

**Physical Activity Assessment of People with Type II Diabetes in the Dominican Republic**

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ABSTRACT

The prevalence of type II diabetes has increased nearly 25% in the past 10 years, leading to significantly higher risk of morbidity and premature mortality. Although it is well-known that physical activity (PA) improves diabetes outcomes, little is known about PA among Dominicans. **PURPOSE:** To evaluate PA participation and perceptions among people with type II diabetes in the Dominican Republic (DR). **METHODS:** Participants (N=29) were recruited from an urban diabetes clinic in Nagua, DR. Age, height, and weight were self-reported. Actigraph wGT3X-BT triaxial accelerometers were fitted for wear on the non-dominant wrist, and participants were instructed not to change their activity level. After seven days, participants returned the accelerometers and completed the Spanish-language Godin Leisure Time Exercise Questionnaire (GLTEQ) and two questions regarding perceptions of PA. Accelerometer data was considered acceptable if worn for at least 10 hours/day on at least four days. **RESULTS:** Eighteen women and 11 men enrolled (Age: 55 ± 13 yrs; BMI: 28.6 ± 4.5 kg·m<sup>-2</sup>). Acceptable wear time was reached by 27 participants. Moderate to vigorous intensity physical activity (MVPA) was 132 ± 48 min·day<sup>-1</sup>; steps·day<sup>-1</sup> was 9994 ± 2983. GLTEQ scores (103 ± 98) classified 25 participants as active and two as moderately active. Anecdotally, there were significant challenges in ascertaining accurate light-intensity physical activity from the participants. There were no gender differences in age, BMI, or MVPA. Men reported significantly higher GLTEQ scores (144 vs. 78, p<0.001). 93% of participants reported that physical activity was 'very important' for their health. There was no association between the GLTEQ and MVPA or steps/day (p>0.2). Participants who reported being 'very active' (n=17) did significantly more MVPA than those that reported being 'not very active' or 'somewhat active' (n=10)(p=0.033). **CONCLUSION:** Dominicans with type II diabetes are highly physically active but do very little vigorous physical activity. Although there were no objective differences between men and women, men subjectively report nearly double the physical activity compared to women, indicating the need for differential interventions. The GLTEQ is not a valid measure of physical activity among Dominicans with type II diabetes.