The 2013 National ACHSA Multidisciplinary Educational Conference is being proudly presented in the Crowne Plaza Philadelphia West. The conference will be run March 15th through the 17th with an additional Nursing Forum being held on March 14th. Lectures will be presented by health care providers from across the country on a variety of current aspects of correctional medical care. Our conference offers up to 13 hours of live CME credit-hours applicable for CCHP certification, nursing and mental health provider credits. Application for CME credit has been filed with the American Academy of Family Physicians. Determination of credit is pending. A tour of the historic Eastern State Penitentiary will also be included for all conference attendees. This is a tour that providers in correctional medicine will not want to miss. Please make plans to join us.
U.S. PRISON HEALTHCARE IN 2013
PERCEPTIONS AND REALITY

Bruce P. Barnett, M.D., J.D., MBA
President, CA/NV Chapter ACHSA

Introduction

A great many changes in US healthcare will likely be ushered in with the New Year. The implementation of new governmental controls to improve access of care will impact delivery of health care services in all parts of this nation. However, inmates have long received healthcare on a different track than the rest of the nations’ citizens due to the unique protections afforded to prisoners under Constitution’s 8th amendment which uniquely guarantee the incarcerated prisoner a right to such healthcare as needed to protect his life and prevent undue suffering.

The history of healthcare in American prisons can be traced back to the Revolutionary War when British prison ships held thousands of rebels in such deplorable conditions as to cause most of their deaths while in captivity. Soon thereafter the newly-formed United States needed its own prisons. Among the oldest of these was the Eastern State Penitentiary opened 1829, and considered by many to be the world's first penitentiary. Contenders for the title of first prison in American include New York City's Newgate prison (1797), and Auburn (NY) prison (1860). Sing Sing in New York, San Quentin and Folsom prisons in California are three of the best known early penitentiaries in American remaining in active service.

A historical review of medical care provided in these prisons at the dawn of the 19th century makes for fascinating reading. As early as 1787 such luminaries as Benjamin Franklin and Dr. Benjamin Rush formed a society concerned with conditions in American and European prisons: The Philadelphia Society for Alleviating the Miseries of Public Prisons. The American Correctional Health Services Association will hold its 2013 annual multidisciplinary conference in Philadelphia and feature educational lectures and tours from the Eastern State Penitentiary.

Of course, healthcare has come a long way for all people in the past two hundred years. Healthcare behind the wire has evolved just as healthcare has changed for those in the free world. Correctional healthcare is certainly no longer a hidden or marginal pursuit. The population housed in American correctional facilities has grown dramatically in the past few decades to more than 2.3 million persons. Thus, prison healthcare across the states cumulatively comprises one of the largest healthcare delivery systems in America.

Common Perceptions of Prison Healthcare

On February 29, 1988, 40 reporters from local and national media gathered at the Plaza Hotel in Manhattan to hear one of America’s best known prisoners talk about his twenty-two years of incarceration. Rubin “Hurricane” Carter, described life in prison as a “living death.” As the first specific example, Carter recounted his experiences, not with prison guards, but with the prison’s medical system.

I have seen people die in prison – needlessly – from lack of medical attention and sheer neglect. And in that regard, I have always considered myself as being lucky because all I suffered was the loss of one eye, while John Artis [an alleged accomplice, sentenced along with Carter] a mere teenager I barely knew in 1966, and who would not have gone to prison had he not asked for a ride home that night, was not so fortunate. He contracted, in prison, an incurable circulatory disease. To date he’s had several fingers and toes amputated and he can only expect more in the future. Now, that’s horrible. I mean, for what? For simply asking for a ride home? It’s incredible.

Stories of medical mishaps in prison evoke horrible visions of abuse heaped upon the helpless. Worse, journalists exaggerate the drama. Facts without the embellishments do not make for such interesting reading.

Take Carter’s tale. He saw people die in prison. Would many inmates be alive today but for the circumstances of their incarceration? Convicts die from the same illnesses that kill in the free world. Carter suffered a retinal detachment from his boxing career long before he entered prison. The prison’s attempt to save his vision was valiant but predictably ineffective.

