THE EFFECTIVE USE OF THE PEDOMETER TO INCREASE WALKING IN POSTPARTUM AFRICAN AMERICAN WOMEN

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Introduction
African American women have been reported to have the lowest levels of physical activity when compared to other populations. The increased contribution of childbearing to weight gain and consequential obesity found among black women is of concern. Further, the lifestyle developed among these women by the 6th week postpartum is another compounding factor which contributes to increased physical inactivity.

The benefits of regular physical activity have been well established for the general population; however, physical activity recommendations are seldom included for early postpartum care.

The purpose of this study was to determine if the use of the pedometer would increase walking (ambulatory movement) in African American women that are between 6 weeks and 6 months postpartum.

Methods
A sample group of 32 apparently healthy postpartum African American females (aged 18-40) that were between 6-8 weeks postpartum and met the inclusion criteria participated in this study.

All participants received a Yamax SW-200 pedometer and an activity log with instructions to intentionally increase their average number of steps by at least 500 steps each week beginning from baseline for 12 weeks. Participants also received bi-weekly contact via phone, email, or face-to-face and a list of suggested ways to increase steps.

Data reduction
Baseline: Average of 1st three days of normal daily steps
Final: Step counts based on a minimum of 36/84 days (3 days/wk x 12 wks) served as validation measure for data analysis

Results
The research question for this study was, “Does the use of the pedometer increase physical activity in African American women who were between 6 weeks and 6 months postpartum?”

A paired t-test analysis revealed a significant increase in daily walking activity (t (30) = -8.204, p < .001) at the end of the 12 week study. An estimate of the magnitude of the effect showed a 64% increase in the average number of steps taken per day by African American women that were between 6 weeks to 6 months postpartum.

At the beginning of the study, the women reportedly averaged ~ 5347 steps/day and increased ~3402 steps/day to an average of ~8749 daily steps by the end of the study. The proposed indices for public health are: <5000 steps/day for sedentary, 5000-7499 steps/day for low active, 7500-9999 for somewhat active, ≥10,000 steps/day for active and ≥12,500 steps/day for highly active adults. Based on the proposed (steps/day) indices for public health, the women in this study advanced from the “low active” classification to “somewhat active” by the end of the study.

Key References

Conclusions
We rejected the null hypothesis that the use of the pedometer would not increase physical activity in African American women who were between 6 weeks and 6 months postpartum.

The use of the pedometer was effective in increasing walking and promoting increased physical activity, as measured by the average number of daily steps, in African American women that are between 6 weeks and 6 months postpartum.

Additionally, the 6 weeks to 6 months postpartum period may be an opportune time to implement a pedometer driven intervention to increase physical activity in African American women.

This study is significant in that it is the first to objectively document the health benefits of increased physical activity during the early postpartum period exclusively in African American women. Moreover, it provides data specific evidence for physicians and healthcare providers to advise with confidence and subsequently complement a culturally appropriate postpartum care plan.