Editorial

Nonoccupational Postexposure Prophylaxis (nPEP) Visits: Opportunities Beyond HIV PEP

Bacterial sexually transmitted infections (STI’s), such as syphilis, chlamydia, and gonorrhea, remain highly prevalent around the globe with rising incidence rates in many at-risk populations. Additionally, hepatitis B and C continue to cause significant mortality and morbidity throughout the world. While hepatitis B and C are treatable, and therapies for chronic hepatitis C are advancing at a dizzying pace, many individuals remain undiagnosed and continue to transmit these infections to susceptible persons. Therefore, opportunities for screening and treatment of bacterial STI’s and viral hepatitis are invaluable. Visits for nonoccupational postexposure prophylaxis (nPEP), whether in the emergency department or clinic, provide a crucial opportunity for screening, counseling, and prevention. To date, data on this topic are scant and primarily focus on HIV PEP.

For these reasons, the study by Sivachandran and colleagues in this edition of the International Journal of Infectious Diseases is a welcome addition to the nPEP literature. The authors prospectively followed 126 individuals who presented to a dedicated HIV prevention clinic after a nonoccupational exposure (approximately 70% were sexual exposures). The analysis concentrates on screening practices, diagnosis rates, and follow-up for bacterial STI’s and viral hepatitis, and provides several notable findings. First, nearly 5% of participants were diagnosed with a bacterial STI (including one person who presented for a non-sexual exposure). Second, while no cases of hepatitis C seroconversion occurred during follow-up, hepatitis C was detected in 2.4% at baseline. Interestingly, all individuals diagnosed with an infection in this cohort were men (about three quarters of participants overall were male). Finally, 22.2% of participants did not have protective levels of hepatitis B surface antibody at baseline and only approximately half of these individuals were retained in care long enough to complete a vaccine series or booster dose and confirm seroprotection.

What lessons can be learned from this analysis? The principal message is that nPEP visits provide an opportunity for more than HIV PEP. These encounters provide an important moment in which bacterial STI’s and viral hepatitis can be addressed. While it is vital to assess the risk of HIV transmission and consider the need for HIV PEP, this study underscores the need to consider other infections. For example, identifying baseline chronic hepatitis C and linking a person to hepatitis C care can be life-saving; even if a person is not ready for treatment, steps can be taken to prevent worsening liver fibrosis or hepatic decompensation (through alcohol reduction counseling and vaccination against hepatitis A and B), the degree of liver fibrosis can be assessed and complications of cirrhosis managed, and a person can be counseled to reduce risk of transmission to others. Furthermore, men or women diagnosed with a bacterial STI should be considered for HIV preexposure prophylaxis (PrEP) and linked to PrEP services. Men-who-have-sex-with-men (MSM) diagnosed with a bacterial STI are one of the highest risk groups for HIV infection; STI treatment may decrease the likelihood of HIV infection if there is ongoing risk behavior, but linkage to PrEP services is also essential for HIV prevention.

The current study highlights the issue of retention in care for individuals who present for nPEP and the difficulty engaging these patients in preventive health services. Attrition between ED visits for nPEP and follow-up in the clinic is a major area of concern. Previous reports showed that only 54.4% of individuals who present to the ED for nPEP keep their follow-up visit in clinic. The study by Sivachandran and colleagues adds insight into the challenge of retaining nPEP patients for the full course of follow-up and underscores that strategies to support linkage and retention in care for nPEP patients are needed.

The HIV Care Continuum provides a representation of the stages of HIV care from diagnosis to achievement of viral suppression and illustrates the proportion of individuals lost at each stage. This care continuum has been replicated in many countries and offers a tool to optimize prevention efforts and allocation of resources. A similar care cascade for hepatitis C depicts the drastic divide between the number infected and the number who have been successfully treated. Researchers have also generated a care cascade as it stands for PrEP in certain areas. Although it would be difficult to measure or assess, one can imagine what a care continuum for nPEP might look like and the substantial number of individuals lost at each step: from the number exposed, to the proportion who present for initial evaluation, to the proportion who adhere to a follow-up clinic visit, to the proportion who finish their nPEP medications and vaccines (if recommended), and finally to those who complete nPEP follow-up or successfully transition to PrEP (if indicated). Such a model provides an idea of the most effective areas to dedicate adherence support resources.

Practitioners who provide postexposure care anywhere in the world know that many individuals who present for nPEP are likely to do so again in the future; per one study, nearly one fifth of nPEP users had multiple nPEP courses. These individuals would benefit significantly from the type of “wrap around” services

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and support that have been provided to HIV-infected individuals in many clinics for years. The authors of the current study suggest automated reminders to support nPEP adherence, which would be a useful step, though additional outreach is likely needed. Other authors have stressed the importance of adherence counseling that addresses mental health and psychosocial barriers. A working group recently developed a list of priority areas for PEP research and the list includes identification of barriers to accessing care and trials to assess the effectiveness of various adherence support strategies. The working group also emphasizes that lessons can be learned from HIV treatment and PrEP adherence trials. The current study reminds us that key components of nPEP adherence include PEP medications as well as follow-up visits, vaccinations and lab testing, and linkage to PrEP services.

The current study has several limitations. It is a single-center study, so additional analyses from other geographic regions and patient populations are needed. Testing for STI’s included screening of the pharynx and rectum for MSM, which is important, though did not use nucleic acid amplification testing (NAAT), so some extragenital chlamydia and gonorrhea infections in MSM may have been missed. The study did not identify any STI’s in women, though did not test for trichomoniasis, a common yet underreported STI throughout the world. Despite these limitations, the authors should be commended for their efforts and this analysis should encourage other centers to examine their nPEP practices and support systems.

References


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