Prevention and Early Identification of Eating Disorders
Evelyn Attia, MD; Angela S. Guarda, MD

In this issue of JAMA, the US Preventive Services Task Force (USPSTF) reports its first Recommendation Statement on screening for eating disorders in adolescents and adults with normal or above normal body mass index (BMI).1 The USPSTF concluded, based on a commissioned Evidence Report conducted by Feltner et al,2 that “the current evidence is insufficient to assess the balance of benefits and harms of screening for eating disorders in adolescents and adults (I statement).”1 The publication of these reports is especially timely, given attention to the rapid increase in severe eating disorders, especially among adolescents requiring hospitalization and other intensive treatments, during the COVID-19 pandemic.3

Eating disorders (eg, anorexia nervosa, bulimia nervosa, binge eating disorder) are serious illnesses that affect an estimated 4.9% of women and 2.2% of men in the US.4 Eating disorders are associated with significant medical and psychiatric morbidity and high mortality due to medical complications and suicide.5,6 In a 2011 meta-analysis of 36 studies, the weighted crude mortality rate for anorexia nervosa was 5.1 deaths (95% CI, 3.99-6.14) per 1000 person-years, and the overall standardized mortality ratio for anorexia nervosa (ratio of observed deaths among affected individuals to expected deaths in the general population) was 5.86 (95% CI, 4.17-8.26).7

Standardized mortality rates for bulimia nervosa and binge eating disorder were less elevated but still suggest mortality rates higher than those seen in control populations.8 These disorders commonly begin during adolescence and young adulthood and appear prevalent among individuals who present for general clinical care, such as those seeking all cause care in emergency departments.9 Because some individuals with eating disorders conceal core illness symptoms—and avoid or delay seeking specialist care—due to feelings of embarrassment, stigma, or ambivalence toward treatment, screening for these disorders is primary care settings is especially important, as most cases of eating disorders remain undetected and untreated.

In their Recommendation Statement on eating disorders, the USPSTF explained that their review was limited to general rather than high-risk populations and excluded studies of individuals with low weight or symptomatic patients, and instead focused on data relevant to asymptomatic adults and adolescents with normal or above-normal BMI.1 However, medical and psychiatric consequences of an eating disorder can result in a wide range of nonspecific presenting symptoms. Additionally, training regarding eating disorders is often limited or absent in Accreditation Council for Graduate Medical Education primary care and psychiatric training programs.10 Presenting psychiatric issues that reflect an underlying eating disorder can include mood and anxiety symptoms, whereas medical presenting symptoms vary greatly, ranging, for example, from poorly controlled diabetes related to deliberate insulin omission, to gastroesophageal reflux as a result of chronic purging behavior. For some patients with some of these presenting symptoms, primary care clinicians or general psychiatrists might not consider including an eating disorder in their differential diagnosis, adding to the importance of improving screening and detection in general populations.

The authors of the thorough review of the available literature on primary care screening for eating disorders identified 9 brief screening instruments used in primary care. However, aside from data that validated these instruments and measured their sensitivity and specificity, the review found little evidence about the potential utility of these instruments for case detection or health outcomes. The most commonly used assessment, the SCOFF questionnaire,11 was used in 11 of the 17 screening studies. The SCOFF, however, was originally developed to identify only 2 of the current eating disorders—anorexia nervosa and bulimia nervosa—and can easily miss individuals with binge eating disorder because they are likely to have scores below the cutoff for a positive screen result.12 More recently developed brief screening instruments designed to capture a wider spectrum of eating disorders including binge eating disorder (such as the Screen for Disordered Eating13) were used in no more than 1 study, and in a single case 2 studies each.1,2

The evidence review found no studies that examined whether screening directly improved health outcomes or caused harm.2 The task force also examined the effectiveness of psychotherapeutic or pharmacological interventions in screen-detected or previously untreated adults and adolescents with eating disorders who were not underweight. None of the identified treatment studies, however, enrolled populations that were detected via screening in primary care settings. Indeed, eating disorder treatment studies have not traditionally included participants identified by screening at the primary care level.

An important additional finding of the USPSTF Recommendation Statement1 and the Evidence Report3 is that the available data lack information about underrepresented groups including males, adolescents, Black individuals, Latinx individuals, and LGBTQ individuals. This is of particular concern...
given data suggesting that prevalence rates for eating disorders vary for different ethnic and racial groups. For example, bulimia nervosa is more common among Black and Latinx individuals than among non-Latinx White individuals. Transgender youth have higher rates of self-reported eating disorders than cisgender heterosexual females.

