought disorder, and disorganized behavior, and to obtain relevant collateral information from family or staff who have observed the patient. When in doubt and when consistent with safety, consider delaying treatment until sufficient observation of the patient (preferably on a designated MHU) and a confident diagnosis has been made.

The 2004 American Psychiatric Association Practice Guideline for the Treatment of Patients with Schizophrenia promotes three goals: 1) reduce or eliminate symptoms, 2) maximize quality of life and adaptive functioning, and 3) promote and maintain recovery from the debilitating effects of illness to the maximum extent possible.[109] These objectives remain relevant in a correctional setting. A patient's functioning in a jail or prison may be reflected by participation in activities such as work or programming, following institutional rules and staff directions, appropriate interpersonal interactions, and personal hygiene.

The use of antipsychotic medication is indicated for the treatment of psychotic illnesses in any setting and the latest National Institute for Health and Care Excellence (NICE) guideline reports that there is no efficacy-based evidence for recommending one antipsychotic versus another for first-line treatment.[108,110,111] When selecting an antipsychotic medication for initial treatment, considerations include the patient's prior response to medication, history of side effects, history of nonadherence, medical comorbidities, and the risk for drug-drug interactions.[112] The side-effect profile of the medication (e.g., sedation, activation) in relation to patient symptoms is important to consider along with patient preference as much as the institution's formulary and security considerations will allow (see section 6.5., "Misuse and Diversion of Psychotropic Medications"). Although formulary prescribing is more convenient, the psychiatrist may need to advocate for a nonformulary medication when it represents a better clinical choice. In such a situation, we suggest that the psychiatrist be prepared to obtain collateral information (such as pharmacy or medical records) to support the nonformulary request.

Prescribers may consider the adjunctive use of benzodiazepines to treat catatonia, agitation, or anxiety in the acute phase of treatment.[112] We recommend that benzodiazepines be closely monitored, administered in crushed form when given orally, and usually prescribed for the short term when used as an adjunct treatment for psychosis, given their inherent risk for misuse and diversion.

Patients with psychotic disorders need closer monitoring in the acute phase of treatment. The dose of antipsychotic medication should be titrated to relieve symptoms, until severity of side-effect symptoms outweighs positive benefit.[112] In the event of failure to respond to the chosen treatment, consider overt or covert nonadherence (see also section "6.3. Medication Nonadherence"). Although serum levels of antipsychotics are of variable clinical utility, this strategy may at least have value for identifying nonadherence.[113] Long-acting injectable (LAI) antipsychotic medications are another strategy to reduce

nonadherence.[108,114] Patient preference is a valid reason to prescribe an LAI; some may prefer this option as it may reduce the need to go to pill call.[36] If treatment is refused and the patient has impaired decision-making capacity, consider pursuing medications over objection (see section 6.4., "Treatment Over Objection") in accordance with local statutes, regulations, and institutional policies.

If the patient is tolerating the medicine, monitoring them on a therapeutic dose for two to four weeks is appropriate, but if improvement is minimal at two weeks, further improvement is unlikely.[36] If an adherent patient fails to respond to antipsychotic medication, verify that the dose has been optimized, that there has been adequate time for response, and that the medication is being administered for optimal efficacy. Considerations include timing and frequency of administration, drug-drug interactions, and relationship of pill calls to mealtimes. Smoking, if allowed at the facility, may change the metabolism of the medication, with reduced serum levels seen in thiothixene, trifluoperazine, and clozapine.[36] For some antipsychotics like ziprasidone,[115] lurasidone,[116] and asenapine,[36] problems with absorption may arise when institutionally scheduled mealtimes are not coordinated with scheduled pill calls.

Patients who have failed two adequate trials of antipsychotic medications may be candidates for clozapine.[117] Requirements for blood monitoring and reporting[118] may present logistical challenges for prescribers in correctional settings. Nevertheless, clozapine has been demonstrated to be effective, including specifically in prison settings[119,120] and may reduce the risk of disciplinary infractions in those patients for whom it is indicated. Inmates in a Canadian prison who were prescribed clozapine at the time of release took significantly longer to reoffend than those prescribed other antipsychotics.[121] The recently updated APA guideline for the treatment of schizophrenia recommends consideration of clozapine for treatment-resistant schizophrenia and for patients with schizophrenia with a persisting risk of suicide. This document also suggests that clozapine be considered when aggressive behavior is comorbid.[36] Nevertheless, data from a survey by a group affiliated with the American Correctional Association suggest that clozapine is underutilized in U.S. state prisons, and even a third of respondent states did not have it on their medication

formulary.[122] We recommend that inmate patients have access to clozapine in any facilities with the operational capabilities of fulfilling its monitoring requirements.

Community practice guidelines recommend continuing antipsychotic medications in the maintenance phase to reduce the risk of relapse, using the lowest dose that accomplishes this aim and minimizes side effects.[112] The APA guideline suggests for maintenance treatment using the same antipsychotic medication that was initially effective in reducing symptoms.[36] Given the risks of emerging side effects and relapse, we recommend closer follow up of patients whenever medication doses are increased or decreased. We furthermore recommend caution when discontinuing antipsychotic medications for patients confidently diagnosed with a chronic psychotic illness. Transient psychotic symptoms, especially nonbizarre persecutory delusions, have been observed in prisoners and may be a function of environmental stressors such as restricted housing[123] or exposure to trauma. In such cases, once asymptomatic, a trial off medication with careful monitoring may be appropriate.

Polypharmacy and high doses of antipsychotics are practices that have been identified in some correctional settings.[124,125] Although it may be appropriate for some patients, we recommend caution with these approaches. Antipsychotic polypharmacy is associated with a greater incidence of side effects, with limited evidence to support a clinical benefit for most patients.[110]

5.3. Bipolar and Related Disorders

The prevalence of bipolar disorder is estimated to range from 2 to 7 percent in prisons.[126] Bipolar disorder, along with alcohol and drug use disorders, has a greater impact upon violent reoffending than other mental health conditions.[127] Persons with bipolar disorder, compared with others diagnosed with a serious mental illness, also appear to have the highest rate of overall criminal recidivism.[46]

If the patient is not already on lithium, the NICE guidelines call for using haloperidol, risperidone, olanzapine, or quetiapine as first-line therapy of acute manic or mixed episodes. If the patient is already on lithium with a therapeutic serum level, the psychiatrist may consider adding one of the aforementioned agents. For bipolar depression, NICE first-line recommended treatments are olanzapine with fluoxetine,

or quetiapine. Olanzapine (without fluoxetine) is a second-line treatment for bipolar depression. For maintenance treatment, lithium is recommended, with divalproex sodium, olanzapine, and quetiapine being second-line options. If lithium by itself is ineffective for maintenance, it may be prescribed with divalproex sodium.[128]

Lamotrigine, in light of its need for gradual titration to an effective dose to minimize the risk of a life-threatening rash, is not recommended for the management of acute bipolar illness.[128] Although there is risk for misuse or diversion especially in the correctional environment, short-term use of benzodiazepines may be appropriate to treat agitation or mania.[128] Appropriate risk management strategies for benzodiazepines include crushing tablets and DOT (i.e., nursing administered medications with mouth checks; see also sections 5.1., "Psychiatric Emergencies" and 6.3., "Medication Nonadherence").

Besides the aforementioned recommendations from NICE, lurasidone, lumateperone, and cariprazine are U.S. Food and Drug Administration (FDA) approved for bipolar depression.[129–131] Aripiprazole, asenapine, ziprasidone, and risperidone have FDA approvals for acute or short-term management of bipolar manic or mixed episodes,[132–135] and ziprasidone is FDA approved as an adjuvant bipolar maintenance treatment.[132] Increasing generic availability of lurasidone may make it a viable option in correctional facilities.[136] When selecting an antipsychotic to treat bipolar disorder in a correctional environment, especially quetiapine, the cautions discussed elsewhere regarding misuse and diversion (see section 6.5., "Misuse and Diversion of Psychotropic Medications") apply.

The most recent update (2014) of the APA guideline for the treatment of patients with bipolar disorder suggests that moderate evidence exists for the use of antidepressants combined with traditional mood-stabilizing medication for bipolar depression. This guideline advises against using antidepressant monotherapy in patients with bipolar illness.[137] In general, antidepressants should be used with caution in patients with bipolar depression. Experts recommend reserving them for severe cases, with discontinuation after resolution of the depressive episode.[138]

If a patient with bipolar disorder suffers a recurrence of a mood episode, consider checking a serum level (if prescribed an agent for which this is available) to optimize treatment[128] and to verify adherence. Consider confounders like active substance use

or a comorbid medical condition,[137] with laboratory investigations targeted accordingly.

For patients prescribed lithium, NICE guidelines recommend checking serum levels one week after starting it and after every dosage change. For patients on maintenance therapy, prescribers should check lithium serum levels every three months for the first year of treatment, and thereafter every six months. More frequent monitoring may be appropriate for older individuals, in cases of renal impairment, and for those with ongoing bipolar symptoms, a history of nonadherence, or levels of 0.8 mmol/L or higher.[128] Consistent with these guidelines, we suggest collaboration with medical providers to avoid inadvertent prescription of medications likely to interact with lithium, with consultation as necessary for specific cases. Prescribers should also counsel patients about these risks if they have access to over-the-counter anti-inflammatory medications via commissary.

Although community guidelines do not recommend routine monitoring of serum levels for valproate, these may be of value to address concerns related to efficacy, tolerability, or adherence.[128] The FDA recommends for patients on valproate to check transaminases at baseline and every six months thereafter,[139] as well as serum levels when doses are changed and "whenever enzyme-inducing or inhibiting drugs are introduced or withdrawn" (Ref. 135, p 1). As recommended by NICE guidelines, consider checking a hepatic panel and complete blood count at baseline, after six months, and then annually thereafter.[128]

If a decision is made to discontinue a mood stabilizer in a nonemergency situation, a taper is recommended. The NICE guideline specifically recommends a three-month taper for lithium (even if on another mood stabilizer), and a four-week taper for divalproex sodium.[128]

Algorithm-based pharmacotherapy for bipolar disorder for prisoners was systematically evaluated in two studies[140,141] in Connecticut and showed improved outcomes on symptom and quality-of-life scales. A detailed review of the Texas Implementation of Medication Algorithms process is beyond the scope of this document as it is out of date, although the interested reader may review it online at: https://www. sccgov.org/sites/bhd-p/PharmacyInformation/ MedicationAppendices/TMAP-Bipolar.pdf. Nevertheless, these studies are promising in terms of using a structured and stepwise approach for the management of bipolar disorder in correctional settings.

There has been some other research to evaluate the value of mood stabilizers, specifically in correctional settings. A chart review of inmate patients in Connecticut supported the use of divalproex sodium for impulsivity and mood lability, although benefits for these problems were also observed in subjects without bipolar disorder.[142] Similar positive results have been noted for impulsive aggression and violence in prisoners for lithium, not necessarily tied to diagnosis.[143]

Patients with cyclothymia may be particularly prone to mood switching from antidepressants and side effects from antipsychotics.[144] Although some have suggested treatment with low-dose mood stabilizers,[145] psychiatrists in correctional settings, who frequently encounter patients with irritability and subthreshold mood symptoms, are cautioned that none of the medications used for bipolar disorder have been FDA approved for, or even specifically studied for, cyclothymic disorder.

5.4. Depressive Disorders

As discussed in section 4.4., the assessment process for a depressive illness should be as thorough as possible in the circumstances. When addressing common complaints about depression in correctional settings, we suggest that the psychiatrist approach these cases with a broad differential diagnosis respectful of comorbidities and alternative explanations for mood symptoms in incarcerated people. Especially in those who have recently been in the community (e.g., pretrial inmates, parole violators, and returns from halfway houses), consider problematic adjustment or symptoms referable to intoxication or withdrawal from a substance. Transient or subthreshold depressive symptoms may sometimes be better explained by a personality disorder or chronic adjustment disorder (see also section 5.6., "Trauma- and Stressor-Related Disorders").

Nevertheless, as in the community, major depressive disorder is the most common serious mental illness found in incarcerated settings. In a systematic review on prevalence rates in corrections, major depression was found in 12 percent of females and 10 percent of males.[107] A study of depression in pretrial detainees using psychological instruments found the rate of moderate to severe depression symptoms of 25.3 to 28.4 percent.[146]

Some community guidelines recommend using rating scales both to evaluate depression and to monitor response to treatment,[147] and they may be a useful tool in differentiating a transient depression from one that may benefit from pharmacotherapy. Although rating instruments have been used in studies of incarcerated persons with depression, to our knowledge, no studies have been done thus far to test the validity of depression scales in jails nor prisons. Given the realities of confinement, such scales may be confounded in correctional settings by questions about loss of interests, inability to make decisions, and loss of libido.[146] We are skeptical of self-report rating scales, given the high rates of malingering in these settings (see section 4.4., "Assessment"), but clinician-rated scales such as the Quick Inventory of Depression Symptomatology ((QIDS-C), available at https://www.psychdb.com/_media/mood/qids-c.pdf) may be useful. No studies to date have been done to test the validity of the QIDS-C in correctional settings.

Cognitive behavioral or interpersonal psychotherapy, not antidepressants, are the best evidence-based treatments for subthreshold depressive symptoms.[148] Still, even for mild to moderate major depressive episodes, antidepressant medication is recommended by community guidelines.[147] NICE guidelines suggest that if subsyndromal symptoms persist, an antidepressant may be considered.[148] For more severe episodes (including complex depression, depression with psychotic features or with severe self-neglect, or if otherwise life-threatening), medication is necessary, and electroconvulsive therapy (ECT) may be considered[147] (see also section 6.6., "Electroconvulsive Therapy and Transcranial Magnetic Stimulation"). Although the clinical value of antidepressant medications for less severe cases of depression has been questioned,[149] in some correctional settings, such as jails or segregated housing, psychotherapy may not be available or practical. Regardless, patient education (including depression self-management, see Figure. 2) and psychotherapeutic techniques are of value in treating depression of any severity and should be provided whenever possible and appropriate (see also section 4.5., "Patient Education and Psychotherapeutics"). For patients complaining of insomnia in combination with a depressive disorder, advice on sleep hygiene may be helpful (see also Figure. 1 and section 5.10., "Insomnia and Sleep-Wake Disorders").[150]

When pharmacotherapy is indicated, the factors to consider when selecting an initial antidepressant include the medicine's side-effect profile, pharmacological properties (e.g., how frequently it must be dosed), and prior response to treatment.[151] The SSRIs or the SNRIs are appropriate for first-line

treatment for depression in this population. SSRIs are as effective as other antidepressants, have a favorable risk-benefit profile, and have rarely been identified as being prone to misuse in correctional settings. Generally, antidepressants are similar between and within drug classes in terms of effectiveness.[147] Although some research suggests superiority of some SSRIs within the group, the clinical meaning of these differences is not well established.[147,151] Some antidepressants, such as the TCAs, may be more toxic in overdose,[148] a factor that should be taken into consideration in patients at greater risk for suicide or who may also be seeking them for their sedating properties (see also section 6.5., "Misuse and Diversion of Psychotropic Medications").

