

# Behavior, Disparities, and Diagnostic Dilemmas

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While HIV infection has been documented since the first report in *Morbidity and Mortality Weekly Report* in June, 1981, the story of its effects on the medical community is worth reviewing. With the newer generations of retroviral medications, people with HIV have been living with a chronic disease that remains a threat but—if they adhere to protocols—can be controlled. I have friends and former patients who have lived with HIV infections for over 30 years and are doing fine.<sup>1</sup> But the HIV story has been a different one in developed countries from that in the developing world. HIV and AIDS continue to devastate many countries in Africa and Asia where low-cost treatment and effective prevention still are not available to many. The emphasis for the World Health Organization's HIV programs has been education about high-risk behaviors, getting medications to those who are positive, and decreasing transmission to newborns.<sup>2</sup> In all cases, managing HIV infections and avoiding risks depend on patients to adhere to medication regimens and, as Petroll and his colleagues point out in this issue of the *WMJ*, it requires a change in physician behavior as well.<sup>3</sup>

Their commentary discusses ways that the practicing community can work with infectious disease specialists and public health to promote pre-exposure prophylaxis (PrEP) for patients who live in high-risk communities for HIV infection and who engage in unsafe behaviors. The reported success rates of prevention of HIV infection through the use of PrEP protocols in this population are truly remarkable. However, Petroll and colleagues point out that

the awareness of the availability of PrEP among clinicians needs to be much higher and encouragement of high-risk patients should be much broader if society and patients are to realize the

American community. Another article in this issue of the *WMJ* points out disparities in breast and colorectal cancer survival in the southeastern part of the state served by the

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value from prevention. Although the drugs are expensive—what drugs aren't expensive these days—the long-term savings are substantial. We all have had experiences with the logic that should make high-risk patients decrease those risks, whether through safe sexual practices or needle exchanges, but we also know how human behavior can be unpredictable. We all look for ways to work with patients to increase adherence of all types, but human beings are fallible and as long as they are, adding a proven medication that will increase the likelihood of preventing the spread of HIV seems like a very wise thing to do.

## Continuing Disparities

In the discussion of Wisconsin HIV prevalence and incidence data, Petroll and colleagues point out the continuing racial disparities in the state, with a disproportionate share of HIV prevalence and incidence in the African

Medical College of Wisconsin Cancer Center, with African Americans—again—seeing a significantly shorter survival rate than whites, and Latina women having shorter survival rates from breast cancer than white women.<sup>4</sup> In a second article, Foote and colleagues report high levels of many types of cancers in the American Indian/Alaska Native population of the state.<sup>5</sup> They show that American Indians who live in primary tribal areas are at greater risk of getting cancer than the overall American Indian population and that both groups are at higher risk than other non-Indian populations. Different populations are at risk in urban and rural communities but the data from these epidemiologic studies are compelling. These analyses should motivate the practicing community to look carefully at the environmental and behavioral components that we know are related to the development of cancer, work with communities on the local level to improve access to medical

care and education, work with public health to assess environmental safety, and find creative and community-specific ways to bring about behavioral changes in patients that focus on prevention. All of this is very hard work. But if Wisconsin is to meet its goals as a Healthy State, partnering with the most at-risk populations to find realistic solutions is essential.<sup>6</sup>

Just as the world is getting used to the idea of Ebola virus and its regional and international spread, viruses from Central and South America threaten to spread worldwide through travel. Climate change has amplified this dilemma by enabling vectors to spread to regions where they have not been endemic. The last decade has seen birds migrating to places where they rarely or never have been seen, but birds are the bellwethers for the more insidious spread of less beloved species. Much of the iatrogenic bacterial resistance that we have seen over the past 40 years is also regional and requires clinicians to look at patterns of prevalence by county and region. Munson and colleagues<sup>7</sup> include maps showing bacterial resistance in the state and there are different patterns for different bacteria. One wonders what led to the kinds of north/south differences in susceptibility to antibiotics that they found in their surveillance studies. Linking clinical, laboratory, and prescribing/pharmacy data, where possible, has the potential to offer changes in behavior by clinicians that could decrease resistant bacteria in communities. We have the data; now we need to use it.

