Opioids and Sexually Transmitted Infections: Nefarious Partners

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Session Outline:

I. Magnitude of opioid abuse in the state of Michigan

II. Connections between opioid use, other substances and the spread of sexually transmitted infections in Michigan.
    a. Chlamydia Trachomatis (CT)
        i. Disease trends
        ii. Treatment recommendations
        iii. When Chlamydia isn't Chlamydia… Lymphogranuloma venereum (LGV)
    b. Neisseria gonorrhoeae (GC)
        i. Disease trends
        ii. Treatment recommendations
        iii. Threat of Drug Resistance
        iv. When Gonorrhea isn't Uncomplicated…Disseminated Gonococcal Infection (DGI)
        v. Link to Opiods and Methamphetamine
    c. Syphilis
        i. Disease trends
        ii. Treatment recommendations
        iii. Congenital Syphilis
        iv. Link to Opiods and Methamphetamine

III. Partnership opportunities for pharmacist in the fight against sexually transmitted infections

    a. Expedited Partner Therapy for chlamydia

    b. Additional Food for Thought

        - Point of care testing

        - Syringe access

        - Administration of Cetriaxone for EPT or other medication

Iv. Case Study

Resources/References

CDC. Increase Methamphetamine, Injection Drug, and Heroin Use Among Women and Heterosexual Men with Primary and Secondary Syphilis – United States 2013-2017. *MMWR Morb Mortal Wkly Rep* 2019;68(6);144-148.

Michigan Department of Health and Human Services, Guidance for Health Care Providers Expedited Partner Therapy (EPT) For Chlamydia and Gonorrhea. Accessed electronically at https://www.michigan.gov/documents/mdch/EPT_for_Chlamydia_and_Gonorrhea_-_Guidance_for_Health_Care_Providers_494241_7.pdf

Pew Charitable Trust. More Babies Are Being Born with Syphilis. Blame Meth and Opioids. Pew Charitable Trust accessed electronically at https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2019/02/26/more-babies-are-being-born-with-syphilis-blame-meth-and-opioids

MICHIGAN PHARMACISTS ASSOCIATION

Expedited Partner Therapy

In December 2014, Michigan Gov. Rick Snyder signed into law legislation that authorizes Expedited Partner Therapy (EPT) for patients receiving diagnosis of sexually transmitted diseases and whose partners are not likely to seek treatment on their own. MPA has worked with the Michigan Department of Community Health to establish recommended guidelines for the implementation of these patient services. Please review the guidelines below, and if you have any questions, please contact Eric Roath, Pharm.D., MPA director of professional practice, at (517) 377-0224 or by email at Eric@MichiganPharmacists.org.

Summary EPT Clinical Guidelines for Chlamydia and Gonorrhea
Pharmacy Information

- **Patient's diagnosis:** Clinical or laboratory diagnosis of chlamydia or gonorrhea.
- **Appropriate patients for EPT:** Those with partner(s) who are unable or unlikely to seek timely clinical services.
- **Recommended drug regimens:**
  - ***** Sexual partners of patients with chlamydia, but, not gonorrhea:
    Azithromycin 1 gram orally, once
  - * Sexual partners of patients with gonorrhea, regardless of chlamydia test result:
    Cefixime 400 mg orally, once, PLUS Azithromycin 1 gram orally, once
- **If a prescription is provided, clinicians are asked to:**
  - ***** Individual prescriptions are given for each partner
  - * The prescription, if possible, should be made out in the partner's name
  - * If the partner name is unavailable, the prescription is made to Expedited Partner Therapy
  - * In this instance, use January 1 of the current year for the date-of-birth
  - * Additionally, the pharmacist should gather some identifying information from the person who will be picking up the prescription (such as their initials) to differentiate between multiple EPT prescriptions.
- **Informational materials provided by clinician:** Clear instructions, including contraindications and clinic referrals, should be provided for each partner.
- **Patient counseling:** Abstinence for seven days after treatment.
- **EPT is NOT recommended for:**
  - * Men who have sex with men diagnosed with gonorrhea: EPT is not recommended due to the lack of data to demonstrate the effectiveness in this population and the risk of missing STD/HIV co-infections.
  - * Patients co-infected with treatable STDs, other than chlamydia or gonorrhea
  - * Cases of suspected child abuse or sexual assault
  - * Situations where a patient's safety is in question
  - * For partners with known allergies to antibiotics
- **If the prescription or patient falls into any of these categories, contact the prescriber for referral.**

Michigan Department of Health & Human Services
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Bureau of Local Health & Administrative Services
Division of Health, Wellness and Disease Control
Sexually Transmitted Disease (STD) Section

Guidance for Health Care Providers

Expedited Partner Therapy (EPT)
For Chlamydia and Gonorrhea

Public Act 525 of 2014 (MCL 333.5110) authorized the use of expedited partner therapy (EPT) for certain sexually transmitted diseases as designated by the state health department. In January 2015, the department designated chlamydia and gonorrhea as diseases for which the use of EPT is appropriate. This document provides health care providers with guidance for using EPT.