Indeed, medical care in prison seems to get a “bum rap” to use an older vernacular meaning an undeserved reputation. In fact prison medical care in the US during the past decades has probably been better than inmates would admit. The vast majority of bad outcomes for inmates are not on account of bad care. For example, Carter’s friend with the amputations suffered from Buerger’s disease (thromboangiitis obliterans). He was a long-term smoker. Whether in prison or not, multiple amputations were likely.

Continued page 3
But old perceptions die hard and nearly twenty years after Carter’s public condemnation of his imprisonment, journalists continued to cast aspersions on the efforts of healthcare providers working in prisons throughout the United States. New York Times reporter Paul von Zielbauer’s 2005 Pulitzer prize-nominated series about American correctional healthcare was surely among the more widely-read attacks. His article “Private Health Care in Jails Can be A Death Sentence” calls upon a handful of cases more than ten years back to portray an abysmal U.S. prison healthcare system. Mr. Zielbauer’s article sheds no light on the extreme challenge of providing care to the incarcerated, nor on the current progress in this venture.

The Reality of U.S. Prison Healthcare

The Constitution of the United States guarantees inmates a minimal standard of care, pursuant to the 8th amendment that bars cruel and unusual punishment. In 1976 Estelle v. Gamble applied this standard to prison healthcare and interpreted it to prohibit deliberate indifference to serious medical need. Since then a great number of cases have elucidated the exact meaning of this Supreme Court ruling.

Over the years, public policy has evolved to make prisons accountable for the healthcare inmates receive while incarcerated. Most states explicitly imposed a duty of care for the overall welfare of an inmate. (See, e.g. Sanchez v. State (N.Y. App. Div. 2007) 827 N.H.S.2D 338, 339 [“Having assumed physical custody of inmates who cannot protect and defend themselves in the same way as those at liberty can, [the prison official] owes a duty of care to safeguard inmates, even from attacks by fellow inmates.”]; City of Belen v. Harrell (N.M. 1979) 603 P.2d 711, 713 [“When one participates in the custodial care of another, as in the case of a jailed prisoner, the custodian has the duty to exercise reasonable and ordinary care for the protection of the life and health of the person in custody.”];

Generally speaking, the quality of care has improved as the result of legal and statutory attention spurring increased scrutiny and expenditure on inmates’ medical care. Thus Mr. Zielbauer’s expose was already old news in 2005. By then federal courts were well engaged in massive projects to reform prison healthcare. For example, the nation’s largest state prison system in California was placed under federal receivership.

Goals for Providers of Healthcare in Prison

Just as Family Medicine evolved to form its own associations independent of other specialties, Correctional Medicine has reached enough proponents to determine applicable standards of care. There are national standards promulgated by national organizations, such as the American Correctional Health Services Association, the National Conference on Correctional Healthcare and the Society of Correctional Physicians. Many medical residents nowadays obtain training in care for the incarcerated. In October, 2012, the American Osteopathic Association officially recognized Correctional Medicine as a medical specialty.

The basic goals for providers behind the wire are the same as those working in the free world: 1) safety for the patient and staff 2) medical confidentiality and 3) professional care based upon scientific evidence. The many layers of oversight and regulations that monitor health services in prison tend to promote high quality care in virtually all correctional settings. All of us who practice in the specialty of Correctional Medicine can be proud of our efforts and the recent acknowledgment of our roles.

2 Artis appears to have suffered amputations as a result of Berger’s Disease.
4 Estelle v Gamble, 429 US 97 (1976) defines “deliberate indifference” to inmates' serious illness as violating 8th amendment prohibition agains cruel and unusual punishment. In Europe, the European Convention on Human Rights prohibits “inhuman or degrading treatment or punishment,” a somewhat different formulation.
5 See California Prison Receivership website, cprinc.org, for detailed court documents and turnaround plans

Oregon Chapter American Correctional Health Services Association Fall Conference Report

Blustery fall weather greeted those attending the fall conference on the Oregon Coast in November. Those attending had a great time learning, networking, and having fun. Presentations included information on Bath Salts, Updates on TB, Assessment Skills, ADA Updates, Transition Planning, and Quality Improvement.
CONSIDERATIONS IN USING LONG-ACTING INJECTABLES FOR INMATES WITH SCHIZOPHRENIA AND PSYCHOSIS

By Kelly Lee, PharmD, BCPP* and Todd Shinohara, PharmD**

Schizophrenia affects about 1-2% of the world's population, including 3.2 million Americans. The NCCHC survey cited in the Handbook of Correctional Mental Health edited by Scott and Gerbasi find 2-4% of inmates in State prisons suffer from schizophrenia or psychosis.