Consideration of common co-occurring disorders and the conditions of confinement can help guide antidepressant selection. As Attention Deficit/Hyperactivity Disorder (ADHD) is a common comorbidity with depression, especially in a correctional setting (see also section 5.9., "Attention Deficit/Hyperactivity Disorder"), it may be useful to consider bupropion, desipramine, nortriptyline, duloxetine, or venlafaxine,[152,153] each of which has some evidence supporting its use in adults with major depression and ADHD. Still, bupropion has significant misuse potential, and its use should be carefully monitored in the correctional setting.[154] For depressed patients with co-occurring pain, the SNRI duloxetine is FDA-indicated for some chronic pain conditions.[155] In cases of depression with comorbid insomnia not responsive to psychological interventions, evidence for mirtazapine supports efficacy for the treatment of depression with insomnia.[156] (See also section 5.10., "Insomnia and Sleep-Wake Disorders.") Monoamine oxidase inhibitors (MAOIs) in correctional settings are not advised unless it is possible to ensure that the patient will have reliable access to a tyramine-free diet.

If the patient does not respond to the first choice of antidepressant, consider first whether the diagnosis is accurate, medication adherence is a factor, adequate time (i.e., two to four weeks) has been allowed for response, and the dose has been optimized.[147] Although treatment failure complicated by ongoing substance use may not be likely in a jail or prison setting, the ongoing use of illegal, controlled, or other substances is certainly possible.[154,157,158]

If there is no response to a therapeutic dose of an agent by four weeks, or if the side effects are unacceptable, consider switching to another antidepressant. The STAR*D trial demonstrated the efficacy for switching to either bupropion SR, sertraline, or venlafaxine after a failed trial of citalopram, although none of these second choices was superior.[159] Another approach in such cases is augmentation,[147,148,151] which refers to using an additional nonantidepressant drug or two antidepressants together. Combinations of medications carry with them an increased risk of drug interactions and side-effect burden.[148] Evidence-based augmentation strategies include lithium, mirtazapine, or second-generation antipsychotic medications such as aripiprazole, olanzapine, quetiapine or risperidone.[147,148]

For many patients, antidepressant treatment should be for six to nine months.[151] Most guidelines recommend the use of continuation treatment for patients who have had two or more episodes of depression or those who have had severe or prolonged episodes. In such cases, a period of two years is generally considered advisable before considering tapering the medication toward discontinuation. In this context, gradual tapering and monitoring over at least a four-week period is recommended.[147,148]

5.5. Anxiety Disorders

Correctional psychiatrists are frequently asked to see patients who have a chief complaint of anxiety. Those who have recently been arrested or sentenced are facing various real or potential losses (e.g., freedom, reputation, relationships, employment, housing, and certainty the future), may endure forced abstinence from alcohol and other substances, and are coping with an abrupt change of environment. It is thus not surprising that anxiety problems are common in corrections. Surveys have rarely recorded the prevalence of anxiety disorders in this population. A study of Brazilian prisons revealed a one-year prevalence of anxious-phobic disorders of 27.7 percent in women and 13.6 percent in men.[160] A study of prisoners in Quebec with comorbid antisocial personality disorder (ASPD) found the lifetime prevalence of any anxiety disorder (including PTSD) was 68.5 percent.[161]

In this population, comorbidity is extremely common: depressive disorders, SUDs, and personality disorders are the most obvious. Withdrawal symptoms must be managed before an assessment for an independent anxiety disorder can be validly performed (see also section 5.1., "Psychiatric Emergencies"). In the case of a comorbid depressive disorder, the NICE guideline suggests that whichever condition is having

the greatest impact on functioning be treated first.[162] It is also important to consider a personality disorder in the differential diagnosis, particularly borderline personality disorder (BPD), as the treatment may be entirely different (see also section 5.8., "Personality Disorders").

In the initial stages of treatment, consider psychoeducation, self-help treatments, group therapies (when available), and active monitoring. When a diagnosed anxiety disorder is either not responding to the aforementioned modes of management, or is causing significant functional impairment, then more intensive psychosocial therapies, when available, as well as pharmacotherapy should be considered. The NICE guidelines delineate a stepwise approach, which can be adapted for use in particular correctional settings, depending on the resources available.[162] Interested readers are referred to the work of Andreoli *et al.*[160]

The first line of psychopharmacological treatment for anxiety disorders is an SSRI or an SNRI.[162,163] It is prudent to begin with a low dose and gradually build up to a moderately high dose. Sometimes doses at the higher end of the prescribing range are needed to treat anxiety disorders, although 75 percent of patients respond to the initial low dose of an SSRI, except in patients with obsessive-compulsive disorders, who generally require a higher dose.[164] Some SSRI treatment failures may be prevented by avoiding dosing too aggressively, and by warning patients about the initial risk of short-term activation (i.e., the medication may worsen anxiety in the short term). Furthermore, it is appropriate to educate patients that the anticipated response from an antidepressant is expected to be gradual over a period of weeks. Sometimes steadfast resolve is required on the part of the prescriber, with support for the patient, to get through this initial period. Psychosocial treatments such as relaxation therapy, mindfulness, and (if available) cognitive behavioral therapy (CBT) may be continued or initiated as an adjunct to pharmacotherapy.

If the initial SSRI is not tolerated, another may be tried. The SNRI venlafaxine can be effective but takes time to titrate to achieve a therapeutic dose.[162,164] The SNRI duloxetine is FDA-indicated for some chronic pain conditions that are frequently comorbid in a prison population.[155] Other second-line treatments include TCAs, particularly imipramine and clomipramine, that are well established in the treatment of anxiety disorders, especially panic

disorder and obsessive-compulsive disorder.[164] TCAs may be sought out in a correctional environment for their sedating properties, though especially tertiary TCAs (e.g., doxepin or amitriptyline) merit caution given the risk of cardiac complications and potential lethality.[154] Other second-line treatments include buspirone, which is indicated for generalized anxiety disorder, is generally well tolerated, and may be useful for anger control (see also section 5.8., "Impulsive-Control Disorders and Aggression"). Mirtazapine and trazodone, which are only indicated for major depressive disorder, both have well-known anxiolytic and hypnotic effects,[165,166] and may be sought-after in correctional settings.[154] (See also section 6.5., "Misuse and Diversion of Psychotropic Medications.")

NICE guidelines clearly advise against the use of benzodiazepines, except in the very short term, noting that these medications are not effective for the long-term treatment of generalized anxiety or panic disorder.[162] The World Federation of Biological Psychiatry guidelines conclude that benzodiazepines are ineffective in obsessive-compulsive disorder, and they should generally be excluded from use in those with SUDs.[164] Benzodiazepines, although quite effective for anxiety, are controlled medications with a known potential for misuse. Li, Brewer, and Reeves[158] (2015) conclude that benzodiazepines should not be prescribed as a first-line treatment for anxiety in a correctional setting.

Although off label, community guidelines suggest pregabalin as a treatment for anxiety disorders.[162,164] It may be appropriate to consider this for an anxious patient with a comorbid indication such as epilepsy, diabetic neuropathy, postherpetic neuralgia, or fibromyalgia. Psychiatrists taking this approach should be aware that pregabalin does not have an FDA indication for anxiety, it may increase the risk for opioid-related death, and misuse has been described in community case reports.[154,167] Although some antipsychotic medications (such as quetiapine) may have off-label anxiolytic properties, the NICE guideline discourages the prescription of an antipsychotic medication unless specifically indicated,[162] and some antipsychotics may be subject to misuse in a correctional environment.[154]

5.6. Trauma- and Stressor-Related Disorders

A meta-analysis regarding PTSD in incarcerated populations found pooled-point prevalence rates of 6 percent in men and 21 percent in women, which is

five-times higher than rates in the community for men, and eight-times higher for women.[168] Many come to a jail or prison already with a significant history of trauma exposure and rates of childhood sexual abuse of 70 percent in female and 50 percent in male prisoners.[169] Incarcerated women report lifetime rates of sexual assault ranging from 56 to 82 percent.[170] Military veterans in correctional settings often come with a history of traumatic experiences. In a 2001 survey of veterans in a county jail, 39 percent screened positive for PTSD.[171] Despite how common PTSD is in corrections, it may be underrecognized by psychiatrists. Although a third of inmates age 55 or older in a county jail screened positive for PTSD with associated impairment in functioning, only a fifth of these had ever received a diagnosis of PTSD.[172]

Trauma may also happen during a period of incarceration. A review of emergency department visits by incarcerated persons suggested that they present for injuries related to assault or abuse more often than persons in the community.[173] In 2004, 16 percent of respondents reported being injured in a physical fight since they entered prison.[174] Incarcerated persons with mental illness are more likely to be physically or sexually victimized, and those assaulted are at increased risk of suicide.[174,175] According to the National Former Prisoner Survey of 2008, 9.6 percent reported at least one incident of sexual victimization by peers or staff during their most recent stay in a jail, prison, or postrelease community-treatment facility.[176] The Prison Rape Elimination Act of 2003 was enacted to increase reporting and effectuate detection, management, and reduction of sexual assault incidents in prisons.[177] In 2015, there were 24,661 allegations of sexual assault reported by prison authorities, although only 8 percent were found to be substantiated. Nevertheless, the rates of substantiated allegations increased by 63 percent from 2011 to 2015, possibly related to the Department of Justice's publication of the 2012 National Standards for the Prevention, Detection and Response to Prison Rape.[178,179]

Although not explicitly included in the DSM-5, complex PTSD is listed in the ICD-11.[180] Complex PTSD may involve a broader range of presentation, including emotional dysregulation, problems with interpersonal relationships, and dissociative symptoms, often occurring with a background of severe, repeated, and prolonged trauma experiences.[181] In ICD-11 diagnoses made by clinical interviews with male prisoners

in the United Kingdom, complex PTSD was identified more than twice as often as PTSD. Management of this variant may be more challenging as complex PTSD in incarcerated persons is commonly comorbid with anxiety, depression, SUDs, dissociation, psychotic symptoms, and ADHD.[180]

In terms of medication recommendations, the APA's most recent update to their PTSD guideline was in 2009.[182] Guidelines written in 2017 from both the American Psychological Association and the Department of Veteran's Affairs (VA) agree that the best evidence exists for paroxetine, sertraline, fluoxetine, and venlafaxine, the former two of which are FDA approved to treat PTSD.[183,184] Studies have called into question the efficacy of SSRIs for combat-related trauma,[182] but a more recent meta-analysis of treatment studies for PTSD in combat veterans supported the use of SSRIs and TCAs for PTSD, anxiety, and depression symptoms in this group.[185] One subsequent open-label study suggested that mirtazapine was effective for combat-related PTSD.[186] The NICE guideline for the management of PTSD concurs with the American Psychological Association guideline by suggesting venlafaxine or an SSRI as first-line medication.[104]

Regarding adjunctive treatments for PTSD, a strong body of evidence supports the use of prazosin off-label to address trauma-related nightmares and sleep disruption, with a typical effective dosage range of 3 to 15 mg per night.[182] The American Academy of Sleep Medicine (AASM)'s position paper on the treatment of nightmare disorder supports the use of olanzapine, aripiprazole, risperidone, clonidine, cyproheptadine, fluvoxamine, gabapentin, nabilone, phenelzine, prazosin, topiramate, and trazodone for PTSD nightmares. Apart from prazosin and (the synthetic cannabinoid) nabilone, however, most of the studies relied upon were small or of low quality. One large, randomized VA study of prazosin for PTSD nightmares showed no benefit, which tempered AASM's enthusiasm for this medicine.[187] Some have suggested that the benefits of second-generation antipsychotics as an augmentation strategy in PTSD are limited to sedation effects.[188] The 2017 guideline from the VA opposes (with strong opposition to risperidone) the practice of using antipsychotics for PTSD.[184] The NICE guideline endorses the use of an antipsychotic, even risperidone, when hyperarousal or psychotic symptoms are disabling and not responsive to first-line treatments.[104] We recommend a careful

risk-benefit analysis, informed consent, and careful monitoring should correctional psychiatrists opt to use antipsychotic medications off-label for PTSD.

Benzodiazepines may be helpful for agitation, anxiety, and insomnia symptoms, but the risk of misuse and dependence, especially considering the high rate of comorbidity of SUDs in incarcerated persons generally (see section 5.11., "Substance Use Disorders") and PTSD specifically[189] suggests that these are best used on a short-term basis, if at all. Research has shown that benzodiazepines are ineffective for acute stress disorder or for the prevention of PTSD.[104,190] The original APA guideline for PTSD discouraged the use of benzodiazepine monotherapy for PTSD,[191] and the 2009 update was silent on the matter.[182]

To our knowledge, there are no published studies specifically reporting on pharmacotherapy for inmate patients with trauma-related disorders. Research suggests that treatment with medication alone is insufficient to result in a remission of PTSD.[192] Guidelines from the Veterans Health Administration and the American Psychological Association agree that evidence strongly supports the use of prolonged exposure, cognitive processing therapy, and trauma-focused CBT.[183,184] A detailed discussion of these treatments is beyond the scope of this document. We suggest that psychiatrists working in jails and prisons offer evidence-based pharmacotherapy to inmates whenever evidence-based psychotherapies are unavailable, whenever medication is preferred by the patient, or whenever symptoms are impeding the ability of the patient to work in psychotherapy.

Adjustment disorder, which is addressed in part elsewhere in this document (see also section 5.4., "Depressive Disorders"), is listed in the DSM-5 in the Trauma- and Stressor-Related Disorders" chapter.[60] Persons prone to incarceration have high rates of personality traits that may predispose them to a maladaptive response to stress from any number of problems, both inside and outside the institution. The loss of freedom and its accoutrement, loss of outside relationships, exposure to hardships intrinsic to a correctional facility, interpersonal conflicts, outstanding legal problems (e.g., trials, sentencing, appeals, and family court), environmental changes (including returns from a lower security setting), and disciplinary entanglements are common precedents to the development of acute adjustment symptoms. Prevalence studies are limited but have suggested a rate of 11 percent among prisoners on remand and 8 percent among prisoners with an Axis I diagnosis.[193] These are likely underestimates as rates of adjustment disorder in primary care range from 11 to 18 percent, and in consult-liaison psychiatry, 10 to 35 percent.[194]

As with acute trauma symptoms (see section 5.1., "Psychiatric Emergencies"), symptomatic pharmacologic treatment for anxiety or insomnia related to adjustment problems may be appropriate, but the need for continuation should be evaluated on an ongoing basis.[193] There is no good evidence to support the use of an antidepressant for adjustment disorder.[194] Should symptoms worsen, or not resolve rapidly with the resolution of the precipitating stressor, the psychiatrist is advised to reconsider the diagnosis and treatment.