Expedited Partner Therapy (EPT): Another Tool for STD Prevention and Control

Sexually transmitted diseases (STDs) are a significant public health problem. In Michigan, reported cases of gonorrhea and chlamydia exceed 55,000 annually; making them the two most commonly reported infections. They are highly contagious as well as easy to treat. Rates of chlamydia are highest in men and women under the age of 24, increasing the potential for negative outcomes related to fertility resulting from untreated infection.

To prevent further transmission of these STDs, clinicians now have another option to assure that individuals who are at risk due to exposure are provided treatment. A recent amendment to the Public Health Code[1] authorized the use of Expedited Partner Therapy (EPT), which enables clinicians to provide patients with medication or a prescription to deliver to their sex partner(s) without a medical evaluation or clinical assessment of those partners. Furthermore, health professionals who provide EPT in accordance with the law are not subject to liability, except in the case of gross negligence.

EPT is an alternative strategy to assure that sexual partners of patients diagnosed with uncomplicated *Chlamydia trachomatis* (CT) or *Neisseria gonorrhoeae* (GC) are treated. Due to the high risk of repeat infection from exposure to untreated partners, patients diagnosed with CT or GC cannot be considered adequately treated until all of their partners have been treated. This is particularly important given the asymptomatic nature of these infections. Traditional methods to notify and treat sex partners (i.e., health department assisted referral and patient referral) are the cornerstone of STD control and should be considered the gold standard; however, it is imperative that partner management options be examined for each patient. EPT is a useful alternative when a partner is unable or unlikely to seek care. It is a proven effective intervention that is highly recommended by the Centers for Disease Control and Prevention (CDC).[2]

Selecting Appropriate Patients for EPT

EPT can be considered for the partners of patients with a clinical or laboratory diagnosis of chlamydia or gonorrhea infection. Laboratory confirmation of the diagnosis may be based on the findings of culture, microscopy, or a FDA-approved molecular test. Providing EPT without laboratory confirmation may be considered

[1] Public Act 525 of 2014 (MCL 333.5110) effective January 14, 2015.

[2] Centers for Disease Control and Prevention. Sexually Transmitted Diseases Treatment Guidelines, 2015. MMWR 2015; 64 (No. 3): pp. 8-9.

when the provider has a high clinical suspicion of infection and there is concern the patient will be lost to follow-up.

Clinicians should attempt to refer partners in for comprehensive healthcare including evaluation, testing, and treatment. Clinical services provide the opportunity to confirm the exposure and/or diagnosis, examine the patient, test for other STDs including HIV, ensure treatment, and offer additional services such as family planning, vaccinations, and risk-reduction counseling.

Patients most appropriate for EPT are those with partners who are unable or unlikely to seek prompt clinical service. Factors to consider include whether the partner is uninsured, lacks a primary care provider, faces significant barriers to accessing clinical services, or is unwilling to seek care. The acceptability of EPT to the patient and partners should also be assessed. EPT does not preclude attempts to get partners into care. Even if EPT is provided, the partner should be encouraged to seek follow-up care as soon as possible.

The partners of infected clients within the 60 days prior to treatment are the best candidates for EPT as they are at highest risk for infection. If the last sexual encounter was more than 60 days prior, the most recent sexual partner should be treated. There is no limit on how many partners can be provided treatment via EPT. A combination of partner strategies can also be used. For example, a patient with several partners may refer one or more partners to the clinic and take EPT for other partners. If a partner is pregnant, every effort should be made to contact her for a referral to pregnancy services and/or pre-natal care.

EPT should **not** be used for the following:

- In cases of suspected child abuse or sexual assault.
- In situations where a patient's safety is in question.
- For partners with known allergies to antibiotics.
- For patients who are co-infected with STDs other than chlamydia or gonorrhea.
- For treating gonorrhea among men who have sex with men, due to the lack of data to demonstrate the effectiveness in this population and the risk of missing STD/HIV co-infections.