Medication adherence is a significant issue in medical and mental health conditions. The fact that inmates can be directly observed does not guarantee adherence to any schedule as many inmate/patients will simply not appear on the med line to take their prescribed medications. Long-acting injectables (LAI) may therefore be considered an alternative. Advantages of using LAI antipsychotics include simplification of the medication regimen, tracking medication taking behavior, reduced risk of intentional or accidental overdoses, better correlation with dose and plasma correlations, and decreased fluctuations and reduced plasma concentrations, all of which will hopefully improve symptom control, decrease side effects and decreased relapse. The disadvantage of LAI antipsychotics include the delay in reaching steady state levels, prolonged side effects and pain at injection site for the patient. The short-acting injectable (SAI) antipsychotics are also utilized within the prison setting. Their utility will be discussed at another time.

Table 1. Pharmacokinetics of Long-Acting Injectable Antipsychotics

<table>
<thead>
<tr>
<th>Generic (Brand)</th>
<th>Usual Dosage Interval</th>
<th>Time to peak plasma concentration</th>
<th>Half-life (for single dose)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluphenazine (PROLIXIN)</td>
<td>2-5 weeks</td>
<td>8-10 hours</td>
<td>6-9 days</td>
</tr>
<tr>
<td>Haloperidol (HALDOL)</td>
<td>4 weeks</td>
<td>6 days</td>
<td>21 days</td>
</tr>
<tr>
<td>Risperidone (RISPERDAL CONSTA)</td>
<td>2 weeks</td>
<td>21 days</td>
<td>3-6 days</td>
</tr>
<tr>
<td>Paliperidone (INVEGA SUSTENNA)</td>
<td>4 weeks</td>
<td>13 days</td>
<td>25-49 days</td>
</tr>
<tr>
<td>Olanzapine (ZYPREXA RELPREVV)</td>
<td>2-4 weeks</td>
<td>7 days</td>
<td>30 days</td>
</tr>
</tbody>
</table>
Table 2. Long-Acting Injectable Antipsychotics\textsuperscript{16-19}

<table>
<thead>
<tr>
<th>Generic (Brand)</th>
<th>Starting Dose; Conversion from oral dose</th>
<th>Dosage (Max)</th>
<th>Administration &amp; Site</th>
<th>Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluphenazine Decanoate (PROLIXIN)</td>
<td>Start: 6.25 to 25mg IM or SQ. Increase or repeat Q1-4 weeks as needed. Convert: 1.2x previous oral daily dose Q2weeks. D/C oral dose after 1st injection.</td>
<td>12.5-100 (100mg/dose)</td>
<td>SQ or IM. Gluteal injection preferred. Inject slowly and deeply into upper outer quadrant of gluteal muscle</td>
<td>Room temperature (15-30°C). Protect from light.</td>
</tr>
<tr>
<td>Haloperidol Decanoate (HALDOL)</td>
<td>Start: Typically 10-15x previous oral antipsychotic dose in haloperidol equivalents given monthly. <strong>Loading Dose</strong> Low dose (up to 10mg/day haloperidol): 10-15x oral daily dose and titrate upwards. High doses (&gt;10mg/day haloperidol): 20x oral daily dose and titrate downwards.</td>
<td>75-300 (450mg, first dose NTE 100mg)</td>
<td>Deep IM injection. Volume per injection site should not exceed 3ml.</td>
<td>Room temperature (20-25°C). Protect from light.</td>
</tr>
<tr>
<td>Risperidone LAI (RISPERDAL CONSTA)</td>
<td>Start: Initiate at 12.5-25mg IM every two weeks with increase in dose to response every 4 weeks. Convert: Continue oral for 3 weeks after 1st injection to allow for adequate plasma levels of depot risperidone to be reached.</td>
<td>12.5-50 (50mg IM Q2weeks)</td>
<td>Gluteal or deltoid. Deltoid injection only for patients with adequate muscle mass.</td>
<td>Refrigerate (2-8°C). May store at room temperature x7days. Suspension can be at room temp. Use within 2 min. of mix.</td>
</tr>
<tr>
<td>Paliperidone Palmitate Extended Release (INVEGA SUSTENNA)</td>
<td>Start: Initiate with 234mg on day 1, then 156mg one week later followed by 117mg monthly. Convert: Oral can be discontinued at first injection. Same initiation schedule for all patients. Approx. equivalent maintenance doses: 3mg/day=39-78mg/month; 6mg/day=117mg/month; 12mg/day=234mg/month</td>
<td>25-150 (234mg/month)</td>
<td>Deltoid or Gluteal. Slow, deep IM injection. 1st and 2nd dose must be given in deltoid. Maintenance doses can be given in deltoid or gluteal.</td>
<td>Room temperature (15-30°C).</td>
</tr>
<tr>
<td>Olanzapine Pamoate Extended-Release (ZYPREXA RELPREVV)</td>
<td>Oral Olanzapine: <strong>Dose during first 8 wks</strong> 10mg/day: 210mg Q2wks or 405mg Q4wks 15mg/day: 300mg/Q2wks 20mg/day: 300mg/Q2wks Oral Olanzapine: <strong>Maintenance Dose after 8 wk</strong> 10mg/day: 150mg Q2wks or 300mg Q4wks 15mg/day: 210mg Q2wks or 405 mg Q4wks 20mg/day: 300mg Q2wks</td>
<td>150-300mg every 2 weeks of 405mg Q4 wks (300mg Q2wks or 405mg Q4wks)</td>
<td>Deep IM gluteal injection.</td>
<td>Room temperature NTE 30°C (86°F). When suspended in solution, may be at room temperature x24hrs.</td>
</tr>
</tbody>
</table>

