EDITORIAL AND COMMENT

Missed Opportunities: Young Adults with Hypertension and Lifestyle Counseling in Clinical Practice

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In this issue of JGIM, Johnson et al. used manual extraction of electronic health record data to examine the occurrence of lifestyle education in young adults (age 18–39 years) with incident hypertension in a large academic multidisciplinary group practice. They assessed all clinical staff encounter notes and patients' after-visit instructions in order to identify lifestyle education, broadly defined as any mention of general lifestyle terms (e.g., “heart-healthy changes,” “lifestyle changes”); education on exercise, alcohol use, stress management, DASH (Dietary Approaches to Stop Hypertension) diet, low salt/sodium, weight reduction, or tobacco cessation; notation of educational handouts and/or websites provided, or patient refusal of education. Even using a broad definition of lifestyle counseling, they found a limited occurrence of counseling, with only 55% of young adults with incident hypertension having documentation of lifestyle education within one year of diagnosis.¹

These results are not surprising. Unfortunately, despite multiple trials providing evidence of the effectiveness of lifestyle counseling for healthy diet, physical activity, and smoking cessation among individuals with cardiovascular risk, and clear guidelines recommending such practices by the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure and the U.S. Preventive Services Task Force (USPSTF), rates nationally remain uniformly low.² If lifestyle counseling for adults in clinical practice is generally uncommon, is the low rate in young adults particularly noteworthy? We believe it is, for the following reasons.

First, cardiovascular risk develops during the adolescent and young adult period. Considerable epidemiological evidence suggests that higher blood pressure in young adults is associated with subsequent cardiovascular disease and death.^{3,4} Although stroke incidence and mortality has declined over time in the U.S. population, stroke incidence among young adults is actually increasing,⁵ likely due in part to the

continued high prevalence of hypertension and the poor control rates among younger adults. In some populations such as African Americans, hypertension begins earlier in life, and the end-organ consequences of hypertension (e.g., stroke, kidney disease, or heart failure⁶) may also occur during young adulthood. Clinicians may not appreciate the importance of the young adult period in the development of cardiovascular risk, as the consequences of blood pressure elevation may not manifest until years later. Although clinicians may be appropriately reluctant to initiate pharmacotherapy during young adulthood in order to avoid potential risks associated with long-term use of medications,¹ this concern should not overshadow the critical need to understand, appreciate, and help address cardiovascular risk that is developing during this period.

Second, lifestyle counseling is effective and can have a range of health benefits that may be particularly important to young adults. Lifestyle modifications such as dietary changes, increased physical activity, weight management, limited alcohol consumption, and smoking cessation can reduce blood pressure and can be as effective as pharmacotherapy for blood pressure control. Each of these behaviors is also linked to general health benefits beyond hypertension management. The USPSTF assigns an “A” grade to the recommendation of counseling on tobacco use, reflecting high certainty of large net health benefit of this practice in the primary care setting. Unfortunately, in Johnson et al., this highly effective practice still only occurred 70% of the time among smokers with hypertension during a one-year period following diagnosis of incident hypertension. The USPSTF “B” recommendation for counseling for healthful diet and physical activity among those with cardiovascular risk (such as hypertension) also reflects net health benefit of at least moderate magnitude associated with this practice. In Johnson et al., dietary approaches specific to hypertension (counseling on the DASH diet) occurred only 25% of the time, despite considerable DASH trial data documenting the effect of this diet in reducing systolic blood pressure by as much as 8–12 mmHg. Johnson et al. incorrectly state that one reason for the low DASH counseling rates may be the lower prevalence of minorities in this clinical practice. The DASH diet was designed and tested for a general population with hypertension, and the beneficial blood pressure effects seen in the trials of the DASH diet were not restricted to African Americans.⁷

Not only are these lifestyle interventions effective in controlling hypertension, but the patterns of healthful behaviors that they represent have the potential to improve health beyond specific cardiovascular disease outcomes. Important in this regard is the initiation and maintenance of healthy behaviors during the young adult period, when patterns for health-related behavior are often established or reinforced. Clinicians failing to participate in counseling on these important health-related behaviors are missing this important opportunity to improve the general health of their patients. In the more specific realm of hypertension, the failure to initiate counseling, combined with the reluctance to initiate medications in young adults, is likely the main contributor to the low rates of awareness, treatment, and control of hypertension routinely observed in surveys on this topic.⁸

