Significance of the Problem

- Overweight is defined as body mass index (BMI) of 25 to 29.9 kg/m² and obesity as BMI of > 30 kg/m² (NHBLI, 2014).
- Overweight and obese African American women suffer from health disparities, disabilities, and decreased quality of life (Sutton et al., 2016).
- Most weight loss programs are not culturally specific, despite the benefits of dietary changes and increased physical activity for all groups.

**PICOT**

In African American women with BMI > 25 kg/m², what is the effect of a provider-led program that includes culturally tailored strategies on weight and BMI over a 12-week period?

Review of Literature

**Keywords** were searched: obese, obesity, overweight, weight loss, weight reduction or, lose weight, and African American, black, women, woman, or female

**Inclusion criteria** consisted of evidence that was peer reviewed, published between 2012-2018, included an abstract, written in English language, and focused on adult female over 18 years of age. Studies were excluded that included children, pregnant or breastfeeding women, non-black participants, interventions used in hospitals, inpatient settings, or nursing homes, animal subjects, and settings outside of the USA.

The Johns Hopkins Nursing Evidence-based Practice (JHNENP) appraisal tools were used to guide the appraisal of evidence.

Appraisal of Evidence

**Level of evidence:**
- **Level I** included 4 Systematic reviews and RCTs, with A quality of evidence.
- **Level II** included 2 Randomized and nonrandomized control trials with A and B quality of evidence.
- **Level III** included 4 Systematic reviews, descriptive studies and convenience sampling with a B quality of evidence.

Synthesis of Evidence

- The most common approach to obesity treatment for African American women included lifestyle interventions that targeted both diet and physical activity, as well as behavioral self-management (Appel et al., 2011; Burton et al., 2017; Tussing et al., 2013; Walker & Gordon, 2014).
- African American women felt that one-on-one provider counseling, nutrition referrals, weight loss classes, and provider discussion of adverse effects of obesity were significantly important in promoting weight loss (Banerjee et al., 2018; Burton et al., 2017).
- Women who participated in intervention-led physical activity and weight loss programs successfully increased their physical activity in three months or more (Conroy et al., 2014; Goodpaster et al., 2010).

Decision to Change Practice

- Individualized provider support is needed by guiding the participant to increase physical activity and make dietary and behavioral changes.
- Current literature does not address social, environmental, and cultural barriers that hinder weight reduction.
- Evidence supports the need for a culturally specific intervention for obese African American women.
- Face-to-face contact are necessary to provide support, education, and guidance to the participant to reduce weight and improve health.

Implementation

- **Setting**: A walk-in, Internal medicine practice located in an underserved, urban community in Northwest Indiana.
- **Participants**: 23 African American women with BMI > 25 kg/m², ages 18-65; 15-Participating; 8-Dropout participants
- **Strategy**: A 12-week provider-led weight loss program that included lifestyle changes that targeted nutrition, physical activity, behavioral self-management, and follow up.
- **EPB Framework**: The Health Promotion Model EPB Practice Model: Iowa model
- **Intervention**: Primary outcomes: Weight, BMI and waist circumference Secondary outcomes: Systolic and diastolic blood pressure. Time: Baseline, 4.8 and 12 weeks

Primary outcome data:

- One way repeated-measures ANOVAs were conducted for weight, BMI, and waist circumference comparing measurements at 6 intervals: baseline to 4 weeks, baseline to 8 weeks, baseline to 12 weeks; 4 to 8 weeks, 4 to12 weeks; and 8 to 12 weeks. Significant effects were found for all 3 measures:
  - Weight: F(3,42) = 5.765, p < .05
  - BMI: F(3,42) = 5.655, p < .05
  - Waist circumference: F(3,42) = 6.888, p < .05

- Follow-up protected f tests were conducted (see table below) which revealed significant results for weight, BMI, and waist circumference at baseline to 12-week interval. Also, baseline to 8-week interval was significant for waist circumference.

<table>
<thead>
<tr>
<th>Interval</th>
<th>Weight</th>
<th>BMI</th>
<th>Waist Circ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>39.56</td>
<td>38.68</td>
<td>38.58</td>
</tr>
<tr>
<td>1 week</td>
<td>234.7</td>
<td>43.16</td>
<td>43.16</td>
</tr>
<tr>
<td>4 weeks</td>
<td>234.7</td>
<td>43.16</td>
<td>43.16</td>
</tr>
<tr>
<td>8 weeks</td>
<td>234.7</td>
<td>43.16</td>
<td>43.16</td>
</tr>
</tbody>
</table>

Secondary outcome data:

- **Systolic Blood Pressure**: No significant difference exists for systolic blood pressure (F(3,42)=0.01, p>.05).
- **Diastolic Blood pressure**: No significant difference was found for diastolic blood pressure (F(3,42)=2.10, p>.05).

Conclusion and Recommendations

- A provider-led weight loss program was effective for significantly reducing weight, BMI, and waist circumference in African American women. In 12 weeks.
- Barriers: unemployment, low incomes, lack of transportation, lack of family support, low self-esteem, time constraints, safety, numerous fast food outlets, limited supermarkets.
- Recommendations for Nursing Education, research and practice: APNs can identify obesity as health problems in practice and develop programs to treat obesity compared to change weight loss.

[Table showing statistical data]

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