5.7. Impulse-Control Disorders and Aggression

Incarcerated persons presenting with impulsive and aggressive behavior is a common occurrence and can be challenging for health care providers.[195] Felthous[196] defines impulsive aggression as behavior "that is angry or rageful, eruptive, unplanned, and lacking self-control" (Ref. 195, p 456). Such behavior may or may not be part of a mental illness, such as mania or a psychotic disorder. Intermittent explosive disorder (IED) is likely quite common, although the DSM-5 lists antisocial or other personality disorders as an exclusion criterion if these better explain the aggression.[60] Aggression has been linked to traumatic brain injury (TBI),[197] some history of which is reported by up to 82 percent of incarcerated individuals.[198] A Scottish study found that prisoners were three times as likely as persons in the community to have three or more hospitalizations for a head injury, and 80 percent more likely to have experienced a serious head injury.[199] A study of the South Carolina prison system found a rate of medically attended TBI, meaning those whose injury was verified by hospital or emergency department records, of 5.7 percent of male inmates and 6.2 percent of female inmates.[200] In both groups, and especially in the women, a higher rate of violent disciplinary infractions was observed.[200] Matheson and colleagues (2020) found that a third of incarcerated persons in Ontario with TBI had a serious disciplinary charge (defined as a threat to the security of the institution), which was a rate 39 percent higher than those without TBI.[201] Neuropsychological testing data suggests that a correctional environment itself may reduce

impulse control: after three months in prison, subjects showed an increase in risk taking.[202]

In practical terms, it may be difficult in correctional settings to distinguish whether the aggressive behavior is due to character pathology or another mental disorder. Regardless, psychological intervention, where available, is appropriate first-line treatment outside of emergencies.[193] Medication treatment for aggression may be reserved for impulsive aggression mainly attributable to an underlying mental disorder, or for adjunctive treatment. In jails or remand centers, there may not be the time or resources for psychological interventions, and medication may be considered first in these situations. Also, some patients may prefer pharmacological over psychological interventions. Although there are no FDA-approved medications specifically for the management of aggressive behavior, algorithms for treatment have been proposed.[196,203–206] If a diagnostic assessment reveals the presence of a mental disorder (e.g., schizophrenia, a mood disorder, or neurocognitive disorder), treatment of the underlying disorder with indicated medications is an appropriate first step.

Numerous studies report effectiveness of mood stabilizers for aggression in bipolar disorder[207] and schizoaffective disorder.[208–210] Carbamazepine[211] and oxcarbazepine[212] are appropriate to consider if the aggression is associated with epilepsy or other neurologic conditions. Several studies have shown divalproex sodium to have an antiaggressive effect.[213,214] Hollander et al. (2001) demonstrated that divalproex reduced aggression for patients with BPD.[215] Evidence strongly suggests that lithium salts have a specific antiaggressive effect in a variety of disorders; the first clinical study of lithium for this purpose, published in 1971, showed a resolution of angry episodes in aggressive prisoners while taking lithium using a single-blind, on-off-on methodology.[216]

Atypical antipsychotics may have specific antiaggressive effects. Clozapine has proven particularly effective for aggression in schizophrenia[217,218] and is FDA approved to reduce the risk of suicidal behavior in people with schizophrenia or schizoaffective disorder.[219] An important recent study found that the effects of clozapine on aggression were greater for clozapine than for olanzapine, which were greater than the effects of haloperidol in persons with schizophrenia. These improvements were even greater in those with comorbid conduct disorder, and the antiaggressive effects were independent of antipsychotic effects.[220] Another study demonstrated the efficacy of clozapine in seriously violent and psychopathic men in a high-security hospital.[221] Risperidone reduces hostility independent of its efficacy for treatment of the underlying psychosis.[222]

Some studies have supported the use of SSRIs to treat aggression associated with personality disorders.[223,224] Fava et al. found that fluoxetine improved aggression in a subset of depressed patients with higher levels of baseline hostility, irritability, and paroxysms of anger.[225] Other research has supported the use in SSRIs to treat aggression related to TBI.[197] Felthous proposes that fluoxetine be considered first line in subjects with IED and as a second-line treatment in those with aggressive outbursts in the context of a BPD.[196] Some patients may display paradoxical aggression within a short time of starting SSRIs, but this is rarely observed in practice.[226] In a systematic review of 15 studies by Romero-Martinez et al.[227] of the use of sertraline to help manage anger, they concluded that this medicine was useful for controlling irritability and hostility in both people with depression as well as nondepressed people with a variety of underlying psychiatric and neurological disorders.

A number of studies have demonstrated the efficacy of beta blockers, such as propranolol, nadolol, and pindolol, in patients with psychotic disorders,[228,229] intellectual disabilities,[230] and severe dementia.[231] In practice, these medications produce very few side effects and may be useful even in relatively low doses. Some evidence exists for the efficacy of buspirone as an antiaggressive medication across a spectrum of disorders.[205,232] As it is also an effective agent for the treatment of anxiety, it is worthy of consideration for treatment in corrections. Trazodone may reduce aggression related to Alzheimer's disease.[233]

Aggression related to adult ADHD may manifest itself in correctional settings (see also section 5.9., "ADHD"). The use of stimulant medication to address aggression in jails and prisons is controversial, and as we suggest in section 5.9., conduct problems alone are insufficient justification for the prescription of psychostimulants. Psychostimulants reduce aggressive behavior in children with ADHD but are not effective for aggression in those with conduct disorder.[196] Considering this and the risk for misuse and dependence, Felthous wrote that the use of psychostimulants for aggression is "strongly discouraged in jails and prisons" (Ref. 195, p 465).

In practice, patients who have been prescribed benzodiazepines for aggression, which might have been started or continued by general practitioners in the community, often resist being switched to other treatments (see also section 4.1., "Continuity of Care"). Inmate patients may demand benzodiazepines even though the evidence suggests they may paradoxically exacerbate aggression.[203,204,206] Felthous concludes that benzodiazepines should be avoided in people who have a problem with aggression.[196]

5.8. Personality Disorders

A unified interdisciplinary approach to treating patients with personality disorders is essential in correctional systems. The core features of personality disorders often strain working relationships with health care providers and other staff. As in community settings, the treatment of incarcerated patients with personality disorders is challenged by a dearth of data to guide practice, and by the complexity of patient presentations. The milieus of prisons and jails, where maladaptive character traits are less tolerated than in other settings, may further complicate management. The presence of comorbid psychiatric conditions, including mood, anxiety, and psychotic disorders, as well as SUDs, are common in incarcerated persons with personality disorders.[234] This section will focus on rational medication management of personality disorders that minimizes the potential for harm within correctional facilities but also contributes to alleviating suffering for patients.

Among these conditions, BPD, ASPD, narcissistic personality disorder, and paranoid personality disorder have the highest correctional prevalence.[17] Approximately 47 percent of people in prison meet criteria for ASPD, which far exceeds rates found in the community (3 percent of men, 1 percent of women).[235] ASPD is common in both male and female inmates and is associated with co-occurring mood disorders, anxiety disorders, SUDs, psychotic disorders, somatoform disorders, BPD, and ADHD. Those with comorbid ADHD are particularly noted to have worse mental health functioning and a higher suicide risk.[236]

Rather than focusing on personality disorders *per se*, much of the treatment literature has focused on symptom clusters. A pharmacological approach to treating patients with personality disorders is based on evidence that some dimensions of personality are mediated by variations in neurotransmitter physiology and are responsive to medication effects.[237] Obtaining an accurate history of a patient's constellation of symptoms related to character pathology as well as comorbid psychiatric disorders is a crucial first step in pharmacologic management.

Interested readers are referred to a publication by the World Federation of Societies of Biological Psychiatry (WFSBP)[238] as well as Cochrane reviews[239,240] that generally support the notion that pharmacologic agents may be useful in the treatment of personality disorders. Nevertheless, pharmacotherapy of personality disorders, while not uncommon, is not generally supported by robust clinical randomized clinical trial evidence.[241]

The United Kingdom's NICE guidelines take a hard stance against pharmacotherapy for BPD and ASPD, suggesting that this approach should be limited to short-term (specifically, one week) crisis management and for the treatment of comorbidities.[235] No medications are licensed for use in the United Kingdom for any personality disorder. (Similarly, no pharmacologic agent is FDA approved for the treatment of a personality disorder in the United States.) According to NICE guidelines, there is no consistent evidence, including from uncontrolled studies, that supports the use of pharmacological interventions to treat ASPD or the behavior and symptoms that underline the specific diagnostic criteria for ASPD.[242] Drug treatment should not be used specifically for BPD or the individual symptoms or behaviors associated with it (e.g., repeated self-harm, marked emotional instability, risk-taking behavior, and transient psychotic symptoms). In fact, these guidelines note that polypharmacy is a common problem in BPD, often driven by desperate medication changes during crises, and recommend reconsidering the treatment of those who do not have a diagnosed comorbid mental illness, with the aim of reducing and stopping unnecessary drug treatment.[243] Important negative studies in BPD did not support fluoxetine for suicide or self-harm prevention, or lamotrigine for routine care.[241] An updated Cochrane Review examined 11 medications in three classes (anticonvulsants, antidepressants, and dopamine agonists) for ASPD. It concluded that there is insufficient evidence to draw conclusions for pharmacological interventions for this condition, especially given that most studies have not included relevant outcome measures, such as reconviction.[244]

A recent pilot study of eight prisoners with personality disorder and repeated incidents of deliberate

self-harm who completed a course of treatment with clozapine showed a 70 percent decrease in urgent care and emergency room visits for self-injury. This improvement was achieved with a median dose of only 125 mg per day and persisted for six months following the discontinuation of treatment.[245] Further research on this approach will be of great interest.

As mentioned previously, NICE guidelines support the pharmacologic treatment of comorbid conditions consistent with their specific guidelines. For example, ASPD may be associated with chronic anxiety, which should be treated accordingly. NICE guidelines mention SSRIs, which increase cooperative behavior in normal people as a potential intervention among ASPD patients in prisons.[242] Antipsychotic and sedative medication may be used for short-term crisis management.[235] In such circumstances, dosages should be within the normal therapeutic ranges. Comorbid conditions should be targeted, rather than a personality disorder specifically or symptoms solely attributable to it.[243]

Extrapolating from the aforementioned limited data from community studies to routine care of incarcerated patients suffering from personality disorders and comorbid conditions is challenging because of the complexity of correctional environments and clinical pressures that are not necessarily present in community settings. Strong opposition to medicating patients with personality disorders could be counterproductive in correctional environments. As with any clinical decision, psychiatric providers should weigh the risks and benefits of medication treatment as well as consider the same analysis for no medication. Informed consent should include disclosure of the off-label nature of proposed treatments if applicable. Therapy should be directed at clearly defined clinical endpoints, regularly evaluated, and discontinued if not effective. Polypharmacy should be avoided.[241] Research on pharmacotherapy for personality disorders in correctional settings is particularly needed and encouraged.

5.9. Attention Deficit/Hyperactivity Disorder

Prevalence estimates of ADHD among prisoners have generally ranged between 9 and 50 percent, but the underlying studies have methodologic shortcomings that limit their reliability.[246] Although the actual prevalence remains unclear, the disorder can cause significant impairments for some incarcerated persons. ADHD can interfere with the ability to participate in psychosocial, educational, and vocational programming. It also can contribute to disruptive behaviors that compromise operations and security. Effective treatment is expected to result in functional improvements that benefit both the patient and the facility.

In a rare example of a randomized, double-blinded, placebo-controlled drug trial with incarcerated subjects, Ginsberg *et al.*[247] (2012) showed that a long-acting form of methylphenidate reduced ADHD symptoms and improved global functioning. A three-year follow-up study showed that most of the patients continued on methylphenidate had been released from prison, were employed, and had lower rates of recidivism and relapse into illicit substance use.[248]

Conversely, stimulant medications, which are the mainstay of treatment for ADHD in the community, have high potential for misuse. Some feign or exaggerate symptoms to gain access to these medications, and assessing these individuals diverts scarce psychiatry time and resources. Handling and administration of controlled substances requires additional nursing time. Diversion of medications can occur, both voluntarily for profit and involuntarily when patients come under duress from peers (see also section 6.5., "Misuse and Diversion of Psychotropic Medications"). Incarcerated populations are not identical to community samples, and the risk-benefit calculus for pharmacological treatment of ADHD is different in a correctional setting. Consequently, a primary reliance on nonstimulant medications may actually be in line with general community treatment standards and recommendations, even though on the surface it may appear that incarcerated persons are being undertreated due to more circumspect use of stimulant medication.[249]

Nevertheless, the benefits and risks of using stimulants to treat inmate patients with ADHD have parallels to community settings. In any context, variability in patient characteristics and symptom presentation informs treatment selection. A blanket ban on access to effective treatments in or out of correctional facilities lacks justification. Correctional psychiatrists face the challenge of ensuring access for patients in need of treatment while minimizing the potential risks.

How to identify and treat inmate patients with ADHD has been a source of controversy. ADHD is a complex disorder and requires careful diagnostic

evaluation to achieve an accurate diagnosis. Screening measures generate many false positives.[250] This is unsurprising given the high levels of psychiatric comorbidity in incarcerated patients with conditions that can either mask or mimic ADHD symptoms.[249–251] An ADHD diagnosis requires persisting relevant symptoms, confirmation of childhood onset of the same, and neither symptoms nor related impairments that are better explained by comorbid conditions.[251]

A model developed for use in the Massachusetts prison system[252] and described in the third edition of Psychiatric Services in Correctional Facilities[16] attempts to address the risks of prescribing controlled substances in a way that still ensures treatment for appropriate patients. The key features of this model include the following:

- assess and treat only those patients who have current and persistent functional impairments that impede active participation in programming, educational activities, and work assignments
- whenever practical, conduct a comprehensive diagnostic assessment that includes clinical examination, history of symptoms, record reviews (e.g., individualized educational plans, if available), observations of third parties, and symptom rating scales or comprehensive semi-structured diagnostic interview tools[251]
- treat with nonstimulants and nonpharmacological interventions whenever practical and effective
- do not initiate or continue use of stimulant medications for patients who do not meaningfully participate in recommended educational and non-pharmacological therapies
- if diversion is a concern, consider ordering shorter-acting, crushable medications to manage this risk
- discontinue stimulants for patients who misuse or divert their medications

Follow up with institutional collaterals (e.g., teachers or supervisors) is of value to verify functional benefits from stimulant prescriptions.

This model precludes stimulant treatment for incarcerated persons who have impairments in only leisure or recreational activities. It also avoids use of stimulants based solely on disruptive behaviors to discourage intentionally harmful misconduct to gain access to medication. Along with restricting treatment only to patients with meaningful functional impairments, these criteria avoid unnecessary diagnostic assessments and thus lessen demands on psychiatry and nursing staff. This model also recognizes that scarcity of time and resources may limit the extent to which some correctional mental health programs can gather historical and third-party information, conduct testing, and perform other in-depth assessments of the patient.

