

-- FOR DISCUSSION ONLY --
DRAFT DATE: JULY 24, 2006

Milwaukee Alliance for Sexual Health (MASH)
Author: Matt Maxwell
Academic/Staff Mentor: Jim Vergeront

Issue Paper Topic: Expedited Partner Therapy in the Management of Sexually Transmitted Diseases

Problem Description

Expedited Partner Therapy (EPT) is the practice of treating the sex partners of persons diagnosed and treated for sexually transmitted diseases (STD) without a medical evaluation or professional prevention counseling.¹ By ensuring that treatment is provided to infected sexual partners, partners are less likely to reinfect each other.

Issue Paper Summary

Sexually transmitted diseases (STD) continue to be an issue in Milwaukee as infection rates of gonorrhea and Chlamydia are nearly three times the state average. One possible method of curbing this problem is expedited partner therapy (EPT) through patient delivered partner therapy (PDPT). The Centers for Disease Control and Prevention (CDC) released a review and guidance that includes an analysis of the effectiveness and limitations of this method and proceeds to offer recommendations of the appropriate manner of using this method for treatment of STDs. This document offers a review and summary of the CDC review and guidance.

Background

In Milwaukee the number of cases of Chlamydia reported to the City Health Department increased in three of the first four years of the 21st century and 2004 saw the greatest numbers of cases reported in the past twelve years. Further, the Chlamydia case rate in Milwaukee County (1,031 cases/100,000 population) was nearly three times that of the state average (354 cases/100,000 population) in 2004². It is also believed that there is vast under-reporting of Chlamydia due to lack of symptoms and lack of testing if symptoms are treated indicating that the number of cases in Milwaukee County is actually much higher. This is similar trends for gonorrhea with Milwaukee County (353 cases/100,000 population) having a 3.5 times greater rate of cases than the state average (93 cases/100,000 population)².

According to the Centers for Disease Control and Prevention (CDC), women are frequently re-infected if their sex partners are not treated³. Repeat infections can lead to an increase in the risk of serious reproductive health complications. Teenage girls and young women are at particularly high risk for infection with Chlamydia because the cervix is not fully matured³. Presently in Milwaukee County it is recommended that any person with Chlamydia or with a history of sexual contact to a known case of Chlamydia should be treated with anti-chlamydial antibiotics. Disease Intervention Specialists (DIS) attempt to contact partners of persons with syphilis and drug-resistant gonorrhea but no efforts are made with Chlamydia or non drug-resistant gonorrhea at this time. There is no recommendation to use partner delivered therapy.

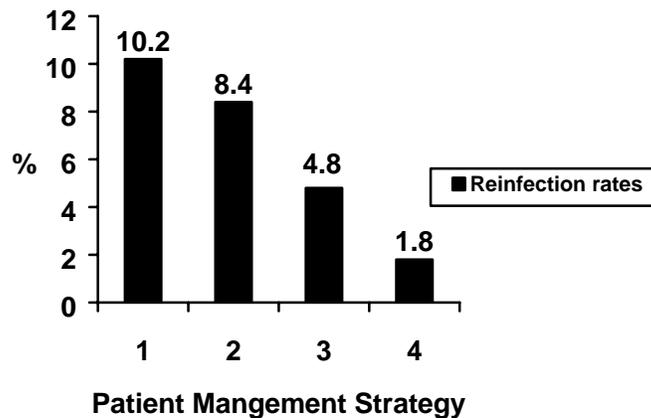
A survey conducted by Golden et al. estimated the scope of attempted provider referral for common STDs by 78 metropolitan public health departments¹. The results of the survey (77% response rate) showed a dramatic difference in assurance of partner treatment between syphilis (89% of cases) and chlamydial infection (12% of cases). While it may not be surprising that follow-up for syphilis is higher than Chlamydia this study indicates that many providers do not

**-- FOR DISCUSSION ONLY --
DRAFT DATE: JULY 24, 2006**

know if partners are receiving treatment. Therefore, another method of reaching partners should be evaluated.

