



Advancing Health Equity With Lifestyle Medicine

Abstract: *The Optimal Health and Wellness Clinic of Morehouse Healthcare seeks to advance health equity by providing lifestyle medicine services to its predominantly African American patient population. Health equity means eliminating health disparities by providing services that meet the needs of the population served. African Americans have a higher burden of cardiovascular disease and diabetes than other American ethnic groups. Recent evidence indicates that eating a plant-based diet may eliminate disparities in cardiovascular disease and diabetes. The clinic provides lifestyle intervention services such as stress and sleep management, but the focus is on helping patients to adopt and maintain a plant-based diet. A range of encounter options that include shared medical appointments and cooking classes are offered. The clinic is an example of a lifestyle medicine specialty practice within the multispecialty practice arm of a medical school. The shared mission to promote health equity provides substantial resources to the clinic and allows for collaborative efforts to improve the health of the community.*

Keywords: health equity; plant-based diet; health disparities; lifestyle medicine; cardiovascular disease; diabetes

The Optimal Health and Wellness Clinic (OHWC) at Morehouse Healthcare (MHC) is a Lifestyle Medicine (LM) clinic that serves a predominantly African American (AA) population in Atlanta. MHC is the clinical arm of Morehouse School of Medicine (MSM), the highest ranked medical school for social mission in the United States.¹ The OHWC embodies MSM's mission to promote health equity.² AAs are twice as likely as non-Hispanic white Americans (NHWAs) to die of cardiovascular disease (CVD)³ and

reasons for AAs' mistrust of the health care system,⁸ but the result of treatment noncompliance may be higher rates of disability and death from preventable or treatable conditions. Prescribing medications with little or no lifestyle interventions may not promote health equity in populations with high medication noncompliance rates. There is no equity if everyone gets the same treatment but only half take it. While medication noncompliant patients may also be noncompliant with lifestyle interventions, all patients should be

 there is good evidence that simply eating a more plant-based diet could eliminate disparities in CVD [cardiovascular disease] and diabetes. 

diabetes.⁴ While there are many social and economic factors such as racism and income inequality that contribute to health disparities, there is good evidence that simply eating a more plant-based diet could eliminate disparities in CVD⁵ and diabetes.⁶

Older AA patients are twice as likely to report medication noncompliance as older NHWA patients.⁷ There are historic

offered evidence-based lifestyle treatment options. A surprising number of patients in the OHWC have been willing to make dietary and other lifestyle changes to reduce their need for medications.

The clinic offers advice on a range of lifestyle interventions such as stress management, physical activity and sleep management but the focus is on plant-based nutrition. AAs have the highest

DOI: 10.1177/1559827618780680. From the Department of Community Health and Preventive Medicine, Morehouse School of Medicine, Atlanta, Georgia. Address correspondence to: Jennifer Rooke, MD, MPH, FACPM, FACOEM, Department of Community Health and Preventive Medicine, Morehouse School of Medicine, Atlanta, GA 30310; e-mail: jrooke@msm.edu.

For reprints and permissions queries, please visit SAGE's Web site at www.sagepub.com/journals-permissions.

Copyright © 2018 The Author(s)

self-reported meat consumption and the lowest vegetable consumption among ethnic groups in the United States.⁹ Food desert neighborhoods are often blamed for this disparity, but Metro Atlanta has a large population of AA professionals who do not live in food deserts. Foods from animal sources are associated with high social status among all ethnic groups and believed to be better tasting and more nutritious than plant-based foods. Access to fruits and vegetables may not promote health equity if these foods are not valued by the community. Complaints about the high cost of plant foods often reflects the low value placed on these foods. The goals of the OHWC are to increase awareness of personal beliefs that influence lifestyle choices and educate patients and the community about the health benefits of a plant-based diet. Assisting patients to make healthy lifestyle choices may improve health, reduce health disparities and promote health equity.

Clinic Services

The OHWC operates as a specialty clinic in a large primary care and multispecialty medical practice. This works well because primary care providers (PCPs) and specialists in the practice are potential sources of patient referrals. Clinic services are currently provided by 1 physician, 1 licensed practical nurse (LPN) who serves as a patient coordinator, and 2 clinical psychologists who each see patients 1 day a week in shared medical appointments with the physician. Fourth-year medical students may rotate through the clinic during their 4-week Community Health and Preventive Medicine elective.

The clinic offers services 3 days each week, on Tuesdays, Wednesdays, and Thursdays. There are 5 types of encounters: (1) initial consultations for new patients, (2) individual follow-up visits, (3) shared medical appointments (SMAs), (4) Medicare annual wellness visits (AWV), and (5) lifestyle intervention/cooking classes. Initial consults, AWVs, and individual follow-ups are scheduled in the mornings; 4

new patients or 8 individual follow-up patients can be seen. SMAs are scheduled on Tuesday and Thursday afternoons from 1:30 to 4:00 PM. The session starts at 2:00 PM, with vital signs being taken between 1:30 and 2:00 PM.

