

Take 3 – Practical Practice Pointers® October 21, 2019 Edition
Asymptomatic Bacteriuria, Smoking Cessation, Cost of Obesity

From the USPSTF

1) Screening for Asymptomatic Bacteriuria in Adults

Asymptomatic bacteriuria is defined as the presence of 1 or more species of bacteria growing in the urine at specified quantitative counts ($\geq 10^5$ colony-forming units [CFU]/mL), irrespective of the presence of pyuria, in the absence of signs or symptoms attributable to urinary tract infection (UTI). Among adults, women (across all ages) have the highest prevalence with rates increasing with age. The reported prevalence ranges from 1% to 6% among premenopausal women to 22% among women older than 90 years. It is present in an estimated 2-10% of pregnant women and is rare in men. The presence of asymptomatic bacteriuria has not been shown to increase the risk of adverse health outcomes among nonpregnant persons.

During pregnancy, physiologic changes that affect the urinary tract increase the risk of asymptomatic bacteriuria and symptomatic urinary tract infections, including pyelonephritis. Pyelonephritis is one of the most common nonobstetric reasons for hospitalization in pregnant women and is associated with perinatal complications including septicemia, respiratory distress, low birth weight, and preterm birth.

The USPSTF recently updated their 2008 recommendation regarding the screening for asymptomatic bacteriuria in adults. Recommendations include:

- **Pregnant Persons:** Recommends screening for asymptomatic bacteriuria using urine culture in pregnant persons. (**B** Recommendation)
- **Non-Pregnant Adults:** Recommends against screening for asymptomatic bacteriuria in nonpregnant adults. (**D** Recommendation)

Of note, the USPSTF changed the grade for pregnant persons from an “A” to a “B” based on the reduced applicability of the previous evidence that newer evidence that shows a significantly lower risk of pyelonephritis than found in previous reviews. This recommendation is consistent with those from the Infectious Diseases Society of America, the AAFP, and ACOG.

My Comment:

It is so very difficult for many of us to not test for, and having tested, to not treat someone with asymptomatic bacteriuria. Hopefully, this guideline (along with others) will help provide confidence needed for us to resist the temptation to screen/treat those for whom doing so will likely cause much more harm than benefit.

References:

- Owens DK, et al. Screening for Asymptomatic Bacteriuria in Adults: USPSTF Recommendation Statement. JAMA. 2019 Sep 24;322(12):1188-1194. [Article](#)
 - USPSTF September 2019: Screening for Asymptomatic Bacteriuria in Adults. [Link](#)
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From the Cochrane Database and the American College of Cardiology

2) Smoking Reduction Interventions for Smoking Cessation

According to the CDC, cigarette smoking is the leading cause of preventable disease and death in the US, accounting for more than 480,000 deaths (20%) yearly. In 2017, 14% (34 million) of US adults ≥ 18 currently smoked cigarettes. Additionally, more than 16 million live with a smoking-related disease. On a positive note, current smoking has declined from 21% in 2005.

The standard way most people are advised to stop smoking is by quitting abruptly on a designated quit day. However, many people who smoke have tried to quit many times and may like to try an alternative method. Reducing smoking behavior before quitting could be an alternative approach to cessation. However, before this method can be recommended it is important to ensure that it is both safe and effective.

The Cochrane Library recently published a systematic review assessing the effect of reduction-to-quit interventions on long-term smoking cessation. The authors found that there is moderate-certainty evidence that neither reduction-to-quit nor abrupt quitting interventions result in superior long-term quit rates when compared. There is also low-certainty evidence to suggest that reduction-to-quit interventions may be more effective when pharmacotherapy is used as an aid, particularly fast-acting nicotine replacement therapy (NRT) or varenicline (moderate-certainty evidence). Available data suggested no excess of pre-quit serious adverse events or withdrawal symptoms.