The first published study on EPT was a retrospective analysis in Sweden comparing chlamydial re-infection rates in patients that received no partner management, counseling to refer partners, counseling to refer partners with compliance monitored, and patient-delivered therapy. The results showed the lowest re-infection rate to be in patients in the patient-delivered therapy section of the study (figure 1). Although not randomized, this study provided encouraging evidence that patient-delivered partner therapy could be successful.

Figure 1: Chlamydial reinfection rates by partner management strategy, 1979-1980 and 1983-1984.

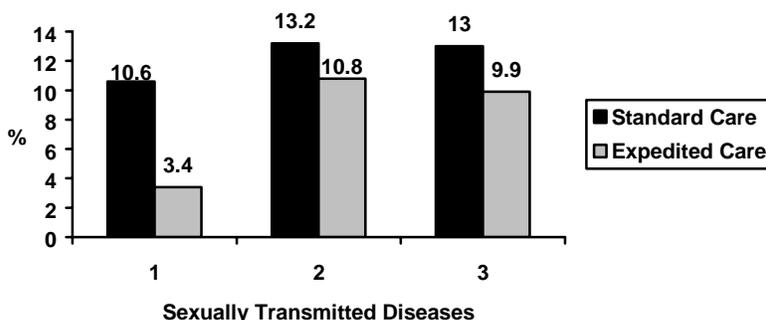


(Patient Management Strategy: 1 = No partner mngt; 2 = Patient counseled to refer partner(s); 3 = Patient counseled to refer partner(s), compliance monitored; 4 = Patient-delivered partner therapy.)

Source: Ramstedt, et al. *Int J STD AIDS* 1991;2:116-118.

From 1998-2003 a study was conducted by Golden et al. in Seattle where 2,751 persons with either Chlamydia or Gonorrhea were randomly assigned to either EPT (N=1,376) or standard partner management (N=1,375), which involves the index client contacting the partner and alerting them to the risk of infection. The study showed a decrease in infection rates at follow-up visits in patients that received EPT compared to standard treatment although a more dramatic decrease was seen in patients with Gonorrhea than with Chlamydia (figure 2).

Figure 2: STD infection rates at follow-up by standard and expedited care.



(Sexually Transmitted Diseases: 1 = GC infections only; 2 = CT infections only; 3 = GC or CT infections.)

Source: Golden, et al. *NEJM* 2005;352:676.685.

The researchers hypothesize this reflects that the current treatment regimen for Chlamydia is not as effective as expected. A 6-city trial conducted by the CDC also suggested a higher than expected rate of persistent Chlamydia infection in women who denied sexual re-exposure¹. This could decrease the apparent effectiveness of both methods of preventing reinfection with Chlamydia.

Implementation issues and uncertainties

While there is significant research available showing the effectiveness of EPT with heterosexual adult males and females there is decidedly little involving men who have sex with men (MSM), pregnant women, and adolescents. This could have an impact on the effectiveness of EPT as MSM have higher STD rates and also have had variable success with other methods of partner notification because of high rates of partner change and anonymous partnership. Further, adolescents have also displayed variable success with partner notification most commonly attributed to relationship quality and immaturity. While these factors could decrease the effectiveness of EPT it should also be noted that these populations might well be the most effective at utilizing EPT as it may overcome existing barriers preventing other methods from working effectively such as an inability to pay for a medical visit or the concern of privacy if the partner in question is underage.

An important concern with the implementation of EPT is the possibility of undiagnosed infections in partners that could be diagnosed if a clinician were visited. Chief among these concerns is a woman with Pelvic Inflammatory Disease (PID) resulting from an infection with Chlamydia. Further, undiagnosed HIV or other STD infection would be missed by not having a clinic visit to receive treatment. Stekler et al found a 6% prevalence of undiagnosed HIV infection in MSM who gave STD exposure as their reason for visiting STD clinics, a significant issue in considering use of EPT in this population¹. In addition to a missed opportunity to diagnose STDs is a missed opportunity to address other issues such as mental health problems and substance abuse.

