Expedited Partner Therapies

Executive Summary

Sexually Transmitted Infections (STIs) affect millions of people in the U.S. and, while effective treatments exist for the majority of infections, barriers remain to access and effective administration of these treatments. Expedited Partner Therapies (EPT) are a process by which medications are distributed to the partners of infected patients without the prior examination of a doctor. EPT is legal in Missouri (RSMo 191.648) for the treatment of partners of chlamydia and gonorrhea patients. Five states and Washington, D.C. have laws that expressly permit the use of EPT for trichomoniasis, a parasitic infection that can cause serious adverse effects in young women, including complications during pregnancy. House Bill 2386 seeks to expand the list of EPT-treatable diseases in Missouri to include trichomoniasis.

Highlights

- Trichomoniasis infects roughly 6 million people in the U.S. each year and can lead to persistent re-infections and birthing complications.
- EPT has been shown to be effective in lowering overall healthcare costs and improving the treatment and infection rates in other STIs.
- Familiarity with EPT law by pharmacists, high out-of-pocket costs, and patient preferences may be barriers to EPT implementation.

Limitations

- Most studies on EPT focus on chlamydia and gonorrhea, so it is unclear if the results of those studies also apply to trichomoniasis.
- Studies of EPT implementation and efficacy largely focus on re-infection. However, other outcomes, such as successful partner medication uptake or community-level rates of reported STIs, may also be important.

Research Background

Trichomoniasis and Sexually Transmitted Infections (STIs)

Every year, approximately 20 million new sexually transmitted infections are reported in the U.S. to the Centers for Disease Control and Prevention (CDC).[1] These infections include chlamydia, genital herpes, gonorrhea, hepatitis B, HIV, human papillomavirus (HPV), syphilis, and trichomoniasis. Adolescents bear a disproportionate amount of new sexually transmitted infections, due in part to physiologic susceptibility, higher rates of reinfection, and developmental age.[2] There is also considerable variation in the rates of infections among

racial/ethnic groups in the U.S., with Black and Hispanic populations representing a disproportionately large rate of infections compared to White populations.[1]

Trichomoniasis (a genital tract infection caused by the parasite *Trichomonas vaginalis*) is an infection that most commonly causes symptoms in women of childbearing age, and worldwide is the most common sexually transmitted non-viral infection among women aged 15-49 years.[3] Symptoms of infection for women can include vaginal discharge, vaginal itching and irritation, painful urination, and pain during intercourse. Symptoms for men can include urethritis (urethral discharge) and pain during urination.[4,5] If left untreated, trichomoniasis has been associated with increased pre-term deliveries, pre-labor rupture of membranes, and low infant birth weight.[3] In 2018, the number of annual reported trichomoniasis infections in the U.S. were 3,278,000 for men and 3,536,000 for women.[6] The average estimated medical cost for a trichomoniasis infection is $5 for men and $36 for women.[7]

Given the high rate of asymptomatic infections, general screening procedures for trichomoniasis are not robust, making the true rate of infections unknown. The recommended treatment for trichomoniasis is a 7-day course of the antibiotic metronidazole, which can have significant side-effects if used long-term (including nausea, changes in brain function, nerve pain). Further, between 5-10% of infections can become resistant to treatments, and infections may persist for months or years.[4] Left untreated, trichomoniasis can lead to atypical pelvic inflammatory disease and cervical intra-epithelial neoplasia, while in men it can lead to prostatitis, epididymitis, urethral stricture disease, infertility, and an increased risk for HIV in both.[5,8] Another 2018 study found that Black people are eight times more likely to have a trichomoniasis infection than White people.[4] Re-infections from an untreated sexual partner can cause persistent symptoms, and given that contact tracing for trichomoniasis is not required in the U.S., adequate identification and treatment can be difficult.

Expedited Partner Therapy

Expedited Partner Therapy (EPT) is a tool used to assist the low identification and treatment rates of STIs by providing prescriptions or medications to sexual partners of known infected individuals without clinical assessment. Two primary methods of EPT exist: 1) a patient-delivered partner therapy (PDPT) approach, where the primary patient hand-delivers medications to their partners under a shared prescription, and 2) partner referral, where a partner is granted a separate prescription.[9]

One study has shown that EPT can decrease healthcare system and societal costs compared to standard notification of infection to sexual partners.[2] One Alabama study found EPT to be effective in treating trichomoniasis, while other results are mixed; a Louisiana study suggested no effect on partner uptake of treatment for trichomoniasis.[4] A study in Washington state determined that free PDPT was found to result in a 10% reduction in overall chlamydia and gonorrhea cases, and a 16% increase in the rate of patients willingly receiving medications.[10]