This recommendation is consistent with a December 2018 American College of Cardiology (ACC) expert consensus document on smoking cessation. In that report, the authors recommend for those who are not ready to quit abruptly, medication preloading and/or gradual reduction approaches should be considered. Medication preloading involves starting pharmacotherapy while the person is still smoking, with the intent of reducing the satisfaction from smoking, gradually reducing the number of cigarettes smoked per day, and enhancing the likelihood of ultimately quitting.

All FDA-approved smoking cessation medications (NRT, bupropion, and varenicline) promote smoking cessation and are tolerable and effective options for smokers with stable CVD. In the general population of smokers, meta-analyses indicate that varenicline and combination NRT are more effective than bupropion or single NRT products, making these 2 approaches first-line recommendations for smoking cessation, including in smokers with CVD. Single NRT and bupropion are considered second-line therapies for individuals with CVD who are not able or willing to use first-line choices. In the general population of smokers, combinations of these classes of medications (NRT plus varenicline or bupropion, or varenicline plus bupropion) are supported by a smaller body of evidence, but these combinations are tolerable to patients and have generated promising efficacy data. The committee recommended using combinations of agents for smokers who have only a partial response and fail to achieve complete tobacco abstinence with individual agents.

In terms of nicotine replacement therapy effectiveness, each NRT product has about the same efficacy in clinical trials, increasing quit rates with risk ratios of ~ 1.6 compared with placebo. Consequently, the choice of NRT product can reflect a patient's preference. The patch is generally used as the primary product because compliance is

greatest for patch, lower for gum or lozenge, and very low for spray and inhaler. Combination therapy using the nicotine patch with a more rapidly absorbed form of NRT is more effective than using a single product and is now considered the standard of care for using NRT and should be recommended as initial therapy when NRT is chosen.

My Comment:

As e-cigarettes and “vaping” continue to come under increased scrutiny (and hopefully increased regulation – see September 23rd Take 3), reminding ourselves of the approved pharmaceutical options seemed appropriate. Our regularly and explicitly offering pharmacological support for those attempting to quit seems prudent given the data, particularly if they have previously attempted to quit on their own and have not been successful. For those who are skeptical of the potential impact of such interventions to change behavior, please note again the statistic that smoking rates in the US have decreased from 21% to 14% in just over a decade. While there are many explanations for this (including transitions to vaping/e-cigs), this is still a hopeful trend, and assuming a significant portion of these people stopped smoking, this translates into better health for literally millions of persons. Keep hope alive!

References:

- Lindson N, et al. Smoking reduction interventions for smoking cessation. Cochrane Database Syst Rev. 2019 Sep 30. [Link](#)
 - Barua R, et al. 2018 ACC Expert Consensus Decision Pathway on Tobacco Cessation Treatment. J Am Coll Card. 72(25). Dec 25, 2018. 3332-65. [Link](#)
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From the Trust for America’s Health and the OECD