Of particular concern, especially among providers, is the legality of providing a course of treatment to someone without a clinic visit and evaluation. Some private clinics may choose to ignore this legislation but public health departments and many health care institutions will be

-- FOR DISCUSSION ONLY --
DRAFT DATE: JULY 24, 2006

restricted when using EPT until the legal status has been addressed. Legislation has passed in California and Tennessee and is being considered in many other states, which allows physicians to practice EPT legally in both public and private sectors. Currently in Wisconsin, legislation prevents the use of EPT in general practice because a name and address are required for a prescription to be valid. Further, legislation requires that a clinic visit and evaluation must precede the provision of a prescription medication.

Recommendations

The CDC guidance for use of expedited partner therapy declare that "EPT is at least equivalent to patient referral in preventing persistent or recurrent gonorrhea or chlamydial infection in heterosexual men and women, and in its association with several desirable behavioral outcomes"¹. These conclusions support the following recommendations as listed in the CDC guidance:

- **Gonorrhea and chlamydial infection in women:** EPT can be used to treat partners as an option when other management strategies are impractical or unsuccessful. Symptomatic male partners should be encouraged to seek medical attention, in addition to accepting therapy by EPT, through counseling of the index case, written materials, and/or personal counseling by a pharmacist or other personnel.
- **Gonorrhea and chlamydial infection in men:** EPT can be used to treat partners as an option when other management strategies are impractical or unsuccessful. Female recipients of EPT should be strongly encouraged to seek medical attention, in addition to accepting therapy. This should be accomplished through written materials that accompany medication, by counseling of the index case and, when practical, through personal counseling by a pharmacist or other personnel. It is particularly important that female recipients of EPT who have symptoms that suggest acute PID, such as abdominal or pelvic pain, seek medical attention.
- **Gonorrhea and chlamydial infection in men who have sex with men:** EPT should not be considered a routine partner management strategy, because data are lacking on the efficacy in this population, and because of a high risk of co-morbidity, especially undiagnosed HIV infection, in partners. EPT should only be used selectively, and with caution, when other partner management strategies are impractical or unsuccessful.
- **Women with trichomoniasis:** EPT is not recommended for routine use in the management of women with trichomoniasis, because of a high risk of STD co-morbidity in partners, especially gonorrhea and chlamydial infection. EPT should only be used selectively, and with caution, when other partner management strategies are impractical or unsuccessful.
- **Syphilis:** EPT is not recommended for routine use in the management of patients with infectious syphilis.

In order to implement expedited partner therapy in Wisconsin changes in the statutes would be required to allow for the distribution of antibiotic treatment to persons not seen by a physician and not identified by name and address to the physician. If these changes could be made expedited partner therapy could be implemented in the city of Milwaukee for the diseases and in the populations recommended by the CDC. In Wisconsin, expedited partner therapy would be considered an option of last resort due to the fact that other forms of public health follow-up (DIS

-- FOR DISCUSSION ONLY --
DRAFT DATE: JULY 24, 2006

worker, partner notification followed by a clinic visit, etc) are more beneficial. If no other method is believed to be a feasible option then expedited partner therapy would be considered.

Legislation has been introduced in the State of Wisconsin to allow a physician, physician assistant or advanced practice nurse to prescribe an extra, single-dose antibiotic drug for use by a patient's sexual partner for certain sexually transmitted diseases. It was first presented in 2001 as AB 698 by Representative Wasserman, which overwhelmingly passed the Assembly Health Committee. The draft was created in consultation with the Division of Public Health at the Department of Health and Family Services, with the support of the Wisconsin Medical Society's Council on Legislation, the Wisconsin Section of the American College of OB/GYNs, the Wisconsin Academy of Family Physicians, the Wisconsin Chapter of the American College of Emergency Physicians and the City of Milwaukee Health Department. This was also reintroduced in 2003 by Rep. Wasserman.

-- FOR DISCUSSION ONLY --
DRAFT DATE: JULY 24, 2006

Resources Consulted

1. Centers for Disease Control and Prevention. *Expedited partner therapy in the management of sexually transmitted diseases*. Atlanta, GA: US Department of Health and Human Services, 2006.
2. Wisconsin Division of Public Health – STD Program. *Sexually Transmitted Disease in Wisconsin 2004*.
3. Centers for Disease Control and Prevention. *Chlamydia – CDC Fact Sheet*. Atlanta, GA: US Department of Health and Human Services, 2006.