Replinger and colleagues studied the level of knowledge that patients who came to emergency departments showed when questioned about radiation exposures from CT and MRI exams. Not surprisingly, the authors found

that understanding of the differences was quite low overall—even in patients who were health professionals. Therefore, part of our responsibility lies in educating patients and the public about the risks associated with the procedures we order and, in the process, re-educating ourselves.

Education can be difficult though, as illustrated by Thein-Nissenbaum and Brooks. Even when the clinicians developed innovative patient education methods—in this case an instructional DVD that could be watched on the patients' own time to help teenage women basketball players avoid injuries—they found that subjects' behavior didn't match the suggested guidelines.<sup>8</sup> One would think that giving teens something to watch on their computer screens would be an ideal method but, perhaps to no one's surprise, they got distracted and forgot.

### Case Reports

The 3 case reports in this issue highlight diagnostic dilemmas facing clinicians. Garcia-Rodriguez discusses how what was feared to be a malignancy, to the relief of the patient and her physicians, turned out to be ectopic thyroid tissue with Hashimoto's thyroiditis mimicking metastatic disease.<sup>9</sup> Silva and Suarez remind us of the old axiom that, in a previously operated abdomen, one should think of adhesions as the source of almost any abdominal or pelvic complaint, even, in this case, of a patient with disabling urinary frequency.<sup>10</sup> And finally, Galbis-Reig reports on a case of Kratom addiction and withdrawal that should alert us, yet again, that when we sit with patients and go over medication use, we have to include everything a patient is taking, particularly in a world where unregulated herbal and over-the-counter

“supplements” are available and widely used.<sup>11</sup> I had not heard of Kratom prior to receiving this article and since then have read of its wide availability and its potential for abuse and dependence. In our medication reviews, office staff always ask about prescription medication but rarely about a new or continuing “harmless” supplement. That needs to change.

### REFERENCES

1. Frey JJ 3rd. A piece of my mind. You have no idea. *JAMA*. 2011;306(5):469-470.
2. World Health Organization. Global Health Sector Response to HIV, 2000-2015. Focus on Innovations in Africa. Geneva: WHO Press; 2015. [http://apps.who.int/iris/bitstream/10665/198148/1/WHO\\_HIV\\_2015\\_40\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/198148/1/WHO_HIV_2015_40_eng.pdf). Accessed January 31, 2016.
3. Petroll AE, Staden RA, Westergaard RP. Pre-exposure prophylaxis in primary care—a new era in HIV prevention. *WMJ*. 2016;115(1):6-8.
4. Beyer KMM, Zhou Y, Matthews K, et al. Breast and colorectal cancer survival disparities in southeastern Wisconsin. *WMJ*. 2016;115(1):17-21.
5. Foote M, Strickland R, Lucas-Pipkorn S, Williamson A, Lamers L. The high burden of cancer among American Indians/Alaska Natives in Wisconsin. *WMJ*. 2016;115(1):11-16.
6. Wisconsin Department of Health Services. Wisconsin State Health Plan—Healthiest Wisconsin 2020. <https://www.dhs.wisconsin.gov/hw2020/index.htm>. Accessed January 31, 2016.
7. Munson E, Block TK, Bowles EJ, et al. Surveillance of Wisconsin antibacterial susceptibility patterns. *WMJ*. 2016;115(1):29-36.
8. Thein-Nissenbaum J, Brooks MA. Barriers to compliance in a home-based anterior cruciate ligament injury prevention program in female high school athletes. *WMJ*. 2016;115(1):37-42.
9. Garcia-Rodriguez L, Dharia R, Massey B. Ectopic thyroid tissue with Hashimoto's thyroiditis. *WMJ*. 2016;115(1):46-48.
10. Silva PD, Suarez SA. A case of disabling urinary frequency and pelvic pain due to postoperative uterine adhesions. *WMJ*. 2016;115(1):43-45.
11. Galbis-Reig D. A case report of kratom addiction and withdrawal. *WMJ*. 2016;115(1):49-52.



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