Rhode Island Board of Medical Licensure and Discipline

Considerations Regarding Pharmaceutical Stimulant Prescribing for Attention Deficit Disorders (ADD)/Attention Deficit Hyperactivity Disorder (ADHD) in Adolescents and Adults

The Rhode Island Board of Medical Licensure and Discipline (BMLD) shares policy statements to educate its licensees regarding matters that may not be specifically or clearly addressed in current statutes, regulations, or rules. The intent of this document is to provide an educational perspective that informs licensees regarding this relevant clinical matter. This statement is targeted toward physicians who treat patients who are older adolescents or adults. Elementary school-age children have other factors that affect them, specifically physical, emotional, and social development which are beyond the scope of this statement.

This statement contains useful information regarding diversion of stimulants, misuse and thoughtful prescribing. There are several national guidelines[1] from professional and governmental organizations which serve as additional resources.

Background

Prescribing pharmaceutical stimulant(s) for ADD/ADHD in Rhode Island's adolescent and adult populations is common. Currently, pharmaceutical stimulants prescriptions account for 1.3 million doses filled monthly by Rhode Islanders. As with any controlled substance, safeguards are necessary to prevent diversion and to prescribe responsibly. Pharmaceutical stimulants used to treat these disorders are schedule 2 medications, in recognition of the fact that when these medications are used for unintended purposes, there is a potential for abuse. Diversion[2] occurs when a controlled substance, which is intended for one person, is given to another person. There are many problems associated with diversion of controlled substances, and diversion of stimulants present unique challenges.

All prescribers have a professional[3] and ethical duty to follow appropriate minimum standards to prevent diversion of controlled substances. Several pharmaceutical stimulants are available in long-acting, abuse-resistant formulations. However, there is a higher demand for the short-acting (immediate release) formulation of stimulants as they are more easily adulterated for various recreational or performance-enhancing effects.

About Prescription Drug Diversion

Review of prescribing data from the Rhode Island Prescription Drug Monitoring Program[4] (PDMP) reveals that in 2007, the total number of prescriptions for stimulants was higher for patients ages 18 and older than it was for patients who were younger than age 18. This trend has continued since 2007, an indication that adult patients are being treated for ADD/ADHD more frequently, often with pharmaceutical stimulants. Of note, short-acting, amphetamine-containing products are more commonly prescribed for patients age 18 and older. Most of these short-acting products are not available in abuse-resistant formulations. Conversely, patients who are younger than age 18 are more likely to get long-acting formulations of methylphenidate that are dispensed in abuse-resistant formulations.

Patients ages 18 to 25, who are typically college students, are more likely to be taking short-acting stimulants than long-acting, abuse-resistant formulations. Additionally, amphetamine products are more common than methylphenidate products for this age group.

Websites such as www.streetrx.com contain information on price and availability of illegally-obtained pharmaceuticals. Although information on this type of website is not obtained or presented in a scientific manner, there is value in being cognizant of the potential monetary value of diverted pharmaceuticals. According to this website, during the month of May 2015, pharmacological stimulants are diverted almost as frequently as pharmaceutical opiates in Rhode Island. Prices for one stimulant pill ranged from $2 to $22[5], and prices for one opiate pill ranged from $5 to $30.

A recent study of college students who were prescribed any medication revealed that 35.8% of those surveyed reported diverting a medication at least once,[6] and the class of medication reported most commonly diverted was stimulants. Of students who were prescribed a stimulant medication for ADD/ADHD, 61% reported diverting it at least once.[7] Sharing stimulants was determined to be more common than selling stimulants.

Diversion and misuse of non-medical, pharmaceutical stimulants occurs in adolescents and young adults[8]. Diversion and misuse is most likely to occur with adolescents ages 16 to 19.[9] However, the highest prevalence of diversion and misuse is more common in adults who are diagnosed with ADD/ADHD.[10]

Diversion of stimulants occurs for a variety of reasons, including performance-enhancing qualities, weight loss, and a misperception that stimulants are less toxic[11] than other substances or recreational drugs. It should be noted that when short-acting forms of this medication[12] are misused, it is often for a recreational, soporific effect, whereas long-acting forms of this medication are diverted it is for performance-enhancing effects.