Recommended Drug Regimens for EPT

Currently, the only recommended drug regimens for treatment of chlamydia and gonorrhea using EPT are:

- For sexual partners of patients with chlamydia, but not gonorrhea: Azithromycin (Zithromax) 1 gram orally in a single dose.[3]

- For sexual partners of patients with gonorrhea, regardless of the chlamydia test result**:** Cefixime (Suprax) 400 mg orally in a single dose, **plus** Azithromycin (Zithromax) 1 gram orally in a single dose.[4]

The medication for EPT may be dispensed or prescribed. The preferred method is dispensing in a unit-use dose as part of a partner packet that includes medication, informational materials, and a clinic referral. If dispensing is not an option, prescriptions can be provided in the partner packet instead of medication. If a prescription is provided:

- Individual prescriptions are given for each partner
- The prescription should be made out in the partner's name, if possible
- If the partner's name is unknown, the prescription is made out to "Expedited Partner Therapy"
- In this instance, use January 1 of the current year as the date-of-birth.

Risk of Under-Treating Complicated Infections, Pharyngeal Gonorrhea, and Missing Concurrent STD/HIV Infection

Oral cephalosporins are less effective in eradicating pharyngeal gonorrhea infection, so inadequate treatment of partners with pharyngeal infection is a potential limitation of EPT. Providers should ascertain the risk by discussing oral sex with their patient and not offer EPT to partners at risk for pharyngeal infection. These partners should seek clinical services where ceftriaxone treatment is available. Another concern when using EPT is missing concurrent STD and HIV infections. This risk can be mitigated through educational materials that clearly instruct EPT recipients to see a health provider for STD and HIV testing.

[3] Centers for Disease Control and Prevention. Sexually Transmitted Diseases Treatment Guidelines, 2015. MMWR 2015; 64 (No. 3): pp. 56-57.

[4] Ibid. pp.62-64.

EPT and Pregnancy

Although EPT is not contraindicated when a patient reports that a female partner may be pregnant, providers should assess whether the pregnant partner is receiving pregnancy services or prenatal care. Every effort should be made to contact the pregnant partner and ensure appropriate care; EPT should be considered as a last resort. The local health department may be of assistance for these special situations. All recommended EPT treatment regimens are considered safe in pregnancy; however, doxycycline, a potential alternative to azithromycin for treating chlamydia, should not be used during pregnancy.

Patient Counseling Messages for EPT

- Partners should seek a complete STD evaluation as soon as possible, regardless of whether they take the medication.
- Partners should read the informational material very carefully before taking the medication.
- Partners who have allergies to the antibiotics or who have serious health problems should not take the medications and should see a healthcare provider.
- Partners who have symptoms of a more serious infection (e.g. pelvic pain in women, testicular pain in men, and fever in women or men) should not take the EPT medication and should seek care as soon as possible.
- Partners who are or could be pregnant should seek care for their pregnancy as soon as possible.
- Patients and partners should abstain from sex for at least seven days after treatment and until seven days after all partners have been treated, in order to decrease the risk of repeat infection.
- Partners should be advised to seek clinical services for retesting three months after treatment.

Patient Follow-Up and Retesting at Three Months

High prevalence of chlamydia and gonorrhea infection has been observed in women and men after treatment; therefore, the CDC recommends that these patients be retested 3 months after treatment, regardless of whether they believe their sex partners were treated. Partners should also be encouraged to get tested 3 months after treatment.

Frequently Asked Questions

Q1: What if the partner has an adverse reaction to the medication?

EPT has been used across the country since 2005. The medications are highly effective, single-dose antibiotics. Adverse reactions are rare; the most common known reaction is mild gastrointestinal intolerance. California, the first state to use EPT, established a dedicated hotline to monitor adverse reactions. After nearly 10 years with no reports, the hotline was discontinued.

Q2: Won't EPT compromise the quality of care provided to partners?

When used selectively, EPT will actually benefit partners who would not otherwise receive treatment. Furthermore, these risks can be mitigated through patient education and written materials for partners that provide warnings and encourage them to visit a healthcare provider.

Q3: Will the use of EPT contribute to the development of population-level antibiotic resistance?

There is no evidence that EPT leads to drug-resistance. Even if EPT was used on all three million chlamydia cases reported annually, it would only increase the overall use of azithromycin by less than five percent. Gonorrhea has developed resistance to several antibiotics; however, there is no evidence that the use of EPT increases the likelihood this will occur. It is important that when EPT is used for a client diagnosed with gonorrhea, re-testing should be strongly emphasized. For persistent infections, use culture testing to rule out resistance.

