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ABSTRACT

The endless health benefits of physical activity is common knowledge, yet physical inactivity is still a public health crisis in the U.S. These benefits are well promoted in the healthcare system but more attention is needed on how to best improve adherence to recommendations. Adjacent to this crisis is an increase in patients with obesity. African American women are among those most impacted by obesity and have been found to be the least physically active group in the country. Exercise referrals to other health care professionals is one intervention that may increase patient success in meeting physical activity recommendations. This study explores how African American women might benefit from exercise referral programs to personal fitness trainers. One hundred African American women, with a BMI over 30 were surveyed on their physical activity habits, recommendations from their primary care provider and perceived barriers and benefits. They were asked about specific recommendations and whether their physician had recommended a personal trainer or physical activity, at all. Results show that while most patients reported being advised on physical activity, none had been directed to meet with a personal fitness trainer. This study may be useful in influencing interventional programs that refer African American women to personal fitness trainers for n by identifying barriers and highlighting exercise referrals as an effective approach that is not commonly used.

BACKGROUND

Physical inactivity is a public health crisis that is heavily correlated with an increased incidence of disease affecting cardiorespiratory health, musculoskeletal function, mental health, and sleep. African American women are disproportionately represented in the population of Americans that are physically inactive. African American women are more often diagnosed with chronic illnesses, like diabetes and heart disease, and are determined to have increased rates of obesity with an estimated 60% of African American women having a BMI >30. Factors that are barriers to African American women's physical activity are multifaceted, including socioeconomic, cultural, personal, and genetic components. They are also more likely to live in areas of low socioeconomic status with limited access to recreational centers and parks. This group also may hold cultural perspectives on physical appearance that may discourage addressing obesity. These variables that influence physical activity in African American women point to several points for intervention to address the growing burden of poor health associated with physical inactivity in this group. Primary care physicians hold a unique influence over their behavior but fall short of promoting physical activity. Exercise referrals to personal fitness trainers are one such advancement that has hardly been demonstrated in clinical practice that may help address this. For African American women, multiple experimental studies suggest improved rates of physical activity.

OBJECTIVES

- To review the physical activity habits of African American women with a BMI >30.
- To explore the benefit of personal fitness trainers in meeting recommendations for physical activity for African American women.
- To identify barriers to physical activity recommendation in African American women.
- To provide research data to support a program and/or practice model that involves exercise referrals to personal fitness training in primary care treatment plans.

METHODS

Literature Review: Conducted that consisted of entering key search terms into the PubMed Database and Google Scholar.

- Literature was sought and reviewed that focused on current physical activity recommendations; physical activity in African American women; physical activity and primary care physicians; community referrals by primary care physicians and the benefit of personal trainers.
- Michigan State University Institutional Review Board exempt status approval.

Clinical site: Ascension Providence Hospital Deighton Family Medical Practice in Southfield, MI.

Procedure: One hundred African American Women were surveyed using a 20-item survey instrument developed by the author that included multiple-choice, check all that apply and open-ended responses.

- Upon completion, participants were given a printed survey and offered a \$5-\$10 gift card from Whole Foods Market or Meijer Superstore.
- Surveys were manually uploaded to google sheets and analyzed using comparison charts.



Deighton Family Medicine Clinic in Southfield, MI



RESULTS

All patients were patients at the Ascension Providence Hospital Deighton Family Medicine Practice, in Southfield, Michigan. All patients identified as female and African American. One hundred percent of patients had a body mass index over 30. Current physical activity levels were assessed through questions about aerobic activity, strength training, and respective duration and frequency. Forty-Five percent of patients reported never participating in physical activity, with 20 percent participating rarely or on occasion. About 10 percent of patients reported participating in aerobic activity greater than or equal to the WHO's recommended 3-4 times per week. Twenty-nine percent of patients reported getting physical activity through house and yard work, with another twenty-six percent exercising in a gym exercise room. The third most common was 'other' physical activity which included redundant and blank responses, and abundant responses of 'walking' for physical activity. Eighty-nine percent of patients reported being advised to exercise by their primary care physician.