So if lifestyle counseling is important and is not being done, what is needed to effect change? One answer is simple awareness on the part of clinicians, particularly about cardiovascular health in young adults; Johnson et al. will contribute to the body of literature that may increase awareness and discussion of how best to care for young adults. However, taking the next step may be more challenging and may require multiple levels of intervention. Effective lifestyle counseling interventions are more intensive than simple instruction, and are therefore often considered impractical under the current constraints of clinical practice and the healthcare system overall. According to a recent review,² effective lifestyle counseling interventions for diet alone or combined diet and physical activity often require medium- to high-intensity contact, comprising at least 30 to 360 minutes, with a median number of five contacts over a duration of 9 months. In contrast, the average amount of time reasonably available for prevention education in a typical office visit is often estimated at one minute.¹ Furthermore, lifestyle counseling interventions in clinical trials are often delivered by specially trained individuals, including dietitians or nutritionists, physiotherapists or exercise professionals, and health educators, nurses, or psychologists. Although the current literature makes it difficult to determine the minimum necessary components of counseling for an effective intervention, the best strategies for effective lifestyle counseling empower patients with support for self-management, including at least one “self-regulatory technique” derived from control theory such as prompt intention formation, specific goal setting, feedback on performance, self-monitoring of behavior, and review of behavioral goals.² Such techniques can be learned, but many clinicians may not be aware or feel sufficiently well equipped to provide this type of effective counseling.

Both the time required for effective counseling and the need for specific approaches that might be most effective at achieving behavior change require a more systematic approach than just asking clinicians to do more during their visits with

patients. Strategies to support these lifestyle changes begin outside the clinical setting and include public policy approaches that reinforce these behaviors. Examples of such policies include urban planning efforts to increase access to safe areas for physical activity, regulations to limit sodium in processed food or marketing and accessibility of alcohol and tobacco to adolescents and young adults, and alignment of financial incentives (through subsidies and taxation) to encourage healthy dietary options such as fruits and vegetables and to discourage those with limited nutritional value such as sugary beverages.⁹ Healthcare institutions, in turn, can play a pivotal role in providing and coordinating lifestyle counseling. Widespread implementation of lifestyle counseling in primary care settings requires redesign of the traditional 15-minute primary care visit. Payment reform that includes funding for multi-component counseling services by teams of physician and non-physician professionals is necessary. The movement for primary care transformation to patient-centered medical homes with robust models of team-based care offers promise for lifestyle counseling. Co-location of nutritionists, health educators, and behavioral health specialists within primary care clinics can extend physician capacity for promoting lifestyle counseling. Group visits and chronic disease self-management programs that offer intensive education classes and cover comprehensive self-management strategies have been shown to improve health outcomes, quality of life, and costs.¹⁰ Peer or medical assistant health coaches integrated into the medical home, partnering with a care team, can effectively work with patients to improve chronic disease outcomes, including hypertension and diabetes.¹¹ Connections to community-based integrated diet and exercise programs, barber-shops, YMCAs, and other community resources to promote self-management and lifestyle modification have shown promise in chronic disease management, and hypertension in particular. Achieving widespread utilization of these evidence-based lifestyle counseling and support interventions requires reimbursement structures for practices offering these counseling services, as well as ongoing evaluation of these approaches to determine the most efficacious and cost-effective means of achieving these goals. Widespread translation of lifestyle counseling into routine clinical practice will require additional external support for broad-scale practice transformation, with special focus on self-management support and team-based care.

Studies like the one conducted by Johnson et al. can lead to a range of responses, from blaming clinicians for poor-quality care, to defensiveness about the need for these types of interventions in young adults, to feelings of futility about our ability to improve care to the standards recommended by clinical guidelines. Hopefully this study will prompt discussion about what is actually required to accomplish the delivery of this evidence-based practice. Strategies for widespread use

of lifestyle counseling in hypertension management involve key changes in public policy, payment reform, medical practice reform, and development of community-based resources for self-management support. While the challenge is great, the potential health benefits of creating sustainable systems that support initiating and maintaining healthy behaviors from young adulthood onward are even greater.

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