At present, 46 states (including Missouri) and the District of Columbia allow for the legal administration of EPT to known partners of individuals infected with an STI (Figure 1). The

remaining 4 states (AL, SD, KS, OK) have contradictory legal language since certain statutes require the clinical assessment or written prescription from a physician for treatment of any STI.[11] Further, five states (MD, NE, NM, OH, WI) and D.C. explicitly permit EPT for trichomoniasis.[11]

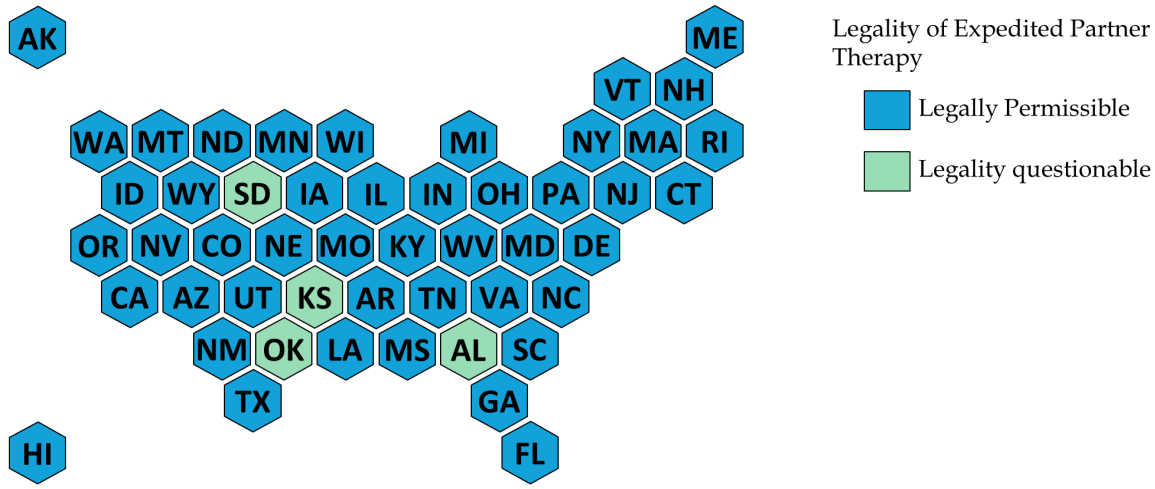

Figure 1: States where Expedited Partner Therapy is Legally Permissible. States with documented laws allowing the administering of an expedited partner therapy program are in blue. States where the legality of EPT is in question are in green. Figure adapted from the Centers for Disease Control and Prevention.[11]

In Missouri, state law (RSMo 191.648) allows any licensed physician to utilize expedited partner therapies for the sexual partners of chlamydia and gonorrhea patients regardless of an established provider relationship. House Bill 2386, introduced in the 2022 Missouri legislative session, modifies the law further to allow physicians to treat the sexual partners of trichomoniasis patients without a medical evaluation.

Other Considerations for Studying the Efficacy and Implementation of EPT

A challenge to studying the effective administration of EPT is that scientific literature has been limited to gonorrhea and chlamydia patient research. Therefore, conclusions of efficacy of expedited partner therapy on trichomoniasis may not be known.[9] Further, most studies measure whether EPT prevents re-infection, but other metrics such as successful partner uptake of medications or community-level rates of reported STIs may also be useful to investigate.[9] Precisely determining whether a repeat infection occurred from the same sexual partner or different sex partners may also make the accurate measure of the EPT success rate difficult.[9] Certain characteristics make a patient more likely to seek EPT for their partners, which can skew research further. For example, patients who are in monogamous relationships, engaged in high-risk sexual behaviors, have higher education levels, or have a close relationship with their medical provider may be more likely to seek EPT.[2]

Barriers to the successful application of EPT. One study showed that in a group of community pharmacists, less than half were aware they could prescribe medications under an EPT regimen.[12] Many states also do not require health insurance to cover EPT, which may impede

the administration of EPT.[4] Prices for medications can be a barrier, particularly if they are paid for out-of-pocket; the estimated 2018 price in one study was $52.71 for a course of gonorrhea antibiotics.[12] Patients have reported that they prefer to deliver the additional medication to their sexual partners, despite many states requiring a prescription to be filled (often by the partner) and paid before the partner is given medications, which can leave prescriptions unfilled.[2,9]

Additional barriers cited include questioning of the legal status of EPT by pharmacists, missing the opportunity to counsel the patient's partner of the necessity to initiate treatment, and parental consent for underage patients.[2] Adolescent infections further complicate effective EPT administration, given that providers of underage patients may be mandated to report statutory rape in the process of filling prescriptions, which a patient may not consent to.[2] In jurisdictions where the legality of EPT may be questionable, local authorities have also deferred decisions on the appropriate administration of EPT to a professional licensing board.[13] One study has found that EPT administration for gonorrhea was significantly higher when state laws specifically allowed EPT administration and when professional state medical boards supported EPT.[14]

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