Using the described model in a well-resourced correctional mental health system, Appelbaum reported a stimulant treatment prevalence of about 1 percent during a two-year period.[252] This led to criticisms that the model is too restrictive and deprives some incarcerated persons with ADHD from receiving treatment. At the other extreme, some might contend that any use of stimulants to treat inmate patients with ADHD is unwise. A balanced approach, however, ensures treatment for those who can obtain significant benefits while limiting the substantial problems that can arise with availability of stimulants in correctional facilities. When correctional psychiatrists at the 2016 Annual Meeting of the AAPL were surveyed about the preferred approach for stimulant prescription in jails and prisons, the majority (64%) supported a balanced approach like that described above and in the literature. Far fewer supported a blanket ban (29%) or first-line use (2%) of stimulants.[253]

Noncontrolled medications for ADHD for incarcerated persons have been the subject of limited research and commentary. Jillani *et al.*[254] (2016) published a case series of five incarcerated adolescents with ADHD who responded to atomoxetine. Two of these subjects were 18 or older at the time of the study (personal communication, Kamath J, July 2016). Mattes (2016) suggested that alpha-2 agonists such as clonidine and guanfacine could be ideal alternatives to stimulants for ADHD in adult prisoners.[255] Neither are controlled medications, and both in their extended-release forms are FDA approved to treat ADHD.[256,257] Both have anxiolytic and sedative effects that may be of benefit for some patients.[255] As mentioned in section 5.4., "Depressive Disorders," some antidepressants have evidence to support their off-label use for adults with ADHD, including bupropion, desipramine, nortriptyline, duloxetine, and venlafaxine.[152,153] We encourage studies of these and other medications for incarcerated persons with ADHD.

5.10. Insomnia and Sleep-Wake Disorders

The DSM-5 describes ten sleep-wake disorders that present with problems of sleep quality, sleep quantity,

related daytime distress, or related daytime functional impairment: insomnia disorder, hypersomnolence disorder, narcolepsy, breathing-related sleep disorders, circadian rhythm sleep-wake disorders, nonrapid eye movement (NREM) sleep arousal disorders, nightmare disorder, REM sleep behavior disorder, restless legs syndrome, and substance- or medication-induced sleep disorder.[60] Insomnia, or sleep dissatisfaction at least three nights per week for at least three months, is the most frequently encountered sleep-wake disorder in incarcerated populations.[16] At least 40 percent of incarcerated individuals in prison[258] complain of insufficiently restful sleep, with the rate likely higher in jail populations because of the abrupt change from community living. A survey of prisoners in the United Kingdom found that 88 percent reported poor sleep quality.[259] Prevalence rates of insomnia disorder in correctional settings vary widely (11 to 81 percent) due to inconsistent definitions and research methods.[259,260] Regardless, insomnia can have a substantial impact on quality of life and is a risk factor for mood disturbances, cardiovascular disease, suicide, and overall mortality.[260,261] Untreated insomnia and sleep disorders have been linked to aggression, at least in incarcerated adolescents and young adults.[262]

As in the community, prior to initiating any treatment regimen, psychiatrists in jails and prisons may find it helpful to first establish a timeline of the sleep disturbance and relationship to comorbid psychiatric or medical conditions as well as external stressors. Although it may be difficult to firmly establish whether insomnia is a causative factor or a complication of medical or psychiatric comorbidities, a detailed history can help point to a particular course of treatment.

The conditions in correctional settings, i.e., confinement, lack of physical activity, legitimate fears about personal safety, inconsistent light and temperature control, idle time during the day that promotes napping, poor mattress quality, and institutional concerns about medication misuse and diversion, create a unique and challenging environment in which to address sleep complaints. The expectation of eight restful, uninterrupted hours of sleep may not be realistic. A Swiss survey of male prisoners indicated that their average reported sleep duration on weekdays was 6.8 hours.[263] Each patient with sleep complaints may be educated on the aforementioned factors in the process of collaborating on reasonable goals for treatment. If the patient's sleep pattern is within normal limits, no treatment may be appropriate (e.g., if the patient wishes to sleep more than is necessary for a healthy adult).

Treatment options should be realistic for the jail or prison setting. CBT approaches are the least risky, have the greatest chance of success for long-term resolution of symptoms,[264] and should be considered first-line treatment whether alone or in combination with medication.[265] Consistent with this, the American College of Physicians in their 2016 guideline on treating chronic insomnia in adults strongly recommended CBT as first-line therapy, regardless of whether or not medications are prescribed for this problem.[266] Yet, in correctional settings, particularly jails with shorter and less predictable stays, it may not be practical to offer CBT. Sleep hygiene education, however, may be provided at little cost in terms of time or resources. (See also Figure. 1.)

Studies on prescribing practices for insomnia in jails and prisons are sparse and there is no evidence-based recommendation for pharmacotherapy in these settings. The literature that does exist does not support medication treatment for insomnia in corrections. In a 2003 study of insomnia in prisoners in Geneva who had been prescribed benzodiazepines, zolpidem, or chloral hydrate, most remained poor sleepers despite two months of treatment (with exceptions being those who had a pre-existing cocaine use disorder and those with a healthy lifestyle).[267]

The latest guideline from the AASM (2017) weakly recommends suvorexant, eszopiclone, zaleplon, zolpidem, triazolam, temazepam, ramelteon, and doxepin for various types of insomnia in adults; the AASM weakly discourages the use of trazodone, tiagabine, diphenhydramine, melatonin, tryptophan, and valerian for either sleep onset or sleep maintenance insomnia in adults.[268] Despite the AASM's positive recommendations, correctional settings often restrict or actively discourage the prescription of benzodiazepines for conditions other than emergency indications because of the potential for misuse and diversion (see also sections 5.1., "Psychiatric Emergencies" and 6.5., "Misuse and Diversion of Psychotropic Medications"). Many also limit the use of nonbenzodiazepine hypnotics (e.g., suvorexant, eszopiclone, zolpidem, and zaleplon). We caution that environmental factors (like inconsistent light and noise) in jails and prisons may make melatonin-receptor agonists (e.g., ramelteon) less likely to be effective.

Because of security and formulary restrictions, prescribing practices for sleep disorders in jails and prisons

have evolved inconsistently. Sedating antidepressants (e.g., trazodone), atypical antipsychotics (e.g., quetiapine and olanzapine), and antihistamines (e.g., diphenhydramine) are frequently used despite the risk of adverse effects and limited to no evidence of efficacy.[156,269] An exception may be mirtazapine, although it is not labeled for insomnia and carries a risk for significant weight gain.[156] A review of the literature supports short-term use of low-dose (3 to 6 mg) doxepin for insomnia, with such dosing having better tolerability than antidepressant dose doxepin and without next-day sedation.[270] Increasing availability of generic forms of low-dose doxepin may make it a viable option in correctional facilities when indicated.[271]

Incarcerated persons sometimes present with an isolated symptom of nightmares, possibly with a goal of obtaining sedating medication. There may be some confusion among patients and psychiatrists about the use of prazosin for nightmares at large. Although prazosin is recommended for nightmare disorder by the AASM, to our knowledge, all of the studies to support prazosin's (as well as other studied medications') use for nightmares involve subjects with PTSD.[187]

Inmate patients may present with daytime mood disturbance and irritability accompanying sleep disturbance, along with complaints of snoring (often brought to their attention or even relayed to health care via cellmates). A survey of 438 women in a maximum-security prison found that 10 percent of them were at higher risk for sleep apnea.[272] To our knowledge, the use of continuous positive airway pressure (CPAP) in jails or prisons has not been formally studied. At the 2016 Annual Meeting of the AAPL, in a survey of correctional psychiatrists, more than 92 percent of those aware of institutional policy on CPAP devices reported that these were available for use by incarcerated patients, with 77 percent of respondents reporting this equipment as being provided by the facility or health care vendor.[253] We recommend that in suspected cases of sleep apnea, the psychiatrist collaborate with the appropriate provider in the facility authorized to manage this condition (see also section 4.3., "Coordination with Other Professionals").

In correctional settings that offer overnight work duty for inmates, circadian rhythm sleep-wake disorder may also be an important diagnosis to consider. This and other DSM-5 sleep-wake disorders have not been adequately described in the literature as related to correctional settings. Psychopharmacologic management of these disorders should mirror community standards as much as possible.

It is appropriate to choose a medication that best matches the patient's symptom profile and considers any comorbid conditions. Off-label use of a medication for insomnia or another sleep disorder should be disclosed in the informed consent process (see also section 4.6., "Informed Consent"). In such scenarios, using the lowest effective dose and the shortest duration of treatment necessary is prudent.

5.11. Substance Use Disorders

SUDs are perhaps the most prevalent mental health disorders among incarcerated persons, with more than half of state prisoners meeting criteria for one or more SUD.[94] Even higher rates are observed for persons in jails,[273] incarcerated women,[274] and incarcerated persons with comorbid mental health problems.[275] The use of drugs and alcohol may continue during incarceration.[157] There is a substantial risk of relapse,[276] overdose,[277] mortality,[278] and recidivism[279] following release from incarceration. Coroner's reports of drug overdose deaths in Ontario indicated that more than 10 percent of deaths occurred within one year of release from provincial incarceration, and 20 percent of those occurred within just one week of release.[280] Former inmates from the Philadelphia jail system have a nearly 37-times higher risk of overdose death after release.[281] This is particularly concerning in light of data suggesting that patients with OUD referred from criminal justice settings are less likely to receive evidence-based treatment, even when they had access to Medicaid.[282]

Medically supervised withdrawal, previously referred to as detoxification, does not treat an underlying SUD. Management of withdrawal is addressed in section 5.1., "Psychiatric Emergencies." Psychosocial interventions validated for the treatment of SUDs in correctional settings, such as CBT, relapse prevention training, and therapeutic communities, are appropriate to include as a component of the patient's treatment plan,[283,284] although their discussion is beyond the scope of this document. Research on medication-assisted treatment (MAT) for SUDs in incarcerated persons has expanded considerably in recent years. When specifically intended for OUD, the term medication for OUD (MOUD) is preferred.

Naltrexone

Naltrexone is FDA approved for OUD and alcohol use disorder (AUD) in both the oral and the long-acting injectable forms. The evidence base,

however, is particularly poor for using oral naltrexone in OUD, probably related to nonadherence.[285] A study of parolees with OUD found a high dropout rate and thus limited support for oral naltrexone.[286] Evidence for the long-acting injectable form of naltrexone (XR-NTX) for both AUD and OUD is promising. An open-label study of XR-NTX for repeat driving while impaired offenders showed a reduction in alcohol consumption and more days of abstinence.[287] XR-NTX provided to persons with an AUD in drug courts demonstrated a reduction in positive alcohol and drug tests, fewer missed drug court sessions, and fewer arrests.[288] Patients with OUD released from New York City jails found XR-NTX to be effective in controlling cravings, reducing opiate-positive drug screens, and reducing reincarceration.[289] Subjects on XR-NTX released from Rikers Island Prison had a lower rate of opioid relapse in an unblinded, randomized study.[290] In an open-label multisite study, XR-NTX reduced relapse rates in justice-involved persons with OUD, although the protective effects diminished after the injections were stopped.[291]

A drawback to XR-NTX is cost; it is not yet available in a generic form, and particularly relevant to formerly incarcerated persons, is not universally and readily available to Medicaid recipients.[292] Another caveat is found in Lincoln *et al*.'s[293] (2018) study of prerelease XR-NTX for jail inmates, which reported three deaths from opioid overdose in the community several months after stopping the injections. XR-NTX may reset tolerance, and patients should be advised of this as a part of informed consent process.

Acamprosate

Acamprosate is a noncontrolled, FDA-approved option for the treatment of AUD. A systematic review of the literature found it comparable with oral naltrexone in terms of reducing alcohol use.[294] Large studies of MAT for justice-involved individuals showed little overall benefit from acamprosate in terms of criminal and clinical outcome measures.[295,296] Given the lack of evidence specific to justice-involved individuals to support the use of acamprosate, its role in correctional settings is unclear.

Methadone

Methadone is a long-acting agonist opioid that is well supported by the literature for the maintenance treatment of OUD.[297] Randomized, controlled trials of methadone maintenance therapy (MMT) for released prisoners have shown increased engagement in treatment, reduced use of heroin,[298] and reduced needle sharing.[299] Methadone was found in a Cochrane Review to be superior to buprenorphine in retaining patients in treatment.[300] MMT is a long-standing practice for incarcerated women. In a large survey of U.S. prisons and jails, 78 percent of prisons and 81 percent of jails offered methadone to pregnant women, although only a fraction (22% of prisons and 33% of jails) initiated it during incarceration and most of them stopped it postpartum.[301]

A particular disadvantage of methadone is that individuals may use heroin or other opioids along with it to promote intoxication. For patients anticipating release to the community, MMT may require daily visits to a clinic offering this service, which is stigmatizing[94] and makes adherence challenging. Molero and colleagues[296] (2018), in a large Swedish community study, found an increased risk of accidental overdose with methadone compared with other MOUDs.