For more information about EPT or other issues pertaining to STD, please contact the Michigan Department of Health and Human Services STD Program at (517) 241-0870 or www.michigan.gov/hivstd .

References

1. Centers for Disease Control and Prevention (CDC). Sexually Transmitted Diseases Treatment Guidelines, 2015. *MMWR* 2015; 64 (No. 3): pp. 8-9, 56-57, and 62-64. For updated information, refer to www.cdc.gov/std/ept .

2. CDC. Expedited *partner therapy in the management of sexually transmitted diseases.* Atlanta, GA: US Department of Health and Human Services, 2006.

3. CDC. *Guidance on the use of expedited partner therapy in the treatment of gonorrhea.* Atlanta, GA: US Department of Health and Human Services, 2012. http://www.cdc.gov/std/ept/gc-guidance.htm

4. CDC. Legal/Policy toolkit for adoption and implementation of expedited partner therapy, prepared by the Arizona State University, Sandra Day O'Connor College of Law in collaboration with the CDC. (2011) http://www.cdc.gov/std/ept/legal/EPT-toolkit-complete.pdf

5. Gift TL, Kissinger P, Mohammed H, Leichliter J, Hogben, M & Golden, MR. The cost and cost-effectiveness of expedited partner therapy compared with standard partner referral for the treatment of chlamydia or gonorrhea. *Sex Transm Dis,* 2011; 38:1067-1072.

6. Golden MR. Editorial: Expedited partner therapy: Moving from research to practice. *Sex Transm Dis,* 2008; 35:320-322.

7. Golden MR, Kerani RP, Stenger M, et al. Uptake and population-level impact of expedited partner therapy (EPT) on Chlamydia trachomatis and Neisseria gonorrhoeae: The Washington State Community-Level Randomized Trial of EPT. *PLoS Med.* Jan 2015; 12(1):e1001777.

8. Golden MR, Whittington WLH, Handsfield HH, et al. Effect of expedited treatment of sex partners on recurrent or persistent gonorrhea or chlamydial infection. *N Engl J Med.* 2005; 352:676-685.

9. Hogben M, McCree DH, Golden MR. Patient-delivered partner therapy for sexually transmitted diseases as practiced by U.S. physicians. *Sex Trans Dis,* 2005; 32:101-105.

10. Hodge JG, Pulver A, Hogben M, et al. Expedited partner therapy for sexually transmitted disease: Assessing the legal environment. *Am J Public Health* 2008; 98:238-243.

11. Introcaso CE, Rogers ME, Abbott SH, et al. Expedited partner therapy in federally qualified health centers – New York City, 2012. *Sex Transm Dis,* 2013; 40:881-885.

12. Kirkcaldy RD, Bolan GA, Wasserheit JN. Cephalosporin-resistant gonorrhea in North America. JAMA, 2013; 309(2):185-187. doi:10.1001/jama.2012.205107.

13. Kissinger P, Mohammed H, Richardson-Alston G, et al. Patient-delivered partner treatment for male urethritis: A randomized, controlled trial. *Clin Infect Dis* 2005; 41:623-629.

14. Michigan Department of Health and Human Services. *Health Care Professional's Guide to Disease Reporting in Michigan, A Summary of the Michigan Communicable Disease Rules,* Version 2015, pp. 18-19. http://www.michigan.gov/documents/hlth_care_prof_guide_167371_7.pdf

15. Phillips JE & Mariona F. Support expedited partner therapy for gonorrhea and chlamydia. Resolution 1-12. Michigan State Medical Society, House of Delegates 2012. Submitted by the Michigan Association of Public Health and Preventive Medicine Physicians.

16. Schillinger JA, Kissinger P, Calvet H, et al. Patient-delivered partner treatment with azithromycin to prevent repeated Chlamydia trachomatis infection among women: a randomized, controlled trial. *Sex Transm Dis.* Jan 2003; 30(1):49-56.

17. Shiely F, Hayes K, Thomas KK, et al. Expedited partner therapy: A robust intervention. *Sex Trans Dis,* 2010, 37:602-607.

18. State of Michigan, Public Act 525 of 2014. Michigan Compiled Laws Annotated (MCL) 333.5110. Effective Date: January 14, 2015. http://www.legislature.mi.gov/documents/2013-2014/publicact/pdf/2014-PA-0525.pdf

19. Trelle S, Shang A, Nartey L, Cassell JA, Low N. Improved effectiveness of partner notification for patients with sexually transmitted infections: systematic review. *Bmj.* Feb 17 2007; 334(7589):354.