\textsuperscript{LAI}=long-acting injectable, NTE=not to exceed, IM=intramuscular, SQ=subcutaneous, DC=discontinue

Recognized Treatment Guidelines for Long-Acting Injectable Antipsychotics

Clinical Guideline Recommendations for Antipsychotic Long-Acting Injectables\textsuperscript{27}

- Guidelines are generally conservative in their recommendations for use of LAI antipsychotics and there continues to be low utilization among patients who require long-term treatment.
- Patients who require long-term treatment with antipsychotics should be considered a candidate for LAI.
- Patients who have poor adherence and have high risk of relapse are also candidates.
- No definitive evidence that any one LAI is superior to another in efficacy so clinicians should consider previous experience, patient preference and history of response (therapeutic and adverse effects).
National Institute for Health and Clinical Excellence (NICE) Guideline

- The NICE guideline was updated in March 2009. As with oral antipsychotics, selection of medications should depend on the potential of individual antipsychotic medications to cause extrapyramidal symptoms (EPS), metabolic side effects or other side effects that may not be tolerable to the patient. Benefits should be weighed against adverse effects (metabolic, extrapyramidal, etc) and doses should be initiated at the lower ranges.
- Long-acting injectable antipsychotics should be considered in patients with schizophrenia who 1) who would prefer such treatment after an acute episode, and 2) where avoiding covert non-adherence (either intentional or unintentional) to antipsychotic medication is a clinical priority within the treatment plan.
- When initiating depot/long-acting injectable antipsychotic medications, patients' preferences and attitudes toward mode of administration should be taken into account as well as organizational infrastructure and procedures.

Schizophrenia Patient Outcomes Research Team (PORT)

- LAI antipsychotics should be offered as an alternative to oral antipsychotics for the maintenance treatment of schizophrenia when the LAI formulation is preferred to oral preparations.
- There are significant gaps in the evidence base for use of LAI antipsychotics. There are no long-term, randomized, controlled trials investigating whether first generation (FGA) or second generation (SGA) LAI antipsychotic medications reduce the risk of relapse in comparison to oral antipsychotic agents, although 2 such studies of LAI risperidone are currently underway.
- There are also no data to support the use of LAI antipsychotic agents compared with oral antipsychotic medications as first-line treatments for schizophrenia.
- There are also no studies demonstrating that use of LAI agents improves long-term adherence to treatment.
- Finally, comparative studies of the efficacy and safety of LAI formulations of FGAs vs. LAI risperidone have not been conducted. Therefore, the current evidence is insufficient to recommend a specific LAI antipsychotic agent over another.