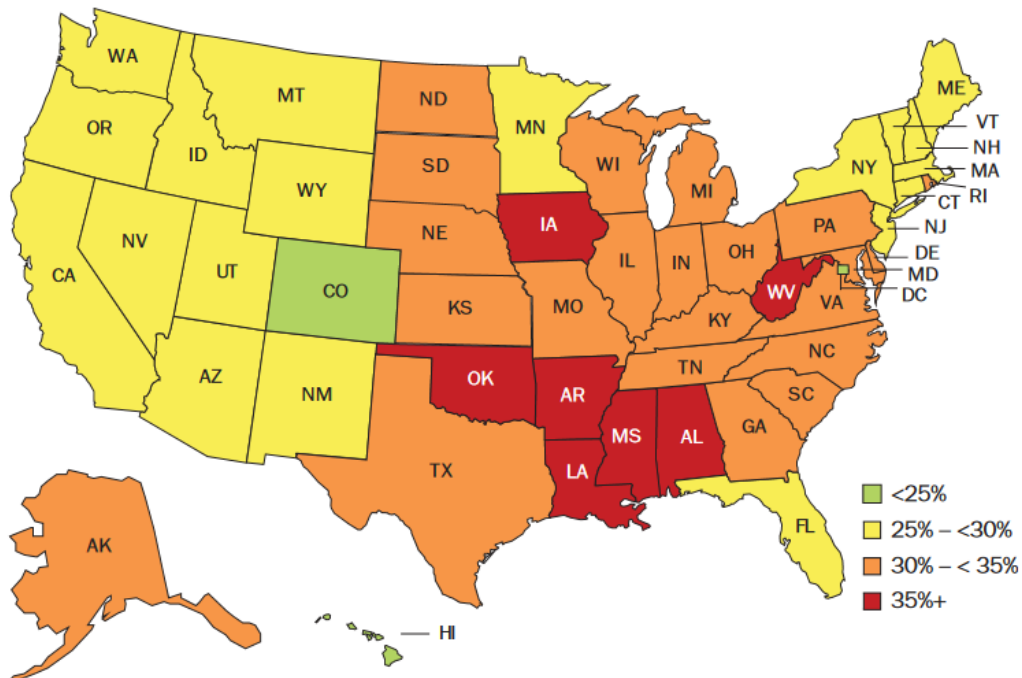
3) State of Obesity 2019 – More Sobering News

A newly released report on obesity from the Organization for Economic Co-operation and Development (OECD) details that being obese with its associated chronic diseases such as diabetes, CV diseases, and cancer reduces life expectancy in member countries by 2.7 years on average, including almost 4 years for those living in the US. The OECD stresses how nations can reap economic benefits, as well as public health gains, from investing in effective strategies to combat rising obesity rates. The report notes: "Policies aimed at reforming the obesogenic environment are the most important Among the most effective initiatives for fighting obesity is regulation of advertising of unhealthy food, with more than \$5 in return investment for each \$1 spent." Based on the report, the US will spend an average of \$645 per person annually on treating obesity and its related conditions, which would account for 14% of the US healthcare budget.

Additionally, a report released in September by the Trust for America’s Health reports that for 2015-16, data shows that 40% of adults and 19% of children were obese (body mass index > 30 for adults). The report is based on the most recent National Health and Nutrition Examination Survey (NHANES) data from 2015-16. As shown in the picture below, more than 35% of adults in nine states were obese. As recently as 2010, no state had an adult obesity rate > 35%.

The data also reveal that obesity is much more of a problem among minority and disadvantaged populations. Among adults, 47% of both Latinos and Africa-Americans were obese, compared with 38% of whites and 13% of Asian-Americans.

Annual obesity rates among adults: 2015-2016



SOURCE: BRFSS

My Comment:

Perhaps the most shocking part of this data/report is that it is not at all shocking. I worry that when it comes to BMI, “30+ has become the new 25” and that we clinicians have become both “blind” to this issue and resigned that it is inevitable that our population will continue to become larger while at the same time feeling at a loss to do anything to reverse this tragic trend. Given this, I’m heartened to regularly experience “success stories” in my own clinical practice as well as hear stories from colleagues who partner with patients to help them reverse this trend through the implementation of very sound lifestyle changes, usually starting with diet/nutrition.

Resisting the strong “current” of an unhealthy dominant culture and our CRAP-SAD (Calorie Rich And Processed Standard American Diet) diet certainly adds to the challenge, which is why we clinicians need to be leaders in this movement, in both word and deed. The alternative is quite SADD (shocking amounts of disease/disability).

References:

- Trust for America's Health. *State of Obesity: 2018*. Sept 12, 2019. [Link](#)
- The Heavy Burden of Obesity – The Economics of Prevention: Organization for Economic Co-operation and Development (OECD). October 10, 2019. [Full Report](#)
[Policy Brief](#)

Feel free to forward Take 3 to your colleagues. Glad to add them to the distribution list.

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