Buprenorphine

Buprenorphine is an MOUD that has advantages for incarcerated persons anticipating a return to the community. Although still a controlled substance, buprenorphine is a partial opioid agonist with limited euphoric effects and less respiratory depression. Worldwide, studies have demonstrated similar effectiveness of buprenorphine to methadone for reducing illicit drug use and criminal activity and improving adherence to treatment.[94] In contrast to methadone, it is available in an office-based setting, is more acceptable to former inmates, and can be more quickly titrated to an effective dose.[94]

MAT for Stimulant Use Disorders

Incarcerated persons on MOUD are shown to have high levels of psychiatric comorbidities, including ADHD and stimulant use disorders.[302] Although there are no FDA-approved medications for stimulant use disorder, a study of Swedish prisoners with ADHD and stimulant (specifically amphetamine) use disorder were randomized two weeks before their release to either long-acting methylphenidate or a placebo. At follow up, the subjects on methylphenidate had reduced ADHD symptoms and more amphetamine-negative urines.[303]

Prerelease Initiation of MAT

Research supports advantages to prerelease initiation of MAT versus merely a referral for treatment in the community. When randomized to receive XR-NTX before or after release from the Rhode Island prison system, those who started it prerelease were more likely to follow up in the community, took the medication for longer, and had more opioid-free days.[304] When prescribed for persons with comorbid HIV and AUD, prerelease XR-NTX reduced alcohol use, especially in those who received four or more injections.[305]

Vocci *et al.* (2015) reported on an induction program for both male and female prisoners in Baltimore. Subjects (who were presumed to be nontolerant) were given a starting dose of 1 mg of buprenorphine, and the mean dose plateaued around 12 mg per day. If a dose of 16 mg of buprenorphine was reached, the patient was converted to a thrice-weekly administration schedule. The most frequently observed side effect was constipation.[306] In a review of prerelease buprenorphine prescribing in the New Jersey prison system, dosing ranged from 2 to 12 mg, with a median dose of 8 mg.[307]

Malta and colleagues' (2019) large systemic analysis of studies on MOUD provided to incarcerated persons found that agonist medications provided during incarceration reduced recidivism, improved adherence with treatment, and reduced the risk of mortality both during and after incarceration. Research favored MMT and prerelease buprenorphine for treatment retention, reduced use of illicit opioids, and reduced recidivism.[308] Moore *et al.*'s (2019) review of a similar body of research suggested that only methadone had enough studies available for a meta-analysis. They agreed with Malta that methadone improved treatment retention and reduced use of illicit drugs but did not find a benefit in terms of criminal outcomes. The available studies of buprenorphine and naltrexone suggest that these medicines were as effective or better than methadone at reducing the use of illicit opioids after release.[309]

Institutional Challenges, Barriers, and Advantages

In a survey of Australian inmate patients prescribed MOUD, 25 percent admitted to at least partial diversion on at least one occasion.[310] Intranasal misuse of buprenorphine was consistently reported by a review of 10 papers on the diversion of opioids within prisons, though when combined with naltrexone (BNX), misuse was observed less often.[311] Inmate patients have reported using clever methods to divert BNX films: sleight of hand, adhering the film to the back of an ID card, dropping the film down their shirt, using dental cavities or dentures, using cling wrap, or coloring a piece of cigarette paper orange as a decoy during mouth checks. Methadone diversion has been described in corrections but is rare.[310] A study of incarcerated persons in the United Kingdom suggested that diverted methadone was harder to sell than any form of buprenorphine, and that buprenorphine without naloxone had the highest underground market value.[312]

MOUD may provide additional benefits for correctional systems. Incarcerated persons surveyed in the Rhode Island Department of Correction's comprehensive MOUD program perceived benefits such as a better overall prison environment, reduced withdrawal symptoms, and a reduction in illicit drug use in the facility. If accurate, this would align the goals of health care and custody staff.[313] Furthermore, a custody official reported that since implementation of MOUD in Cook County, Illinois, there were fewer assaults on jail staff and fewer fights among inmates.[314]

Correctional systems have historically been reluctant to provide MAT for SUDs during incarceration, especially with controlled agonist medications, given the cost, the associated stigma, and concerns about misuse.[94,315] Rapid turnover in jails is an operational barrier for implementation of MAT, especially when releasing to prisons that will not continue these treatments.[316] Scott *et al.*'s[317] 2021 survey of U.S. prison systems reports widespread concerns about the availability of aftercare for MOUD, raising the ethics of starting this treatment if it cannot be continued in the community.

These barriers are quickly breaking down. In 2018, roughly half of physicians in provincial correctional facilities in Ontario reported prescribing either methadone or BNX, with a substantial minority (19% for methadone, 11% for BNX) reporting initiating MOUD during incarceration.[318] In the United States, there is a nationwide trend toward increased access to agonist MOUD, with prison programs reported in Pennsylvania, New Jersey, Connecticut, Vermont, Massachusetts, New Hampshire, Maine, Virginia, and Delaware.[319] In Scott *et al.*'s[317] survey, 21 departments of corrections reported some access to MOUD,

with 19 reporting at least some access to buprenorphine or methadone. Aftercare providers may be located using readily available resources like the Substance Abuse and Mental Health Services Administration (SAMHSA) Opioid Treatment Program Directory (available at https://dpt2.samhsa.gov/treatment/directory.aspx) and the SAMHSA Buprenorphine Practitioner Locator (available at https://www.samhsa.gov/medication-assisted-treatment/find-treatment/treatment-practitioner-locator). We recommend that correctional systems consider the evidence described in this section to inform policy decisions.

Take-Home Naloxone

Whether or not a correctional system is using MOUD, inmates with an OUD or otherwise at risk of overdose death being released into the community should be given take-home naloxone kits along with instructions for use. Research including inmates released from both prison and jail settings supports that this practice is effective at reducing overdose deaths in the transition to the community and is cost effective.[320,321]

5.12. Gender Dysphoria

Epidemiologic data suggest that incarcerated persons identify as transgender at rates higher than would be expected in the community. The matters related to transgender identification, for example, housing, undergarments and other clothing, bathroom use, hair-removal products, hair length, electrolysis, make up and toiletries, voice training, strip searches, preferred name, gender-affirming pronouns, and health care are particularly complicated in a correctional environment.[322] The transgender women interviewed in a county jail reported high perceived rates of abuse, harassment, restricted housing, and limited access to hormonal treatment for gender dysphoria (GD).[323] Various legal challenges have further complicated and polarized transgender health care and the evaluation and treatment of incarcerated persons presenting with GD. Most of the concerns listed here are outside the scope of this document. Here we will focus on recommendations for the development and implementation of medication policy for GD.

Gender identity is the sense of oneself as male, female, or some other gender. A transgender person has a gender identity different than their sex assigned at birth. Gender identity may or may not align with one's gender role or gender expression (how an individual behaves in terms of gender role), and may be independent of one's sexual orientation (physical attraction to males, females, both, or neither). Transvestism (or cross-dressing) is the derivation of pleasure from wearing clothing of another gender; it should not be confused with gender identity or sexual orientation. Transition means the period when a transgender person is learning how to live in the gender role as a member of the sex opposite to that assigned at their birth. Transition includes the early period of hormonal treatment and concludes when the individual has received the medical procedures that are relevant for them.[324] GD occurs when a transgender person has clinically significant distress or impairment related to this identification.[60]

High-profile cases and scientific developments have made correctional facilities' awareness and capability of addressing GD and transgender health increasingly important. In 2002, Michelle Kosilek won a suit against the Massachusetts Department of Corrections to receive hormone replacement and psychotherapy for GD.[325] Transgender persons incarcerated in states that provide higher levels of transgender health care are less likely to report attempted suicide.[326] The NCCHC updated a position statement in 2020 about transgender and gender-diverse health care in correctional settings.[327] The reader is referred to that document for a discussion of standards related to assessment and screening, emergency management, patient safety, housing, privacy, continuity of care, gender-affirming procedures, and discharge planning. Key elements of the position statement relevant to prescribing include the following:

- Transgender persons who are incarcerated should have access to all health care services relevant to them, whether related to their sex assigned at birth (e.g., mammograms and Pap smears for female to male transgender persons) or their gender identity (e.g., medically necessary medical, psychological, and psychiatric services related to GD or transition).
- Transgender patients may arrive at a correctional facility reporting having been taking hormonal treatment in the community. Such medication should be continued if verified by an outside pharmacy.
- If a prescription for hormonal treatment cannot be verified, or if the medication was obtained without a prescription, a decision to start or

change hormonal medication treatment, whether during incarceration or in preparation for release, "needs to be based on individual medical need, risks and benefits, analysis of alternatives, ruling out contraindications, accepted standards of care, and a thorough informed-consent process." (Ref 324, p. 3).

Identification as a transgender person is not a mental illness, but GD may require psychological or psychiatric intervention. Psychiatrists diagnosing GD are advised to assess at a minimum for comorbid depressive, anxiety, and trauma-related disorders, and to treat them accordingly (see also sections 5.4., "Depressive Disorders"; 5.5., "Anxiety Disorders"; and 5.6., "Trauma- and Stressor-Related Disorders").

In many correctional systems, psychiatrists or other mental health professionals will be involved in the evaluation and diagnosis of patients referred for GD. But, psychiatrists do not typically prescribe hormonal treatments for patients with GD in jails or prisons. The World Professional Association for Transgender Health (WPATH) guidelines do not specify who should or should not prescribe hormone medications by discipline or specialty (e.g., endocrinologist, family physician, internist, or psychiatrist), and instead recommend a primary care approach for "hormone prescribers."[324] Thus, in many community health care settings, GD medication treatments are typically initiated and managed by primary care physicians. We recommend collaboration with a qualified professional who has additional training in transgender health care; clinical familiarity with the risks, benefits, and alternatives of various hormone agents; and awareness of the needs of this specialized patient population.

Cross-sex hormone administration is an off-label use of both androgens and estrogens. Extensive clinical experience however supports hormones for treating GD.[324,328] Not all persons with GD will want hormonal replacement therapy (HRT), although many will. Readers interested in the prescription and monitoring of hormonal treatments are referred to the guidelines from WPATH and the Endocrine society on the subject.[324,329]

Correctional and forensic psychiatrists may be called upon to opine about the appropriateness of a transgender patient for hormonal treatment, gender-affirming surgical procedures (e.g., cricoid cartilage shaving, orchiectomy, mastectomy, breast augmentation, and gender-affirming surgery, formerly referred to as sexual reassignment or bottom surgery), housing, gender-specific clothing and items, or matters related to safety or privacy (e.g., searches). A discussion of these topics is beyond the scope of this document; WPATH standards may be of value as a reference for psychiatrists when addressing these concerns.[324]

WPATH standards indicate that incarceration should have no bearing on the application of their standards, although correctional and forensic psychiatrists may be aware of a myriad of institutional or patient-specific circumstances that may require a different approach. Any recommendations should be based on a careful and comprehensive psychiatric evaluation, including consideration of medical and psychiatric risks, current clinical stability, adherence, informed consent, the anticipated duration of incarceration, and aftercare needs and available community resources. Due to the complexity of many of these patients, multidisciplinary case reviews may be helpful.

The following are some recommendations regarding eligibility criteria for HRT for inmate patients:

- they should fulfill DSM criteria for GD
- no psychiatric comorbidity should substantially interfere with the diagnostic work up or treatment
- they should demonstrate knowledge and understanding of the expected outcomes for hormone treatment as well as the medical and social risks and benefits

5.13. Sex Offenders and Paraphilic Disorders

Sex crimes, which constitute less than 2 percent of all crimes in the United States, are highly feared and stigmatized by society. Although perceived by the public as intractable, only 5.3 percent of sex offenders were shown to commit another sex crime within three years of release, which was about a 10th of the overall rate of recidivism.[330] Although a sex crime may or may not occur in the context of a pre-existing mental illness,[330] psychiatric disorders are often observed in this population. A survey of 113 consecutive male sex offenders from jails, prisons, or residential parole placements found high rates of SUDs (85%), paraphilias (74%), mood disorders (35%), impulse-control disorders (23%), anxiety disorders (9%), and ASPD (56%).[331] Persons with a

serious mental illness and a sex offense are more likely than those with a serious mental illness but no sex offense to return to prison on a violation of parole, even after controlling for substance use, Medicaid enrollment, homelessness, and unemployment.[332]

Sex offenders are considered to be at the bottom of the social hierarchy in prison and are often subjected to harassment, exploitation, and assault by peers.[333] These individuals are therefore exposed to experiences that may increase risk for the development of a new mood, trauma-, or stressor-related disorder during their period of incarceration. Sex offenders often, although not always, have a diagnosable paraphilic disorder. Based on a clinical interview with a series of males with sex offenses referred to a residential treatment facility from prison, jail, or probation, a DSM-IV paraphilia was identified in 58 percent.[334] The intent of this section is to address the specific treatment of paraphilic disorders in correctional settings.

It is important to diagnose and address paraphilias. Sex offenders with deviant sexual interests are more likely to commit another sex crime. The evidence is strongest for sexual interest in children and for general paraphilias (e.g., exhibitionism, voyeurism). Besides antisocial attitudes, sexual preoccupations evidenced by high rates of sexual interests and activities are also a significant predictor of sexual recidivism.[335,336]

In response to the passage of numerous state laws for the involuntary civil commitment of sex offenders at the completion of their sentences, the APA published a task force report in 1999 that included then-current best practices for the treatment of paraphilic disorders.[337] The literature at the time supported antiandrogens (e.g., cyproterone acetate (CPA) and medroxyprogesterone acetate (MPA)) as effective interventions to reduce sex offender recidivism, although the task force cautioned that these are less effective when administered involuntarily as the only form of treatment (i.e., it was recommended that these be combined with psychotherapeutic approaches).[337] The 2020 version of the WFSBP guideline for the treatment of paraphilic disorders recommends a stepwise approach, starting with psychotherapy alone, then an SSRI (at higher doses similar to those appropriate for obsessive-compulsive disorder), then antiandrogen medication (e.g., MPA or CPA), then long-acting gonadotropin-receptor hormone agonists (e.g., triptorelin or leuprolide), then various combinations of the

aforementioned.[336] Although the literature is more promising for CPA,[337] it is unavailable in the United States due to concerns about hepatic toxicity.[338]

The type and intensity of paraphilic sexual fantasies, as well as the risk of sexual violence, are important factors to consider in the choice of pharmacologic treatment. Although SSRI antidepressants have shown clinical efficacy, they should be used primarily for the treatment of paraphilias with lower risk of sexual violence such as exhibitionism.[336,339] Testosterone-lowering medications are the mainstay of treatment for sex offenders with moderate to severe paraphilias.[336,339,340] The WFSBP recommends at least two years of treatment with these agents in cases of mild paraphilic disorders, and at least five years if there is a high risk of sexual violence.[336]

Ethics concerns are suggested in the use of testosterone-lowering medications in incarcerated persons, some of whom may be judicially compelled to accept treatment. On the other hand, these treatments may relieve suffering and reduce the risk for reoffending. Their effects are not expected to cause damage to tissue or irreversible infertility. Rather, the clinical effects of these agents are due to the pharmacologic reduction of sex drive. Experts warn that antiandrogens have not been demonstrated to be effective when sex crimes are motivated by anger or hostility.[330] When clinically appropriate, we recommend offering these treatments to patients in correctional facilities on a voluntary basis.

5.14. Neurocognitive Disorders

Older individuals are within the fastest growing segment of the prison population.[341,342] This is a consequence of mandatory sentencing laws, longer prison sentences for certain offenses, and Three Strikes legislation, where a defendant is sentenced to life in prison after a finding of guilt on a third felony.[343] In addition to their growing geriatric population, correctional facilities house many persons with chronic and progressive medical diseases, prior drug and alcohol use, poorer overall health and nutritional status, higher rates of cancer, and higher rates of psychosocial stressors when compared with nonincarcerated people. These factors combine to make this group functionally older than their actual chronological age.[344] Many correctional systems consider inmates to be a part of the geriatric population when they reach the age of 50 based upon their need for additional medical services and supports.[341,342]

Psychiatrists working with the geriatric population in jails and prisons must be aware of the usual concerns associated with older patients: drug-drug interactions between somatic and psychotropic medications, increased sensitivity to the effects and side effects of psychotropic medications, and an increased incidence of serious side effects, particularly those impacting cognition. It is worthwhile to periodically review an older patient's medication list to reduce or eliminate redundancies or medicines with anticholinergic or sedating properties (e.g., diphenhydramine or TCAs), which are not infrequently prescribed in correctional settings for sleep or other indications. The Anticholinergic Cognitive Burden Scale is a useful resource (available online at http://www.idhca.org/wp-content/uploads/2018/02/DESAI_ACB_scale_-_Legal_size_paper.pdf) to identify medications likely to impair cognition and increase mortality. Better integration and collaboration with general and specialty medical services becomes increasingly important as our patients get older.