RESULTS

Patient Demographics	n	%
Race	104	100
African American	104	100
Not African American	0	0
Age 1		
18-24	4	4.2
25-34	17	17.5
35-44	12	12.5
45-54	25	24
55-64	21	20
65+	13	12.5
INCOMPLETE	1	1.0
BMI (Body Mass Index in kg/m2)		
Greater than or equal to 30	100	100
Below 30	0	0

Table 1: Demographic information was collected on race, age, height, and weight. BMI was recorded from electronic calculations in the practice's electronic health record system at the time of survey consent. Majority of survey respondents were between the ages of 45 and 65 years of age.

What Modalities of physical Activity have you participated in the 12 months? (Select All that Apply)

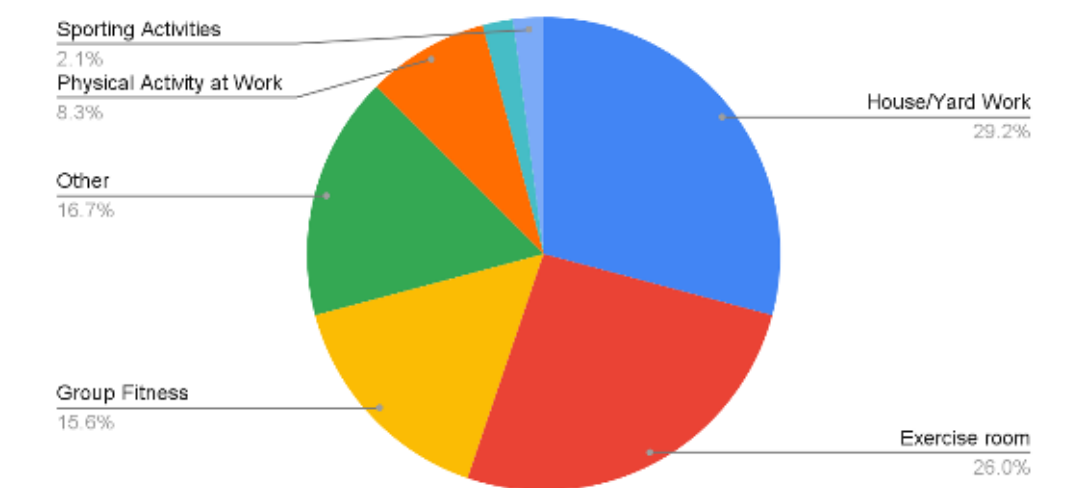


Chart 1: Patients asked about modalities of physical activity to establish baseline physical activity.

How often do you engage in aerobic exercise?

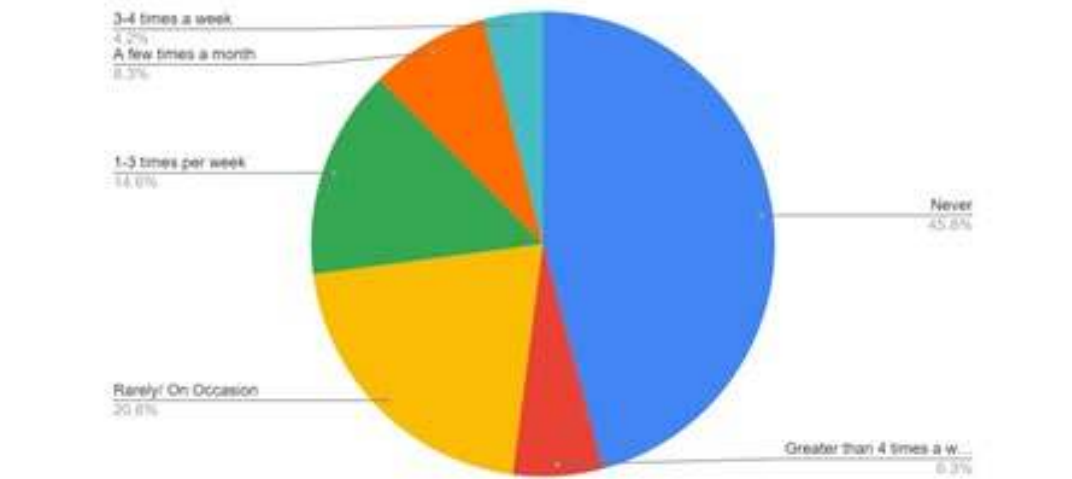


Chart 2: Patients were asked about aerobic activity habits to establish baseline physical activity.