Although overdose deaths are much more commonly caused by opioids, the presence of stimulants were documented in the toxicology reports of 13 overdose deaths in Rhode Island in 2014.[13]

Diagnosis

The diagnosis of ADD/ADHD has been the subject of clinical guidelines from several agencies, including the Centers for Disease Control and Prevention[14/15], National Institute for Mental Health[16/17], and Agency for Healthcare Research and Quality (AHRQ)[18]. These national guidelines provide a thoughtful and thorough overview of the complexities of ADD/ADHD, co-existing morbidities, and approaches to make the diagnosis. Prescribers should consult these national guidelines as part of a comprehensive approach to shape their understanding of ADD/ADHD and for relevant diagnostic and therapeutic clinical applications.

This statement will not provide a detailed approach to the diagnosis of this disorder or therapeutic options, but rather will highlight a few practical considerations when making the diagnosis of ADD/ADHD.

Patients may come to a physician's office stating that they have ADD or ADHD and request a specific medication, such as Adderall. A patient's chief complaints may include lack of concentration, inability to focus or pay attention, difficulty at work or at school, and feeling scattered. Physicians should consider that two of the most commonly-diagnosed psychiatric conditions in adults, anxiety and depression[19], often produce these same symptoms.

Tests for ADD/ADHD are non-specific, and rating scales for adults must be interpreted within the context of the patient's entire clinical history. It is important to collect information from family members and other contacts who can verify that the patient does exhibit the symptoms that were initially reported. An evaluation for ADD/ADHD should be done face-to-face (not via a third party or tele-medicine) and involve a multi-faceted approach.[20].

The standard of care, when considering the use of psychostimulants, is to first assess the patient for symptoms that are consistent with anxiety and depressive disorders. It is imperative that the patient's psychosocial history is reviewed, as "new onset" ADD/ADHD often follows an environmental stressor. Was the disorder present as a child? A trial prescription for an SSRI, TCA, or an SNRI might be the best approach if anxiety or depression cannot be ruled out before beginning a treatment plan that includes psychostimulants.

The initial diagnosis of ADD/ADHD should be made by a clinician who has prior clinical experience with ADD/ADHD and is willing and able to commit the time necessary for an appropriate diagnosis and determination of a medication regimen, if appropriate. Additionally, clinicians should consider that ADD/ADHD often has a familial component[21] as well as an increased inheritance of disorders that involve psychoactive substance abuse.

Preventing Prescription Drug Diversion

If the clinician determines that management includes the use of a pharmaceutical stimulant, consideration also needs to be given to which stimulant and dosage for each patient. There is a legitimate role for short-acting stimulants, as some adult patients need the medication only for a specific time of day or for a limited duration. Other practical considerations regarding stimulant use reflects coverage by third party payers or need for a prior authorization. Consideration for long-term use should be given to abuse-resistant and deterrent forms of the medications for chronic use. Another pragmatic consideration is that patients with ADD/ADHD may have poor judgment and lack of impulse control, thus warranting extra effort on the prescriber's part regarding education to prevent diversion.

As prescribers balance the priorities of providing high-quality healthcare, optimizing patient outcomes, and adhering to professional ethical standards, they should also take the necessary steps to prevent a patient from diverting prescription medication(s):

- Review the patient's record in the PDMP before prescribing *any* stimulant medication.
- Consider using urine drug screens for adolescent and adult patients, as needed, to confirm that the prescribed medication is being taken and that other illicit or illegal substances are not being used in conjunction with the prescription medication. (See reference chart below that details how long certain medications/substances are detectable in a urine drug screen. Please note that shorter-acting medications may not show up in a urine drug screen and multiple screens may need to be obtained.)
- Counsel patients to never share medication with anyone else and to never sell medication.
- Counsel patients regarding how to safely and appropriately dispose of unused medication. (Unused medication should be combined with kitty litter or coffee grounds and thrown away in regular trash. Learn more about safe disposal of medications.[22]) Medications can also be safely discarded at one of the take-back stations across the state[23].
- Consider using a screening tool[24] to identify a patient's potential for drug and/or alcohol abuse.
- When initiating and titrating pharmaceutical therapies, prescribe a quantity that will give the patient only enough medication to last until the next clinical evaluation point.
- Consider prescribing abuse-deterrent or abuse-resistant formulations.