20. Stekler J, Bachmann L, Brotman RM, et al. Concurrent sexually transmitted infections (STIs) in sex partners of patients with selected STIs: implications for patient-delivered partner therapy. *Clin Infect Dis.* Mar 15 2005; 40(6):787-793.

21. The American College of Obstetricians and Gynecologists, Committee Opinion No. 506, Sept 2011, Committee on Adolescent Health Care, Committee on Gynecologic Practice. Expedited partner therapy in the management of gonorrhea and chlamydia by obstetrician-gynecologists.

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Expedited Partner Therapy: Information Sheet for Patients and Partners

You have been offered expedited partner therapy (EPT). This information sheet contains important information and warnings you need to be aware of, so please read it carefully.

Expedited Partner Therapy (EPT) is the clinical practice of treating the sexual partners of persons who receive chlamydia or gonorrhea diagnoses by providing medications or prescriptions to the patient. Patients then provide partners with these therapies without the health-care provider having examined the partner. In other words, EPT is a convenient, fast and private way for patients to help their sexual partners get treated.

Chlamydia and gonorrhea are bacterial infections you get from having sex with a person who is already infected. Many people with these infections don't know it because they feel fine, but without treatment these infections can cause serious health problems, such as pelvic inflammatory disease, ectopic pregnancy, infertility and increased risk of HIV.

It is important to get treated as soon as possible to protect your health, to avoid spreading these infections to others, and to prevent yourself from becoming re-infected. The good news is these infections can be easily cured with proper antibiotic medicine. The best way to take care of your self is to see a doctor or go to your local health department. If you are not able to see a doctor or other medical provider, you should take EPT.

Recommended Medication

EPT for Chlamydia: Azithromycin (Zithromax) 1 gram orally in a single dose.

EPT for Gonorrhea: Cefixime (Suprax) 400 milligrams orally in a single dose PLUS Azithromycin (Zithromax) 1 gram orally in a single dose.

These medicines are very safe. However, you should not take them if you have ever had an allergic reaction (like a rash) to any of these medicines: azithromycin (Zithromax), erythromycin, clarithromycin (Biaxin). If you are uncertain about whether you have an allergy, call your doctor or pharmacist before taking this medicine. If you have a serious, long-term illness like kidney, liver or heart disease, colitis or stomach problems, or you are currently taking other prescription medication, talk to your doctor before taking this medication.

Women: If you have lower belly pain, pain during sex, vomiting, or a fever, do **not** take this medicine. Instead, you should see a doctor to be certain you do not have pelvic inflammatory disease (PID). PID can be serious and lead to infertility, pregnancy problems or chronic pelvic pain.

Pregnant Women: It is very important for you to see a doctor to get pregnancy services and pre-natal care. These antibiotics for EPT are safe for pregnant women, but you still need to see a doctor as soon as possible. It is also important to note that Doxycycline is an alternative therapy for chlamydia, but it should **not** be taken by someone who is pregnant.

Men: If you have pain or swelling in the testicles or a fever, do **not** take this medicine and see a doctor.

Men who have sex with men (MSM): MSM in Michigan continue to experience high rates of syphilis and HIV. Many MSM with gonorrhea or chlamydia could also have syphilis and/or HIV and not know it. If you are a man who has sex with other men, it is very important that you see a doctor or other medical provider and are tested for HIV and syphilis.

Along with this information sheet is the medicine or a prescription for the medicine. If you receive a prescription it will be in your name and will indicate your date of birth, or it will be in the name of "Expedited Partner Therapy" and January 1 of the current year will be listed as the date of birth. In either case, you can have the prescription filled at a pharmacy. You will be responsible for the cost of the medicine, unless you have prescription drug coverage. In that case, you could provide your name so the pharmacy could bill your health plan.

Take the medication as directed. Some people will have a mild, upset stomach, which does not last long. After taking the medicine, do not have sex for 7 days. Do not share this medicine or give it to anyone else. It is important to tell everyone you have had sex with in the last 60 days that they need to go to the doctor to be tested for sexually transmitted infections.

Ways to prevent these and other sexually transmitted diseases (STDs):

- Abstain from sex. This is the only sure way to avoid getting an STD.
- Use barrier methods, such as condoms, consistently and correctly.
- Limit the number of sexual partners.
- Have regular physical exams, including testing for STDs.

For more information about EPT or other issues pertaining to STD, please contact your health professional, local health department, or the Michigan Department of Health and Human Services STD Program at (517) 241-0870 or www.michigan.gov/hivstd .

This information sheet was produced by the Michigan Department of Health and Human Services in compliance with Public Act 525 of 2014, MCL 333.5110.