Texas Medication Algorithm Project (TMAP)

- According to the Texas Medication Algorithm Project Schizophrenia Treatment Algorithm published in April 2008, there are no definitive recommendations for the timing of initiation of LAI antipsychotics or specific LAI medication that should be recommended first-line.
- The guideline recommends that if a patient is inadequately adhering to medication at any state, a LAI may be considered such as haloperidol decanoate, fluphenazine decanoate or long-acting risperidone. Prior to initiation of a LAI, clinicians should also assess contributing factors to non-adherence.

SUMMARY

- Clinicians may want to consider use of LAI antipsychotic if patients are poorly adherent.
- Based upon published guidelines, there are no recommendations for use of long-acting FGA or SGA based upon efficacy or adverse effects.
- Step wise approach to therapy should be considered when multiple options presents themselves.
- Based upon the lack of definitive recommendations, clinicians should consider long-acting formulations of FGA as first line when possible, over SGA, unless contraindications exist.

REFERENCES


*Dr. Lee is an Assistant Professor of Clinical Pharmacy at UCSD Skaggs School of Pharmacy & Pharmaceutical Sciences. She is a board-certified psychiatric pharmacist who has extensive clinical, research and teaching experience in mental health. She is a consultant to local, state and national organizations who seek to improve utilization of psychotropic medications.

**Dr. Todd Shinohara is the clinical pharmacy services manager for the California Correctional Health Care System. He is an Assistant Professor of Clinical Pharmacy at the UCSD Skaggs School of Pharmacy and Pharmaceutical Sciences.
ESSENTIALS OF CORRECTIONAL NURSING

By Bruce P. Barnett, MD, JD, MBA

In recent years, no fewer than 2 million Americans have been receiving their healthcare while incarcerated, either in jails or prisons as more than 1% of the adult US population is behind bars in any year. But there are very few medical texts to guide the many thousands of healthcare providers engaged in the care of this population. Dr. Schoenly and Ms. Knox provide in their 2013 text a welcome addition to the very limited inventory of text books on the subject.

By its title, ESSENTIALS OF CORRECTIONAL NURSING appears to be a companion volume to the 1998 medical text, CLINICAL PRACTICE IN CORRECTIONAL MEDICINE, first published in 1998 (second edition in 2006). But that notion does not do justice to this new book. Schoenly and Knox have edited and written a comprehensive review of the healthcare issues and treatment options for US inmates equal or superior in its value to any prior issued publication. This book is worth reading by anyone caring for the incarcerated patient regardless of discipline.

ESSENTIALS OF CORRECTIONAL NURSING has much to recommend it. It is affordable. The soft cover format is convenient and possibly more practical for use on a prison yard than might be a hard cover version. In addition, an eBook version is available for digital readers. Most importantly it is relevant and readable. Thankfully, the editors do not reiterate material about such common diseases as hepatitis C and diabetes already put forth adequately in many other authoritative textbooks. Instead, each of the chapters informs readers about aspects of health care unique to the correctional environment. The book begins appropriately with an overview of ethical and legal and practical considerations for the delivery of healthcare in correctional facilities. Additional chapters tackle all the main concerns for inmate healthcare such as drug habitation, chronic pain, end-of-life care, mental health and dental health. The book’s last chapters touch upon management topics and modern strategies for quality improvement.

This is a textbook ostensibly directed to nurses. The authors are all nurses, many with doctorate degrees. There is not one MD author. Yet despite the lack of MD writing, the textbook is extremely relevant and informative for any physician treating inmates. That a nursing text has so much to teach me is no surprise, because nurses provide more direct health care to inmates than do physicians.

ESSENTIALS OF CORRECTIONAL NURSING is the first new and comprehensive text about this growing field to be published in the last decade. Fortunately, the editors have done a great job in all respects. The writing is clear and pertinent to the practice of medicine “behind the wire.” The references are sufficiently erudite to satisfy the most critical academic. This book should be required reading for all medical practitioners and administrators working in jails or prisons. It certainly belongs on the shelf of every nurse, physician, ancillary healthcare professional and corrections administrator.

Bruce P. Barnett, MD, JD, MBA is the President of the California/Nevada chapter of the American Correctional Health Services Association. He works as a medical/legal liaison for the office of legal affairs for California Correctional Health Care Services, and also provides health care to inmates as a staff physician.

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