Has your primary care doctor advised you to exercise?

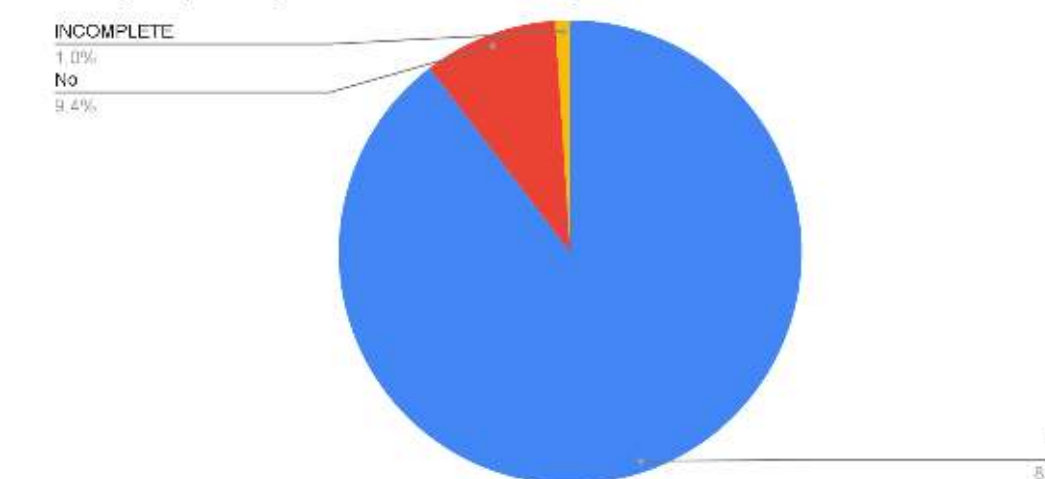


Chart 3: Patient questioned on physician recommendation on physical activity.

Which of the following did your doctor suggest?

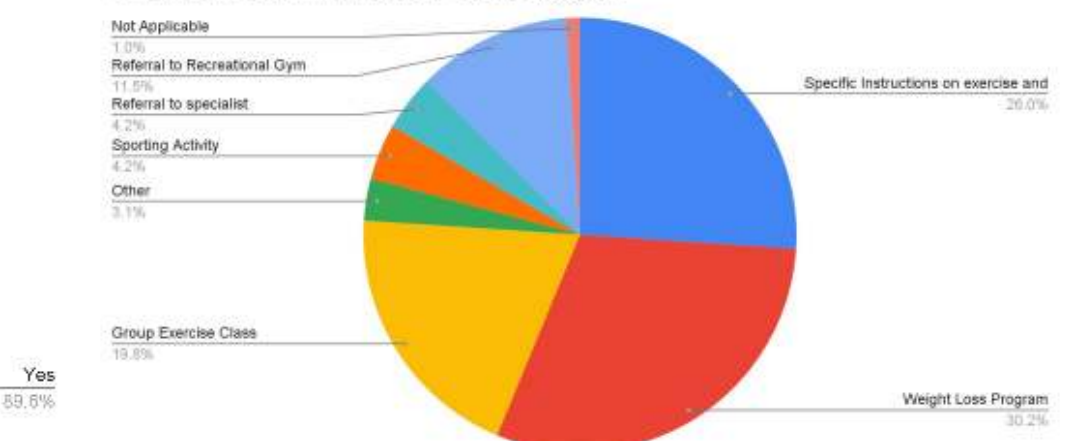


Chart 4: Patient asked about specific physician recommendations.

CONCLUSIONS

- Development of exercise referral programs for African American women might serve as one approach to support these patients in meeting physical activity recommendations.
- Further research on logistics of referral to personal fitness trainers is necessary to explore this intervention.