While the USPSTF review provides important information about the current status of screening research, its conclusions risk possibly being misconstrued as suggesting that screening may not be necessary for early identification and referral of high-risk individuals. Studies that examined low-weight or symptomatic populations were excluded from the review because eating disorders would be part of the diagnostic assessment for patients presenting with an abnormally low body weight and because screening is aimed at asymptomatic individuals. However, these exclusions limit the recommendation to only a subgroup of individuals who may present to primary care with hidden eating disorders in need of identification. For example, the USPSTF focus on asymptomatic patients with normal or above-normal BMI excludes patients with anorexia nervosa or underweight avoidant/restrictive food intake disorder as well as individuals presenting with the broad range of secondary psychiatric and physical signs and symptoms that can prompt patients with eating disorders to seek care in primary care settings.

Clinicians and third-party payers are advised against assuming that the lack of an A, B, or C recommendation by the USPSTF for screening eating disorders changes any of the current recommendations for screening higher-risk individuals for these serious conditions. An I statement is not a recommendation for or against screening but rather indicates there is insufficient evidence to make a recommendation either way. Clinicians are encouraged to use their clinical judgment in deciding whether or not to screen. As acknowledged by the USPSTF and included in the materials reviewed, several professional groups have published guideline recommendations to support screening for eating disorders among well-recognized high-risk groups, including those with weight change, deviation from growth trajectory, pubertal delay, bradycardia, and amenorrhea. The American Academy of Pediatrics and the American Academy of Child and Adolescent Psychiatry recommend screening youth through longitudinal weight and height monitoring and looking for signs of disordered eating. The American College of Obstetricians and Gynecologists and Society for Adolescent Health and Medicine recommend that practitioners be able to identify signs of disordered eating and eating disorders and screen and monitor at-risk patients. The Academy for Eating Disorders recommends that all high-risk patients should be monitored for signs of eating disorders.

An additional consideration in the USPSTF Recommendation Statement is that its suggestion for screen-based treatment trials may be impractical, especially for the less common eating disorders, such as anorexia nervosa, bulimia nervosa, and avoidant/restrictive food intake disorder, as these are unlikely to accrue the sample size needed for clinical trials if study participants are culled from primary care settings. Screening for a more prevalent condition such as binge eating disorder or other specified eating disorders may be more feasible to identify clinical samples for interventions.

This I statement on screening for eating disorders highlights the need to prioritize research aimed at closing the evidence gap identified by USPSTF in a timely manner and underscores the need for new studies that address screening for eating disorders, treatment trials that enroll screen-detected populations from primary care settings, and screening in specific populations. Funding is needed to support research on screening for eating disorders and its effects on health outcomes. Specific research topics could include evaluation of brief screening instruments that capture a wider range of eating disorder diagnoses, information about benefits and harms of screening in primary care populations, and training of primary care clinicians in the detection of eating disorders. Concern about the possible harms of screening, including false-positive screen results and overlabeling, could be addressed by procedures that pair initial screening with clinical interview for individuals who screen positive to confirm diagnosis.

Research on screening in primary care also should be paired with development and assessment of early brief intervention strategies for those individuals who screen positive, especially adolescents. Increasingly, evidence supports the importance of early interventions aimed at avoiding the development of secondary neurobiological maintaining factors that may make eating disorders more treatment resistant, as well as interventions that target early behavior change. Brief, behaviorally based outpatient interventions that are feasible and scalable are needed to avert referral to more expensive higher levels of care, including residential or inpatient treatment. Examples may include targeted guided self-help or family-based interventions that can be delivered remotely or by telemedicine and that do not require intensive training.

The USPSTF Recommendation Statement and accompanying Evidence Report on screening for eating disorders have identified several notable deficiencies in the available data. Directing attention to rigorous research to close this evidence gap will be important to find optimal approaches to identify patients with these complex disorders and improve their health outcomes.

ARTICLE INFORMATION

Author Affiliations: Department of Psychiatry, Columbia University College of Physicians and Surgeons, New York, New York (Attia); Department of Psychiatry, Weill Cornell Medicine, New York, New York (Attia); Department of Psychiatry and Behavioral Sciences, Johns Hopkins School of Medicine, Baltimore, Maryland (Guarda).

Corresponding Author: Evelyn Attia, MD, NYS Psychiatric Institute, 1051 Riverside Dr, Unit 98, New York, NY 10032 (eal12@columbia.edu).

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