Initial Consultations

Initial consultations last an hour and are billed based on time using the 99205 Current Procedural Terminology (CPT) code. This is a comprehensive review of the patient's medical and social history along with a physical examination. Standard laboratory tests that are covered by all insurance plans are ordered if patients have not had the test within the past 3 months. The tests ordered include a complete blood count, metabolic profile, lipid profile with oxidized-low-density lipoprotein (Ox-LDL), thyroid stimulating hormone, vitamin B₁₂, folate, and vitamin D. If patients report a history of vitamin D deficiency, the 1,25-dihydroxy vitamin D (DHVD) test is ordered. The DHVD test is used because the standard 25-hydroxyvitamin D test may misdiagnose AA as vitamin D deficient.¹⁰ This is a health equity issue because some insurance plans may not pay for the DHVD test. During this first visit, basic aspects of the lifestyle intervention program are outlined, and the health benefits of a plant-based diet are discussed. Patients are given a lifestyle prescription and recommendations based on their readiness to make lifestyle changes. A Readiness to Change screening tool was developed to identify patients who would benefit most from referral to the OHWC. The questionnaire is currently administered by clinical assistants before patients see their providers but there are plans to incorporate it into the screening section of the electronic medical record (EMR).

There are 3 basic groups of patients that we see during initial consultations.

1. Patients who are primarily looking for support and guidance. These patients are looking for a "plant-based doctor" because they are either ready to make lifestyle changes or have already made

them. These are the most successful patients. If they already have a PCP or medical specialists, they are encouraged to inform their providers about their lifestyle changes. Those who want to change their PCP are referred to physicians at MHC.

Occasionally, we will see a patient who has no PCP and has not seen a health care provider in years. They may have uncontrolled health problems such as hypertension or diabetes. In these cases, medications are prescribed, and they are referred to PCPs at MHC for medication management. These patients may continue to be seen at the OHWC because they are usually highly motivated to make dietary and other lifestyle changes.

2. Patients who have been thinking about making lifestyle changes but are not ready to commit to a plant-based diet. These patients are referred to a dietitian who can help them to make healthier choices. They are often interested in other lifestyle interventions, such as sleep management or physical activity. The cooking class offers these patients an opportunity to sample plant-based foods before they decide to make dietary changes.
3. Patients who are referred by a health care provider or concerned family member but have no interest in making dietary or other lifestyle changes. These patients are challenging, but they provide valuable lessons about patient autonomy. Lifestyle medicine is patient-centered where practitioners serve as guides to help patients achieve their health goals, not the goals of the practitioner.

Individual Follow-up Appointments

Individual follow-up visits are the same as standard follow-up visits with a focused physical exam, but lifestyle counseling and support are provided instead of medication refills. These visits are scheduled for 30 minutes and billed using the 99214 CPT code.

Shared Medical Appointments: Follow-up Patients

An SMA is a series of medical consultations in a supportive group setting where other patients can listen, interact, and learn. Patients sign a confidentiality agreement and consent form before every session. At OHWC, SMAs are co-facilitated by a physician and a clinical psychologist. The group dynamics are patient-centered and responsive to patient's concerns. SMAs are not structured as a class, but occasionally there is a brief presentation to explain the science of a disease process or lifestyle intervention.

Each SMA typically includes a physician, psychologist, patient coordinator, medical student, and 3 to 5 patients (with a maximum of 6 patients). Appointments last 2 hours but patients get 15 to 30 minutes of individual attention depending on the number of patients in the group and the complexity of their medical problems. SMA patients are billed with 99213 or 99214 CPT codes. The physical examination is mostly inspection and auscultation, but we conduct a focused examination on patients with specific complaints, such as swelling of the ankles. Fruit or a plant-based snack is provided during the SMA.

Additional Visits/ Services Offered

Medicare Annual Wellness Visits

AWV provide personalized preventive services for Medicare beneficiaries. These visits are billed with G0438 CPT codes. There are several associated CPT codes such as G8055 for fall assessment; G8434 for cognitive assessment; and 99497 for advanced care planning. These visits are an hour long and they present an ideal opportunity to discuss lifestyle interventions with people who often have many health problems but never considered lifestyle changes, such as a plant-based diet.

Lifestyle Intervention/ Cooking Class

The OHWC offers a 12-week cooking class that costs \$12.00 per session or \$10.00 per class if participants pay for all 12 sessions in advance. The classes are held on Wednesday evenings from 6:30 to 8:30 PM for patients and community members.