Geriatric correctional populations also experience neurocognitive disorders (i.e., dementia) and other age-related cognitive disorders and decline. Including a standardized, objective measure of cognitive ability is a valuable component of the clinical approach to this population. Examples include the Mini-Mental State Examination and the Montreal Cognitive Assessment.[345,346] Both instruments are available on the Internet (the Mini-Mental State Examination is available at https://cgatoolkit.ca/Uploads/Content Documents/MMSE.pdf; the Montreal Cognitive Assessment is available, after registration and training, at https://mocatest.org) and are easy to administer. It is helpful to use one or more of these for a baseline and at periodic intervals to document and track the patient's cognitive ability. This will assist in determining when and whether to prescribe medication indicated for dementia as well as anticipating the types of additional services, supports, and programming required. Specialty neurological consultation, neuropsychological testing, and brain imaging studies may be helpful in identifying reversible disorders and to distinguish dementia from depression in older patients with memory deficits, anhedonia, and sleep disturbance.[347]

To our knowledge, no clinical trials of medications for dementia have been conducted in a correctional setting. Several cholinesterase inhibitors have been FDA approved for use in the management of Alzheimer's disease (AD). Although there is no evidence that any of these medications improve or reverse dementia, these agents stabilize current cognitive functioning and slow disease progression.[348] Each of these medications is likely similarly effective for AD.[349] Rivastigmine is available as a patch and may be considered for patients with difficulty swallowing or those who have gastrointestinal side effects from oral cholinesterase inhibitors.[350] Memantine, a glutamate receptor antagonist rather than a cholinesterase inhibitor, has been approved by the FDA for treatment of moderate to severe AD. It is often prescribed in combination with a cholinesterase inhibitor. It may delay worsening of symptoms for some patients.[351]

The NICE guideline for dementia recommends using a cholinesterase inhibitor for mild to moderate AD, with memantine being second line for moderate AD and first line for severe AD. For Lewy body dementia (LBD), donepezil and rivastigmine are first line, with galantamine and memantine being second-line options. Cholinesterase inhibitors and memantine should only be considered in vascular dementia when comorbid AD, LBD, or Parkinson's disease dementia are present. These medications should not be offered in cases of frontotemporal dementia or dementia related to multiple sclerosis.[352] Given these recommendations, best clinical efforts to assess the underlying etiology of a dementia syndrome is important.

Older inmate patients are more likely to have a disability that affects their mobility.[353] Correctional facilities typically have not been designed and built to accommodate mobility-impaired people. Even modest gains in function and delaying further cognitive loss can have significant ramifications for patients in these settings. Many incarcerated persons are housed in bunk beds that present a significant risk of falls for older and mobility-impaired patients. They may be required to walk long distances to get to meals, pill calls, clinic appointments, and programming. This can be particularly challenging for older individuals. Barry et al.[342] (2020) linked problems with prison activities of daily living with depression and suicidal ideation in older inmates.

Patients may benefit from psychiatrists advocating for modification of operational procedures, including bringing meals and medication administration into correctional units that house older persons. Physical plant modifications, including support fixtures for showers and toileting, handrail installation in cells and hallways, and use of single rather than bunk beds

in these units are other important adaptations that may be considered.[354] Supporting the skills older persons need to navigate the requirements of life in a correctional facility will help preserve independent functioning for as long as possible and will delay or eliminate the need for more intensive and expensive nursing and supportive services.

6. Special Topics

6.1. Special Settings

Mental health care should be available to incarcerated persons regardless of where they are housed within a correctional facility. Some housing settings have operational differences that may affect the prescribing and provision of psychiatric medications. Here we address three of these settings: restricted housing, mental health, and medically oriented units.

6.1.1. Restricted Housing Units

Some incarcerated persons are housed on tiers separate from other (i.e., general population) settings for administrative (i.e., for protective custody), or disciplinary (i.e., for an institutional rule infraction) reasons. Restricted housing may be referred to as disciplinary, detention, or punitive segregation; administrative segregation; isolation; supermax; solitary or isolated confinement; etc. Although restricted housing varies from facility to facility, common features include limited social interaction, limited recreational activities, limited access to property, and fewer privileges. Protective custody differs in that it is usually voluntary, although these individuals may be under added stress related to the reasons for this housing (e.g., threats from peers). Incarcerated persons with mental illness may be more likely to violate institutional rules than their peers and may even seek out restricted housing for protection from real (e.g., harassment) or perceived dangers.[355] Although the methodologies of studies critical of restricted housing have themselves been criticized, time spent by inmates there has been linked to affective, cognitive, and psychotic symptoms.[356] Among mental health professionals, there is a strong consensus that restricted housing settings often result in psychiatric decompensation and may present barriers to effective treatment due to the nontherapeutic milieu, lack of adequate out-of-cell time, and restricted access to health care staff.[357–359] Studies have linked restricted housing with suicide and serious self-harm in both jail[360] and prison[361] systems.

Awareness of these risks is important for those with clinical responsibilities for patients in restricted housing settings. It is also important to consider the operational differences that may make effective treatment here challenging. As those in restricted housing may not leave the cell for medication administration, this process often occurs at the cell door. Although this may afford nursing staff opportunities to observe evidence of functional impairment (e.g., notably poor patient hygiene or general disarray in the cell), the significance of these observations may not be grasped in the time available, and covert nonadherence (i.e., cheeking) may be easier for an inmate standing behind a door. Prompt and correct documentation of adherence and medication refusal on the MAR, and communication of problems or changes of behavior to the psychiatrist are critically important. A closer follow up by mental health staff for patients in restricted housing is usually appropriate to better monitor for decompensation or for the development of new symptoms.

Out-of-cell contacts are preferred for treatment of patients in restricted housing.[356] Even when inconvenient, psychiatrists should request accommodation for out-of-cell contacts whenever concerns regarding limits of confidentiality may result in inadequate assessment, and when physical access is required to effectively complete an examination (e.g., in consideration of extrapyramidal symptoms) or to perform other necessary monitoring procedures (e.g., phlebotomy for serum levels). Psychiatrists of the opinion that effective mental health treatment is impracticable for the patient in a restricted housing setting should advocate for the patient to be transferred to a secure MHU or a forensic hospital capable of providing effective mental health treatment. These recommendations are consistent with the 2012 APA and the 2016 NCCHC position statements on solitary confinement.[359,362]

Continuity of medication administration may be interrupted by operational problems common in restricted housing, such as flooding of cells, lockdowns, or housing transfers, resulting in the patient not being in the cell the nurses expect. Good communication and coordination between custody and nursing staff may mitigate these disruptions.

Psychopharmacologic management targeting symptoms that emerge in restricted housing is often appropriate, although it is also important to reassess the patient's treatment needs upon exit from this setting. On the other hand, it is worthwhile to consider whether the stress related to the

aforementioned exposed a nascent or prodromal primary psychopathology.

6.1.2. Mental Health Units

Some patients' psychiatric problems cause more functional impairment than can be safely managed in a typical (i.e., general population) jail or prison setting. Correctional systems are well served by offering a continuum of levels of care for mental health services.[363] According to the 2011 National Survey of Prison Health Care, 41 of 45 respondent departments of corrections provided onsite inpatient mental health services.[364] A correctional facility may designate one or more tiers as specifically for the treatment of persons with serious mental illness. MHUs are more often found in prison systems than in jails, which typically have a lower census and shorter length of stay.[363] In an extensive search of the literature and the Internet, Cohen *et al.*[365] (2020) identified 317 MHUs in the United States, although 80 percent of them were located in prisons. The advantages of MHUs usually include a lower staff-to-patient ratio, on-tier nursing services, and increased access to programming, such as group and individual psychotherapies. Staff on these units are more likely to have additional training in mental health, and even custody staff may be considered part of the treatment team.[363] Some systems may have a separate "prison hospital" that serves the same purpose. An outside forensic psychiatric hospital, possibly under the jurisdiction of a different state agency, may exist as an option for an even higher level of care; a discussion of treatment in these settings is outside the scope of this practice resource, although the reader is referred also to section 4.1., "Continuity of Care."

Psychiatrists may consider recommending transferring a patient to an MHU for several reasons. If the patient's diagnosis is unclear, there may be more opportunities there to gather reliable observational data. Patients with adherence concerns (especially those subject to treatment over objection) may be better monitored and counseled by MHU nurses and psychiatrists. Staffing ratios on MHUs usually allow more frequent contacts with psychiatrists and other mental health staff, and thus more intensive treatment for refractory patients. Medications that require more intensive monitoring (e.g., clozapine or lithium) may be more appropriately initiated on an MHU.

Enhanced clinical services may avoid the need for nonemergency treatment over objection. A specialized treatment unit for patients with serious mental illness in the New York City jail system used a multidisciplinary approach and coordination with custodial staff to reduce medication nonadherence by 40 percent.[366]

6.1.3. Infirmaries and Hospice

Medical problems are more frequent in justice-involved populations, possibly related to high rates of SUDs as well as socioeconomic factors, including historically limited access to or utilization of community health care services. A survey of chronic medical conditions among persons in United States jails and prisons found higher rates of hypertension, asthma, arthritis, cervical cancer, and hepatitis than in the community.[367] Complicating these concerns is the aging of the prison population, with an increasing number of incarcerated persons having multiple medical problems (see also section 5.14., "Neurocognitive Disorders").[354] Incarcerated persons may be housed either on a temporary or long-term basis in an infirmary or specialized medical tier to address acute or chronic medical illnesses. As with MHUs, the availability of specialized medical tiers is more likely in correctional systems such as state prisons, with a larger population and longer anticipated length of stay.

Infirmaries and specialized medical units, although usually staffed with on-tier nursing, are often oriented toward the management of nonpsychiatric medical problems. Nevertheless, those with serious mental illness may be on one of these units when nonpsychiatric medical problems require acute attention. It is important to be cognizant of the interactions between psychiatric illness and nonpsychiatric medical illness. Research on depression and chronic medical illness in the community shows that depressed patients have increased rates of somatic symptoms, functional impairment, disability, and mortality.[368] Conversely, chronic medical illness is a risk factor for nonadherence with medical recommendations, worse medical outcomes, and suicide.[368] Extra caution is appropriate to avoid drug-drug interactions, especially in elderly patients and those with chronic medical conditions already treated with multiple medications.[369] Coordination of care with other medical providers, as always, is important (see also section 4.3., "Coordination with Other Professionals").

An infirmary is not a substitute for an MHU because they have different missions. Nevertheless, an infirmary may be used for incarcerated persons

with mental illness for diagnostic purposes, stabilization purposes, or crisis intervention when an MHU is not available in the facility. MHUs are typically used as a much longer-term special needs unit for persons with a mental illness who are unable to adequately function within a general population housing unit.

Likely related to their substantial medical burden and comorbidities, the prevalence of incarcerated persons with illnesses that require palliative, hospice, or end-of-life care is higher than expected.[370] Numerous palliative programs have been identified in prisons nationwide.[354] According to the 2011 National Survey of Prison Health Care, 43 of 45 respondent departments of corrections provided onsite long-term or nursing home care, and all but one provided onsite hospice care.[364] The rate of mental disorders in general and death anxiety specifically is higher in these patients than for similarly situated individuals in the community.[371] Concern about misuse of medication is a barrier to effective end-of-life care in correctional settings.[371] The 2009 guideline from the National Hospice and Palliative Care Organization on hospice and end-of-life care in correctional settings recommended that these facilities develop protocols to address nonpain psychiatric symptoms in hospice patients such as anxiety, confusion, restlessness, and sleep disorders.[372] We recommend that psychiatric treatment for incarcerated patients nearing their end-of-life, as it does in the community, focus on the compassionate alleviation of suffering from mental health symptoms.

6.2. Adverse Effects of Medications

The management of adverse effects from prescribed medications is a component of effective psychiatric care in any setting. Side effects are a major risk factor for medication nonadherence in prisons and jails.[373] All serious and common adverse drug reactions should of course be monitored in correctional settings following the same standards as in the community, including laboratory testing and focused physical examinations. Examples include, but are not limited to, baseline and regular periodic monitoring of serum levels for mood stabilizers (e.g., lithium, carbamazepine, and valproic acid), abnormal involuntary movement scales for antipsychotic medications, and metabolic monitoring parameters for second-generation antipsychotics. The reader is referred to pp. 8–16 of the Goldberg and Ernst[374] textbook *Managing the*

Side Effects of Psychotropic Medications (Second Edition) for a tabular summary of an evidence-based approach to routine laboratory studies for commonly prescribed psychotropic medications.

The APA, in its most recent version of its guideline for the treatment of schizophrenia, recommends anticholinergic medication for acute dystonia from antipsychotic medications and a reversible inhibitor of the vesicular monoamine transporter 2 (VMAT2) for moderate to severe or disabling tardive dyskinesia. Furthermore, for parkinsonism or akathisia the APA suggests lowering the dose of the antipsychotic or switching to an alternative one. Medication suggestions from the APA for parkinsonism includes anticholinergic medications, and for akathisia include a benzodiazepine or a beta-adrenergic blocking agent.[36] The cost of VMAT2 inhibitors justify a nonformulary process to limit their use to appropriate cases. Akathisia, which has been linked in some cases to aggression, violence, and suicide,[375] is a concerning complication. Yet, the clear risk of misuse and diversion of benzodiazepines suggests that short-term use, and either finding an alternative antipsychotic or trying a beta-blocker, would be preferable to chronic benzodiazepine prescription in correctional settings. Although anticholinergic medications may also be misused (see section 6.5., "Misuse and Diversion of Psychotropic Medications"), the risks are comparably lower.

Some side effects may be desired and even sought after by incarcerated persons. Adherence with antipsychotic medication, for example, is positively correlated with weight gain in prisoners.[376] One explanation for these observations is the preference of some to appear more formidable among their peers. Obesity and overweight are major concerns in this population. Gates and colleagues[377] (2016) found statistically significant weight gain in prisoners prescribed antipsychotic and antidepressant medications, although baseline rates of obesity were already high in those prescribed psychotropic medications.

In another relevant example, although SSRIs are well established to be generally better tolerated than TCAs, prisoners' adherence was unexpectedly better for the latter.[378] Baillargeon *et al.* (2000) speculated that the sedating effects of TCAs may have been advantageous to cope with the "stresses of institutional life" (Ref. 375, p 1446). When adverse effects from an indicated medication are perceived by the patient in a positive light, the psychiatrist should consider whether unintended effects are impairing functioning

or imparting risks that exceed the benefits of the medication. In such circumstances, we suggest that the patient be re-engaged in a discussion of these risks, and that alternative medications be offered if clinically appropriate.