Providing quality patient care

As with diagnosis and treatment of any chronic disease or condition, prescribers must make clinical decisions within the context of the patient's entire clinical and medical profile to assure that the patient is receiving the highest quality of care.

- A patient's initial evaluation should include a full mental health and social assessment, a full medical history, and a physical examination that includes:
  - Assessment of any history of exercise syncope
  - Undue breathlessness
  - Any other cardiovascular symptoms

When assuming care of a previously-diagnosed patient, prescribers should make a reasonable effort to verify any diagnosis prior to writing a prescription.

- Measure and document the patient's heart rate, blood pressure, and weight every three to six months, at minimum.
- Ask the patient if there is any family history of cardiac disease and whether the patient has ever had an examination of his/her cardiovascular system.
- Prescribers should monitor patients for any side effects of the medication.
- Perform an annual review and assessment of the patient's need for continuation of the medication based on its clinical effectiveness.
- Follow-up visits should include assessment and documentation of clinical progress (or lack of progress) and any side effects the patient may experience.

- Develop strategies to deal with conflict in the exam room[25]. Stimulants are among the type of medications that patients may pressure a physician to prescribe.
- Prescribers should have risk-benefit discussions with the patient and document the conversations in the patient's medical record.
- When prescribing stimulant medication doses which are greater than the FDA-approved, maximum daily dosage, indicate in the medical record justification and discussion with patient (mixed amphetamine salts >40mg/day[26], methylphenidate >60mg/day[27]).

Conclusions

Prescribers should recognize that pharmaceutical stimulants are commonly-prescribed medications that have legitimate medical indications, such as in treatment for ADD/ADHD. These schedule 2 medications are also easily misused and diverted. Prescribers should also consider common-sense approaches to minimize the potential diversion of pharmaceutical stimulants and balance that with the need to appropriately treat adolescent and adult patients for ADD/ADHD and all behavioral health-related conditions.

Detectable Substances in Drug-Urine Tests

Substance	Duration of detection
Amphetamine	48 hours
Cocaine metabolite	2-4 days
Marijuana Metabolite	
➢ Single use	3 days
➢ 4x/week use	5-7 days
➢ Daily use	10-15 days
➢ Long-term, heavy use	>30 days
Opioids	48-76 hours
PCP	8 days
Barbiturates	
➢ Short-acting	24 hours
➢ Long-acting	3 weeks
Benzodiazepines	
➢ Short-acting	3 days
➢ Long-acting	30 days
Methylphenidate	1-2 days

[1] Agency for Healthcare Research and Quality. (2015, June 18). *National Guideline Clearinghouse*. Retrieved from http://www.guideline.gov/content.aspx?id=14325

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[3] Rhode Island Secretary of State. (2015, May 27). *Title 5 Businesses and Professions*. Retrieved from http://webserver.rilin.state.ri.us/Statutes/title5/5-37/5-37-5.1.HTM

[4] Rhode Island Prescription Monitoring program: created March 2015

[5] Denver Health. (2015, May 28). *See what others paid*. Retrieved from www.streetrx.com

[6] J Clin Psychiatry 2010 March; 71(3); 262-269

[7] ibid

[8] Sussman, Steve, et.al. (2006, June 9). *Misuse of study drugs: prevalence, consequences, and implications for policy*. Retrieved from http://webcitation.org/643sQnROp

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[17] ibid
[18] Agency for Healthcare Research and Quality. (2015, June 18). *Diagnosis and Management of ADHD in Children, Young People, and* Adults. Retrieved from http://www.guideline.gov/content.aspx?id=14325
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[23] ibid
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