The objectives of the class are to

1. Form a community around healthy plant-based eating habits. Social isolation is one of the factors that contributes to failure of plant-based diets. Patients are encouraged to bring family and friends to create a supportive environment.
2. Educate patients and community members about the scientific evidence that supports eating a plant-based diet to reverse chronic diseases and eliminate health disparities.
3. Demonstrate basic cooking techniques, such as cooking without oil. Many of the participants have never cooked but are excited to learn.
4. Introduce patients and community members to new tastes and eating patterns.

This class has been very successful; there is a waiting list to attend. The classes usually include a half-hour presentation on a health topic followed by a cooking skills demonstration and food tasting. Lifestyle intervention topics are presented by the clinic physician, a registered dietitian, and specialists in areas such as sleep management, stress management, and physical activity.

Encounter Documentation

MHC recently transitioned from Practice Partner to EPIC. This transition was challenging but it allowed for customized EMR templates to be designed that capture lifestyle information such as a nutrition history and life stress information.

Clinic Billing and Support Staff

The OHWC accepts Medicare, Medicaid, and all the health insurance

plans that contract with MHC. Patient billing services and support staff administration are available through MHC. These resources allow clinicians to focus on patient care, rather than reimbursement.

Community Outreach

Improving community health is an integral part of MSM's social mission. OHWC staff speak frequently at churches and other local community organizations. These organizations are encouraged to start their own plant-based lifestyle intervention programs.

Clinic Challenges

Support from MHC was crucial in the development of the OHWC. Most of the physicians in the MHC system have been supportive and willing to refer patients. They all acknowledge the importance of lifestyle interventions, but there is still uncertainty about the efficacy of plant-based nutrition.

The biggest challenge was finding the right clinical support staff to help deliver care. Most medical assistants and health administrators are trained to work in traditional medical settings. Treating patients with lifestyle interventions and seeing them in SMAs were unfamiliar concepts to them initially. This problem was solved by recruiting a dedicated patient coordinator, who has adopted a plant-based diet. The current team of professionals complement each other to deliver a cohesive message to patients. However, this presents a challenge when coverage is needed for support staff. It is difficult for float support staff to cover for specially trained dedicated staff.

Conclusion

Lifestyle medicine services that include plant-based nutrition are a cost-effective approach to promoting health equity. Health care systems are starting to recognize the value of these services. The OHWC is an example of a lifestyle medicine specialty clinic within the

multispecialty practice arm of a medical school. The clinic focuses on lifestyle interventions and benefits from the resources of the medical school to improve the health of the population it serves.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Ethical Approval

Not applicable, because this article does not contain any studies with human or animal subjects.

Informed Consent

Not applicable, because this article does not contain any studies with human or animal subjects.

Trial Registration

Not applicable, because this article does not contain any clinical trials. **AJLM**

References

- Mullan F, Chen C, Petterson S, Kolsky G, Spagnola M. The social mission of medical education: ranking the schools. *Ann Intern Med*. 2010;152:804-811.
- National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Board on Population Health and Public Health Practice, et al. *Communities in Action: Pathways to Health Equity*. Washington, DC: National Academies Press; 2017. doi:10.17226/24624.
- Center for Chronic Disease Prevention. Vital signs. African American health. Creating equal opportunities for health. <https://www.cdc.gov/vitalsigns/aahealth/index.html>. Accessed April 22, 2018.
- Centers for Disease Control and Prevention. National Center for Health Statistics. Tables of summary health statistics. <http://www.cdc.gov/nchs/nhis/shs/tables.htm>. Accessed May 17, 2018.
- Fraser G, Katuli S, Anousheh R, Knutsen S, Herring P, Fan J. Vegetarian diets and cardiovascular risk factors in black members of the Adventist Health Study-2. *Public Health Nutr*. 2015;18:537-545. doi:10.1017/S1368980014000263.
- Tonstad S, Stewart K, Oda K, Batech M, Herring RP, Fraser GE. Vegetarian diets and incidence of diabetes in the Adventist Health Study-2. *Nutr Metab Cardiovasc Dis*. 2013;23:292-299. doi:10.1016/j.numecd.2011.07.004.
- Bazargan M, Smith J, Yazdanshenas H, Movassaghi M, Martins D, Orum G. Non-adherence to medication regimens among older African-American adults. *BMC Geriatr*. 2017;17:163. doi:10.1186/s12877-017-0558-5.
- Gamble VN. Under the shadow of Tuskegee: African Americans and health care. *Am J Public Health*. 1997;87:1773-1778. doi:10.2105/AJPH.87.11.1773.
- Economic Research Service, US Department of Agriculture. *Commodity Consumption by Population Characteristics*. Washington, DC: US Department of Agriculture; 2012.
- Powe CE, Evans MK, Wenger J, et al. Vitamin D-binding protein and vitamin D status of black Americans and white Americans. *N Engl J Med*. 2013;369:1991-2000. doi:10.1056/NEJMoa1306357.