

An Eight Week Evidence-Based Employee Walking Program

Valerie Dietrich Greaves DNP, RN

Chamberlain College of Nursing

Email address: vgreaves@wccnet.edu

Practice Problem

Physical inactivity is on the increase in America, with many individuals having more sedentary jobs and lifestyles. This increase in PI has a detrimental impact on an individual's health as well as on health care costs for the nation. PI can predispose an individual to many illnesses and chronic diseases such as obesity, diabetes and cardiovascular related incidents (Park et al., 2014). Recent studies have shown that seventy million Americans or the equivalent of 20% of the United States (U.S.) population is inactive (Park, et al., 2014). Physical inactivity was ranked by the World Health Organization (WHO) as the fourth leading cause of premature mortality globally, ahead of obesity and dietary factors (World Health Organization, 2016).

Clinical Question

PICOT question: For adult employee volunteers, will participation in an eight-week, evidence-based walking program significantly impact their health outcomes as measured by: BP, weight, and BMI?



Project Description

An evidence-based eight week walking program was implemented for full-time employees at a large community college in Ann Arbor, Michigan. The sample was a diverse group of volunteer participants ranging from 18-70 years in age. Upon initiation of the project all 46 participants were screened for BP, weight, and BMI. The participants were then given a pedometer and a "Step Journal" in which they tracked their weekly steps. Participants were asked to attend a check-in once a week with the project coordinator. During the check-in, the project coordinator would record the participant's weekly number of steps, as well as assist in setting the participant's step goal for the following week (Adams et al., 2014; Fanous et al., 2014). The weekly check-in sessions were also a time for the project coordinator to demonstrate caring utilizing Watson's Theory of Transpersonal Caring (Watson, 2007; Mladenovic et al., 2014; Leininger et al., 2013). The project coordinator created a caring environment by meeting with each participant individually at the check-in and offering support and encouragement each week throughout the program. Motivational group emails were sent out weekly between the check-in days, to support the participants and increase engagement in the program. If a participant missed a check-in, they were contacted individually by the project coordinator. After completion of the program participants were screened again in the following areas: BP, weight, BMI and total cholesterol.

Project Evaluation

The participants were given a demographic questionnaire to complete as well as pre and post screenings of BP (systolic & diastolic) weight and BMI. An evidence-based tool for measuring physical activity (IPAQ-SF) was also given to the participant's pre and post walking program. Paired samples *t*-test were run on the pre and post interventions of BP, weight, BMI, and IPAQ-SF scores. The data demonstrated that activity levels among participants had statistically significant improvements. Systolic BP and weight also had statistically significant decreases. No statistically significant difference was noted in the pre and post BMI's. demonstrating that the short eight-week walking program had positive impacts on some health measurements.

Conclusions

Walking programs as short as eight weeks can yield positive results in the areas of BP, weight, and increased activity levels. The use of pedometers, weekly check-ins, group walks, and raffle incentives can assist in keeping participants engaged and decrease attrition rates of walkers.



Nursing & Healthcare Implications

Implementation of an eight week evidence-based walking program is an inexpensive and relatively simple means for an institution to increase PA levels among employees, which can lead to decreased obesity, diabetes, cardiovascular disease and other chronic illnesses. The implementation of employee walking programs are becoming more popular in organizations as employers begin to realize the benefits of increased PA among their employees. Walking and increased PA among employees has led to increased health outcomes which has been linked to decreased insurance premiums for employers as well as increased productivity, increased moral, and improved health behaviors among employees (Leininger et al., 2013). Recent studies have shown an ROI of 1.88-3.92 for their organizations utilizing a wellness program in their organization (Kaspin et al., 2013).

References

- Adams, T., Burns, D., Forehand, J.W., & Spurlock, A. (2014). A community-based walking program to promote physical activity among African American women, *Nursing for Women's Health*, 19 (1), 26-39.
- Fanous, A.M., Kier, K.L., Rush, M.J., & Terrell, S. (2014). Impact of a 12-week, pharmacist-directed walking program in an established employee preventive care clinic, *American Journal of Health-System Pharmacy*, 77, 1219-1225.
- Kaspin, L.C., Gorman, K.M., & Miller, R.M. (2013). Systematic review of employer-sponsored wellness strategies and their economic and health related outcomes, *Population Health Management*, 16 (1), 14-21.
- Lee, P.H., Macfarlane, D.J., Lam, T., Stewart, S.M. (2011). Validity of the International Physical Activity - Short Form (IPAQ-SF): A systematic review, *International Journal of Behavior Nutrition & Physical Activity*, 8, 1-8.
- Leininger, L.J., Harris, D., Tracz, S., & Marshall, J.E. (2013). Differences in physical activity participation between university employees with and without a worksite health promotion program. *California Journal of Health Promotion*, 11(1), 67-75.
- Mladenovic, A.B., Wozniak, L., Plotnikoff, R.C., Johnson, J.A., & Johnson, S.T., (2014). Social support, self-efficacy and motivation: a qualitative study of the journey through HEALD (Healthy Eating and Active Living for Diabetes), *Practical Diabetes*, 31(9), 370-374.
- Park, J.H., Miyashita, M., Takahashi, M., Kawanishi, N., Hayashida, H., Kim, H.S., Suzuki, K., & Nakamura, Y. (2014). Low-volume walking program improves cardiovascular-related health in older adults, *Journal of Sports Science and Medicine*, 13, 624-631.
- Watson, J. (2007). Watson's caring theory website. Retrieved from <http://www.2.uchsc.edu/son/caring/content/default.asp>
- World Health Organization (2016). World Health Organization website. Retrieved from <http://www.who.int>