If the prescriber suspects that medication is not indicated and is being taken by the patient for nonclinical reasons, we recommend that a careful risk-benefit analysis be undertaken, especially for higher-risk medications. Continuation of nonindicated medications may not be harmless. Particularly relevant for patients in correctional facilities, all antipsychotics, and some antidepressants (especially TCAs) have been linked to cardiac risks, including QT prolongation.[374] According to the last year of data reported from the Drug Abuse Warning Network (2011), there were 1,582 reported incidents of treatment in emergency rooms for the nonmedical, nonself-injurious use of antidepressants or antipsychotics, with patients being released to either law enforcement or a correctional facility.[379]

Patients in jails and prisons are more likely to tolerate side effects when they recognize that they are receiving benefits from the medication.[373] Thus, psychoeducation about the indications, benefits, and side effects of recommended medications is essential (see also section 4.6., "Informed Consent"). This begins with an informed consent discussion but should continue over the course of treatment. This approach may realize long-term benefits in terms of investment in treatment, adherence, and outcomes both during the period of incarceration and subsequently in the community.

6.3. Medication Nonadherence

Medication nonadherence is a common problem in all treatment settings.[380] Still, unlike providers in an outpatient community setting, the correctional psychiatrist may be quickly alerted to problems with adherence (e.g., by nursing or custody staff). Regardless of where treatment occurs, it is paramount to first identify why a patient will not take medications.

Inmate patients may refuse to take medications for many of the same reasons as patients in community settings, such as stigma, peer influence, side effects, and problems with insight.[381,382] Nonadherence may be directly related to illness symptoms such as persecutory thought content or impaired judgment. Additional reasons that are more specific to correctional

settings include a fear that participation in psychiatric treatment will indicate weakness or put one at higher risk for abuse or extortion. Patients may wish to avoid being transferred to an MHU, whether out of concern for stigma or because of additional restrictions that may be in place there.

Patients who refuse medications are more likely to be referred to psychiatry for evaluations for threatening language and behavior.[383] In these situations, consideration of transfer to a higher level of care or psychiatric hospitalization may be indicated. If nonadherence is due to simple forgetfulness or fatigue related to managing a chronic illness, it may be sufficient to provide psychoeducation, re-establish a therapeutic alliance, or co-develop a new treatment plan.

Given the significant loss of rights that occurs in jails and prisons, incarcerated persons may look for ways to control their environment to regain a sense of power. When psychiatrists prescribe medication without involving the patient in the treatment planning process, this promotes the patient's sense of powerlessness and increases the likelihood that they will refuse the medication at pill call. Provided the patient is willing to engage and does not have strong antisocial traits, the psychiatrist can avoid this dynamic by offering appropriate choices in the context of a respectful informed consent discussion (see also section 4.6., "Informed Consent").

Certain medications hold value in correctional systems due to psychoactive properties like sedation, euphoria, stimulation, or hallucination (see also section 6.5., "Misuse and Diversion of Prescription Medications"). Patients legitimately prescribed medication may feign adherence but save the medication for sale or barter later. Some may misuse their own medications to achieve certain effects not intended by the prescriber. In these situations, the nonadherence is covert. During medication administration, they will accept their medications but not actually take them as prescribed. They may then take the medications in an unintended route of administration (e.g., crushing and insufflating to achieve a "high"), or after accumulation, at a dosage higher than intended by the prescriber.

It is important that nurses working in jails and prisons be trained to understand, monitor, and address both overt and covert nonadherence with prescribed medications (see Table 1). Signs of cheeking (when the medication is taken into the mouth but not swallowed) include refusing to speak, quickly

Table 1. Signs and Strategies to Prevent Covert Nonadherence

Signs of covert nonadherence	Suggested prevention strategies
Refusing to speak	Mouth check
Moving the tongue inside the mouth	Liquid medications or water "chasers"
Quickly turning away	Officer observation and intervention
Leaving directly for the restroom	Restroom restriction
Diverting to peers in line or nearby	Restrict contact with peers in or near pill line
Unwillingness to show hands	Prefill pills in cup to hand to patient
Unexpectedly low-serum medication level	If available, consider long-acting injectable or liquid forms of the medication

turning away from staff or moving toward the restroom, and moving the tongue inside the mouth abnormally after taking medication. Low-cost interventions to prevent cheeking include "mouth checks" (having the patient open his mouth after taking medications), "liquid chasers" (sips of liquid to swish and swallow after taking pills), and requiring the patient to stay with staff for several minutes after taking medications. Palming (when the medication is taken in the hand by the patient, who may then pretend to ingest it) may be minimized by careful observation and by prefilling cups with the pills to be administered, thus avoiding the need to directly place the medicine in the patient's hand. In the most extreme cases, the patient may take the medication orally, then as soon as possible induce emesis to retrieve it.

Although nursing staff are at the vanguard in terms of medication administration, a multidisciplinary approach is instrumental for improving adherence. A cognitive-behavioral and psychoeducational intervention conducted by psychologists in a Spanish prison had a moderate but statistically significant improvement on adherence.[384] This benefit was maintained at three- and nine-month follow-up assessments.[385] Correctional officers also have a role here. An officer working alongside a nurse offers a second perspective and increases the chance of detecting unusual behavior. The presence of custody also sends a message that medication administration is important, and that there may be consequences for failure to take medications as prescribed. Another officer posted to observe the pill call line can serve to limit the passing of administered medications among patients. This officer may also observe whether a patient immediately goes to a nearby restroom to retrieve a cheeked medication or to induce emesis.

Laboratory studies (e.g., serum levels for TCAs, mood stabilizers, or antipsychotic medication; or urine toxicology tests for buprenorphine or methadone) may be refused to conceal covert nonadherence. Although the need for such monitoring should be included in the original informed consent discussion, a patient who refuses routine testing should be counseled again about the medical risks of unmonitored prescribing. If the patient still will not agree to participate in clinically indicated monitoring, the psychiatrist should carefully consider the risks of continuing the medication versus selecting an alternative treatment plan.

Some strategies may reduce the risk of covert nonadherence with oral medications (see Table 1). For example, oral disintegrating tablets (ODTs) typically dissolve in the mouth in under 10 seconds. This makes cheeking more difficult, although a patient may still be able to avoid taking it because ODTs are not absorbed through the oral mucosa and must still be swallowed. Alternatively, some medications may be crushed and dissolved (i.e., floated) in liquid. This should be followed by a mouth check to ensure that all the liquid, and therefore the correct dose, has been taken. The disadvantages of this approach include increased nursing time, adding a step in the medication administration process (thus increasing the chance of error), alteration of the properties of the medication (such as absorption), and incomplete dosing due to residual medication left in the discarded cup. Some medications cannot be physically crushed (like capsules), some are difficult to crush (like enteric coated pills), and some should not be crushed (such as extended-release forms). The reader is referred to the Institute for Safe Medication Practice's Do Not Crush list, accessible at http://www.ismp.org/tools/donotcrush.pdf.

When available (e.g., valproic acid, lithium citrate, and risperidone), liquid forms may circumvent many of the drawbacks of crushing medications, although they also require increased nursing time for administration (because of measuring). Accordingly, a blanket policy against unmodified psychotropic pills (i.e., requiring that all psychotropic pills be crushed or

administered in liquid form) is impractical in most correctional settings. One or more of the aforementioned strategies may have value, however, for an individualized treatment plan.

LAI antipsychotics (LAIAs) have several benefits for managing adherence concerns with antipsychotic medications. When indicated, an LAIA strategy is perhaps the surest method to eliminate the risk of covert nonadherence. Research on LAIAs shows that they reduce recurrent hospitalizations and improve adherence in the community.[386] Although drawing up and administering an LAIA requires time in the beginning, there is a net decrease in nursing work because of the elimination of daily dosing. Patients on monotherapy may prefer an LAIA for the sake of convenience and avoiding the need to routinely go to pill call. Cost, especially for second-generation LAIAs, can be a disadvantage. Additional side effects from LAIAs are usually limited to pain and bleeding at the injection site. Of note, there is a risk of postinjection delirium or sedation from the LAIA olanzapine pamoate, and as a result, the FDA requires continuous monitoring of the patient for three hours postinjection by a health care professional. This is an operational challenge for correctional settings, which may make this particular medication option impractical.[387]

6.4. Treatment over Objection

Both serious mental illness (see section 2, "Introduction and Legal Framework") and medication nonadherence (see section 6.3., "Medication Nonadherence") are commonly encountered in jails and prisons. The use of psychotropic medications on an involuntary basis may sometimes be necessary. In general, psychotropic medications can be involuntarily administered on an emergency basis, without additional due process, in both jails and prisons throughout the United States. Nevertheless, there are differences in procedures that are followed both within and across jurisdictions related to the setting of administration (e.g., health care versus non-health care), the duration of authorized administration (e.g., limits on the time frame or number of doses that may be given on an emergency basis), and the personnel who participate in the administration (e.g., health care versus non-health care staff). Procedures involving more due process are generally required if medications continue to be clinically indicated beyond these limits.

For nonemergency involuntary treatment over objection, the minimum constitutionally appropriate due process requirements are well defined in the prison system. The U.S. Supreme Court's 1990 *Washington v. Harper* decision allows for psychotropic medications to be administered on an involuntary basis if an internal prison administrative process, with procedural protections such as adequate notice and a right to be heard at a hearing, is followed. There must also be a finding that an individual has a serious mental illness, is dangerous to self or others, and that the treatment is in the individual's medical interest.[388] The Court in *Harper* held that judicial review was not required, and that the administrative committee used in this case (which included at least one medical professional, but with no members being currently involved in diagnosis or treatment) was sufficient to satisfy due process. Although the *Harper* decision has garnered criticism related to concerns about meaningful due process and vagueness about the appropriate setting for the administration of involuntary medications, there is little doubt that it sets a minimum standard for nonemergency involuntary medication in prisons. According to the latest review of prison systems with respect to nonemergency involuntary medication policies, 10 states provide significantly more due process protections (e.g., a hearing before an administrative law judge or district court judge), based on state constitutional grounds.[389] For additional analysis regarding the legal aspects of administering antipsychotic medications in correctional institutions, the reader is referred to the review article on this subject by Dlugacz and Wimmer (2013).[74]

The nonemergency involuntary administration of psychotropic medications in jails has not been as clearly constitutionally defined. The 2012 Ninth Circuit Court of Appeals decision in *U.S. v. Loughner* extended *Harper* procedures to federal pretrial detainees, but not to state county jails.[390] As of this writing, the *Loughner* decision has not significantly impacted nonfederal jails. Although 31 states do not have statutes prohibiting the use of a *Harper*-type administrative review in county jails, only South Dakota has implemented it widely.[389] Nonemergency treatment over objection remains uncommon outside of a hospital setting for pretrial detainees, even when clinically indicated. The problem is further compounded in areas where access is psychiatric beds is limited.

Psychiatrists working in jails are referred to the 2020 APA Resource Document on Non-Emergency Involuntary Medication for Mental Disorders in U.S. Jails. Included is this document is an analysis of the risks and benefits to consider when safe medication administration may not be guaranteed, especially if physical force is necessary. Psychiatric staff should act in and advocate for the most therapeutic medication intervention possible, even in the face of opposing pressures. When available, and especially if safe medication administration and clinical practices are not in place, psychiatric hospitalization for treatment over objection is advisable.[382]

There are significant consequences for patients who do not receive psychotropic medications when they are clinically indicated. Even in correctional mental health care systems that have adequate psychosocial rehabilitation services, many patients will choose not to (or are unable to) participate in such programming related to symptoms of a serious mental illness. The consequences of nonparticipation can be punitive, such as restricted housing, and could put an already vulnerable population at risk for clinical deterioration. Salem *et al.*[391] (2015) observed that nonemergency involuntary antipsychotic medication administered under a *Harper* procedure in the New Jersey prison system reduced the incidence of serious disciplinary infractions while these patients were receiving medication.

6.5. Misuse and Diversion of Psychotropic Medications

Vigilance regarding the misuse of prescribed medications is warranted in correctional facilities. Health care professionals providing direct and indirect (such as emergency departments, regional hospitals, clinics, and consulting specialists) services to incarcerated persons may be naive to this risk, especially for non-controlled medications. As previously discussed (see section 5.11., "Substance Use Disorders"), there is a high prevalence of SUDs among inmates, even though access to street drugs is limited in institutional settings. Literature on medication misuse in correctional settings is limited, leaving clinicians dependent on anecdotal reporting from other clinicians or the "buzz in the yard."[392] Diversion of medications occurs despite correctional facilities being highly regulated and controlled environments. Although diversion may be for voluntary self-gain, some patients are coerced by peers to relinquish their prescribed medication.[310]

Red flags for treatment seeking for nonmedical reasons include requests for specific medications, formulations, or dosages. Some may assert that every other psychotropic medication has failed or may claim to have certain medication allergies or intolerances. Some may seek seemingly innocuous medications because they can produce sedation, hallucination, or euphoria when crushed, snorted, smoked, injected, or taken in supratherapeutic doses. Other desired effects include enhanced sexual function and potentiation of other substances or medications.[393]

Controlled Substances

Controlled substances are of obvious concern. Benzodiazepines for example, are well known to carry a risk for misuse and dependence. Nevertheless, correctional health care providers require immediate access to these for managing emergencies such as acute seizures, status epilepticus, sedative withdrawal syndromes, and acute agitation. (See also section 5.1., "Psychiatric Emergencies.") P&T committees may consider allowing providers short-term access without prior authorization to benzodiazepines that pose a manageable risk (such as intramuscular lorazepam or diazepam, or long-acting oral benzodiazepines limited to intake units).

Controlled psychostimulants may sometimes be prescribed appropriately for incarcerated persons, and managing the risk of misuse of these is addressed elsewhere. (See section 5.9., "Attention Deficit/Hyperactivity Disorder") Methadone and buprenorphine used in opioid substitution treatment present particular challenges with respect to supervised dosing in correctional settings.[310] (See also section 5.11., "Substance Use Disorders")

Antipsychotics

The risk for misuse of quetiapine in correctional settings has been well described.[393–395] Quetiapine is usually sought for its sedative and anxiolytic properties, though may also mitigate symptoms of opioid withdrawal.[395–397] Intranasal, smoked, and intravenous self-administration of quetiapine by incarcerated persons is described in the literature.[154] Few other antipsychotic medications have been implicated for misuse in jails and prisons, although some concerns have been raised about olanzapine and risperidone.[154]

Antidepressants

Certain antidepressants have potential for misuse among vulnerable individuals, including persons with SUDs and those in controlled environments.[398] The misuse of bupropion in correctional settings is well established. It has a chemical structure similar to amphetamine,[399] has mild stimulating properties, and is sometimes prescribed as an alternative to psychostimulants.[394] (See also section 5.9., "Attention Deficit/Hyperactivity Disorder") Bupropion may induce euphoria, but only when first-pass metabolism is bypassed via insufflation or smoking.[399]

TCAs may be sought by inmate patients for their sedative (antihistaminergic) and hallucinogenic (anticholinergic) properties.[154] Some, such as amitriptyline, may be prescribed for nonpsychiatric indications such as neuropathic pain or migraine. Given the elevated risk for morbidity and mortality from these agents, alternative therapies should be preferred. When clinically necessary, TCAs should be administered as directly observed (rather than KOP) therapy.

When taken in large doses, venlafaxine can produce effects similar to amphetamine[400–402] or 3,4-methylenedioxy-methamphetamine (MDMA). Data from a study examining reports of adverse drug reactions in a large European database supported the potential for misuse of venlafaxine.[403] Other antidepressants suspected of misuse in correctional settings include fluoxetine, mirtazapine, trazodone, and citalopram.[400–402]

Mood Stabilizers and Antiepileptics

Gabapentin has strong evidence for misuse, both in the community[404] and correctional[405] settings. It has furthermore been linked to the misuse of bupropion in correctional settings.[406] Gabapentin has topical anesthetic properties[404,407,408] and anecdotal reports exist about prisoners using its powder to numb nasal passages to prevent irritation from the insufflation of bupropion (personal communication, Hamel E, October 2013). Pregabalin also has a significant potential for misuse, and is a schedule V controlled substance.[409] Of particular concern is that gabapentinoids are associated with a higher rate of both hospitalization and opioid-related overdose mortality.[167] Community case reports exist for misuse of carbamazepine, sometimes combined with alcohol, and we are aware of at least two anecdotal reports of such in a correctional setting.[410–412]

Other Medications

Anticholinergics such as benztropine, diphenhydramine, and trihexyphenidyl are other medications noted for their misuse in both community and correctional settings.[154,393] They may be sought for sedative or hallucinatory effects. Noncontrolled medications prescribed by nonpsychiatric general medical providers may also be at risk for misuse. There is overlap in terms of who prescribes certain medications (such as gabapentin, diphenhydramine, and clonidine), and if patients are permitted to have medications prescribed by general medical providers KOP, this circumvents the need for covert nonadherence at pill call.[413]

This section is not a comprehensive accounting of all medications at risk for misuse in correctional settings. The reader is referred to resources cited in this section.

Management of Medication Misuse

There are numerous and complementary strategies for managing the risk of misuse of prescription medications in jails and prisons. Administratively, P&T committees may limit access to higher-risk medications by using formulary controls. Correctional systems that have removed such agents from their formulary have reported significant reductions in misuse and diversion.[399] A study to evaluate the clinical effects of removing quetiapine from a correctional formulary showed no statistically significant changes in objective indicators of clinical functioning (e.g., transfers to higher levels of care, suicidal behavior, or disciplinary infractions) among patients whose quetiapine was discontinued.[414] If the benefits of prescribing a higher-risk medicine is considered to outweigh the risks for an individual patient, correctional psychiatrists should be prepared to use the nonformulary prior authorization process available in their system (see also section 3.2., "Pharmacy and Therapeutics Committees and the Formulary Process"). From a QI perspective, correctional health care administrators may alert prescribers when systemic prescribing patterns change, especially sudden surges in the prescription of particular medications.

The ongoing training of psychiatric, nursing, medical, and custody staff of this problem will increase awareness of unit-based or regional trends. As an example, Reeves[415] (2012) described the implementation of a guideline and confidential peer comparison for staff psychiatrists that discouraged treatment of insomnia

with benzodiazepines or low-dose quetiapine. This strategy successfully reduced these practices throughout the state prison system.

Correctional officers may contribute to reducing or preventing the misuse of psychotropic medications and other substances through a variety of methods, such as cell searches, forensic toxicology testing, and other surveillance. Although psychiatrists may play a consultative role in this regard or may communicate concerns about drug distribution and resultant safety concerns, they should be mindful to avoid ethics conflicts related to dual agency and breach of confidentiality. (See also section 4.2., "Coordination with Custody Staff.")

In terms of medication administration, covert nonadherence and methods to address it may be found in section 6.3., "Medication Nonadherence."

At the provider level, reducing medication misuse begins with good clinical care. As previously discussed, comorbid SUDs, personality disorders, and malingering are highly prevalent in correctional populations. Although none of these are mutually exclusive with a serious mental illness, appropriate evaluation of symptoms (see section 4.4., "Assessment") with greater weight given for objective indicators and collateral information (when available and appropriate) over self-reports will minimize unnecessary treatment. Laboratory studies are sometimes of value for verifying adherence with prescribed medication (in cases of suspected diversion). It may be appropriate, especially for more vulnerable inmate patients, to directly inquire about coercion or extortion to divert their medications.[393]

Incarcerated persons may file grievances, threaten litigation, file state medical board complaints, intimidate or even threaten harm, or recruit outside advocates to pressure the responsible provider to prescribe preferred medications.[393] Correctional psychiatrists should remain open minded regarding appropriate care for an individual patient. Yet, they should be prepared for such resistance when higher-risk medications are thought to be clinically inappropriate, adhere to prudent prescribing practices, and clearly document decision-making.

Finally, it is important for providers to stay attuned to and follow up on reports from administration, custody staff, health care personnel, and even inmates regarding substances that may be targets for misuse. The problem of medication misuse is dynamic, with ever-emerging medications of concern, combinations, and methods for misuse and diversion.[416]

6.6. Electroconvulsive Therapy and Transcranial Magnetic Stimulation

Despite its efficacy for severe and treatment-resistant mental illness[417] and its recognition as the standard of care in certain clinical scenarios, ECT is rarely utilized in correctional systems.[418] Surya et al.[419] (2015) surveyed U.S. prison systems and only four had referred patients for ECT within the previous five years. The reasons cited for this include limited knowledge about the indications and side-effect profile of modern ECT procedures, ethics concerns, stigma, and logistical problems.

ECT is considered the treatment of choice for treatment-resistant mania, treatment-resistant depression, neuroleptic malignant syndrome (NMS) and catatonia. Importantly, it has antisuicidal effects in addition to a role as an adjunct treatment for treatment-resistant schizophrenia.[420–422] ECT improves health-related quality of life in both the short and long term.[423,424]

Considering the high rate of serious mental illness in jails and prisons, candidates for ECT can be found there. The logistical and security concerns related to arranging services at an outside facility properly equipped to provide ECT, such as the state psychiatric hospitals or state university hospitals used by the departments of corrections in the aforementioned survey, justify reserving it for when other indicated treatment options fail.

Both legal and ethics arguments can be made that ECT should be available for incarcerated persons when indicated.[419] For example, similar security objections could be raised (and roundly rejected) for outside medical tests and procedures. Concerns about side effects from ECT that could impair functioning in a correctional setting, such as short-term memory loss, can be mitigated (if necessary) by additional support available on MHUs from nursing and trained custody staff.

Another consideration is the cost to correctional systems. Besides the expense of professional services, facility access, supplies, and anesthesia, systems must also cover the cost of transportation and security. To our knowledge, there is no published cost analysis of providing ECT in corrections. In community-based cost analyses, the evidence was inconclusive as to the cost effectiveness of ECT for depression.[425] For treatment-refractory schizophrenia, ECT was more cost effective than standard treatment, although less cost effective than clozapine.[425] Correctional systems may

also consider the human and financial costs incurred to the system relative to disruptive behavior by under-treated persons with serious mentally illness as well as consequent restricted housing. Cost savings may be realized by functional improvements with reduced need for intensive mental health care. Specialty service contracts, like those utilized for medical subspecialty services, are an administrative option for managing the costs associated with ECT.

Transcranial magnetic stimulation (TMS) is a relatively new treatment that is FDA approved for the treatment of major depressive disorder and obsessive-compulsive disorder.[426] Accumulated evidence suggests that it may also be efficacious in the treatment of schizophrenia, autistic spectrum disorder, pain disorders, anxiety disorders, SUDs, and PTSD.[427] It is an expensive and time-consuming treatment,[428] and to our knowledge is not commonly used in jails and prisons. It is possible that in the future, the treatment will be simplified in such a way that it could be practically and cost effectively used within correctional institutions.

6.7. Pregnancy and Lactation

Many incarcerated women are of reproductive age. Some reports suggest that 5 to 10 percent of females admitted to prison are pregnant at intake,[429] and a small number will become pregnant during incarceration through conjugal visits or work release. The same psychotropic-prescribing principals as for these individuals in the community apply in correctional settings and are outside the scope of this document. Still, psychiatrists should note that incarcerated pregnant women may underreport psychiatric symptoms for fear of losing custody of their baby or out of fear of medication teratogenicity. The pregnant individual's ability to make an informed decision about taking medications to manage her serious mental health needs may be compromised by undue pressure from peers, family, and nonmedical staff to avoid medications that might affect the fetus. Formulary restrictions may limit the availability of some medications, although correctional facilities may make allowances for pregnant women, such as for methadone maintenance.

Only about a quarter of U.S. departments of corrections allow for infants to remain with their mothers after delivery,[429] so prescribing concerns related to lactation are less commonly encountered than for pregnancy. A full review of matters related to prescribing for women in jails and prisons is outside the scope of this document. For a more extensive discussion of

prescribing for incarcerated women in consideration of pregnancy, lactation, contraception, and menopause, please refer to Friedman *et al.*'s[430] 2019 companion article to the original version of this practice resource, *Prescribing for Women in Corrections*.

6.8. Continuity of Care during a Public Health Crisis or Other Emergency

The novel coronavirus 2019 (COVID-19) pandemic that continues at the time of this writing has been the most devastating infectious disease event in living memory, but it is not the first infectious disease crisis to strike jails and prisons. Correctional facilities and other institutions, due to their inherent enclosure and congregation of people, are prone to be disproportionately affected by such events. For example, in the first wave of the Spanish Influenza pandemic in 1918, 27 percent of prisoners at San Quentin were infected. Even though isolation of an institution may delay penetration of an infectious agent, once this happens, the nature of these facilities makes an outbreak inevitable.[431] In a matter of weeks, single cases of COVID-19 reported at Rikers Island in New York City and Cook County Jail in Chicago became hundreds of cases within weeks despite efforts to curb the spread.[432] Higher rates of older inmates and those with medical comorbidities (see also section 6.1.3., "Infirmaries and Hospice") in correctional settings lead to greater risk of severe illness and death there during a pandemic.

Rapid detection and control of an infectious disease will reduce the number of affected individuals in these settings.[431] Many jurisdictions responded to COVID-19 outbreaks by reducing jail populations through diversion, bail reform, deferred prosecution, and temporary release for pretrial detainees charged with nonviolent offenses.[432] Prison populations have been reduced by slowing intakes from county jails, parole reform, legislative reduction in sentences, early release for nonviolent offenses, and compassionate releases.[433] When a public health emergency response includes precipitous releases to the community, psychiatrists have a role in facilitating continuity of care for patients, with special attention to those with serious mental illness and undertreated SUDs. (See also sections 4.1., "Continuity of Care" and 5.11., "Substance Use Disorders")

To reduce COVID-19 exposure and possible transmission during the COVID-19 pandemic, some correctional systems reduced time walking to or waiting in line at pill windows and expanded lists of KOP medications. In some jurisdictions, these lists now

included carefully identified psychotropic medications, although this privilege was individualized and could be revoked based on clinical need. Many facilities curtailed mental health services, limiting face-to-face contacts to urgent and high-priority clinical matters based on necessity.[434] These limitations are especially concerning for clinically fragile incarcerated persons with serious mental illness, cognitive limitations, or intellectual disabilities who may be less capable of requesting services. As discussed in section 2, "Introduction and Legal Framework," mental health services for incarcerated individuals are guaranteed by the Constitution and are therefore essential.

The following strategies to improve access to and continuity of psychiatric services for incarcerated patients, gleaned from the literature and from our experience, are offered as relevant learnings at this point in the COVID-19 pandemic:

- linkage and coordination with state and local public health epidemiologic data surveillance efforts that inform disease reduction strategies in systemwide institutions
- collaboration and communication among health care, custody, and administrative staff[435]
- screening and testing of new intakes and recently transferred inmates, and utilizing medical restriction (e.g., quarantine or isolation) for identified at-risk exposures[435]
- universal masking of inmates, custody, and health care staff
- provision of additional and appropriate personal protective equipment (PPE) to all staff who need to provide services for inmates in a medically restricted housing status[436]
- regular screening and testing of incarcerated persons and staff[435]
- vaccination of inmate patients, correctional health professionals, custody staff, and support staff[437]
- when space allows, arrangement of chairs in clinical treatment areas to allow for social distancing and confidentiality
- installation of barriers (e.g., acrylic) in offices where social distancing is not possible
- establishing or expanding telepsychiatry and other remotely delivered services[433,438]
- implementation of physical-distancing restrictions in pill call lines, in inmate traffic to clinics and pill calls, and in waiting room areas

- selecting carefully identified psychotropic medications to offer as KOP medication to reduce the need for patients to come to medication line
- reducing transit time and wait time during pill call
- continue directly observing administration of medication (see sections 6.5., "Misuse and Diversion of Psychotropic Medication" and 6.2., "Adverse Effects of Medications") for patients who misuse KOP medications or certain identified medications that pose an established higher risk for misuse, overdose-related morbidity and mortality, or serious adverse effects
- being cognizant of changes in the community that may require creative aftercare planning to maximize the likelihood of patients' successful transition to the community

Many of these strategies can be adapted to address other emergencies that limit availability of resources and impact implementation of medication administration and the delivery of clinical services.

7. Conclusions and Future Directions

This practice resource presents the best available evidence for the pharmacologic management of mental illness for incarcerated persons. Research specifically focused on individuals in jails and prisons remains limited in quantity and quality. Persons with a serious mental illness are overrepresented in correctional institutions, and their conditions are frequently complicated by comorbidities to a degree less often seen elsewhere, suggesting a need for more studies specific to this population. There are no published guidelines for prescribing psychiatric medications in correctional facilities. Community guidelines may be helpful for psychiatrists in these settings, but many need revisions, and studies to validate community practices in jails and prisons are also lacking. Even when current, guidelines may be difficult to fully implement, in part due to operational factors relevant to correctional facilities not considered by these documents.

Ethics concerns about the vulnerability of incarcerated persons as research subjects have severely limited modern work in this area, although interest in reinvigorating research for this population has been growing.[439] We continue to recommend engaging institutional review boards to encourage high-quality research on the assessment, pharmacologic management, and monitoring of serious mental illness in jails and

prisons. Validation of new or existing guidelines for the treatment of psychiatric illnesses in incarcerated persons would be of particular value.

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