

Effect of Providing Supplemental Physical Activity & Exercise Resources in Diabetes Centres on Physical Activity Levels of Patients

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PURPOSE: This study aimed to determine the extent to which providing Diabetes Centers (DC's) with supplemental physical activity and exercise resources affects levels of physical activity and exercise of patients with diabetes.

METHODS: Questionnaires reporting physical activity and exercise levels, confidence, and clinical values were completed at baseline (N=180) and 6 months (N=118) by patients at eight DC's across Nova Scotia. DC's were provided with physical activity resources such as informational brochures, counseling from a Kinesiologist, and exercise classes. Paired and mixed method statistical analysis identified differences in variables between baseline and 6 months, and between those who did and those who did not make use of the supplemental resources at 6 months.

RESULTS: Patients reported increased aerobic exercise (baseline=1.5 ± 2.0 days/week; 6 months= 2.0 ± 2.4 days/week; p=0.038) and resistance exercise (baseline=0.5 ± 1.4 days/week; 6 months=1.3 ± 1.9; p=0.000) at 6 months. Those who attended exercise classes reported greater overall health compared to those who did not (p= 0.046); however, the only significant clinical outcome was lower triglycerides (p=0.007). Those who received resistance exercise instruction from a Kinesiologist (n=15) reported greater task, self-regulatory, and overall efficacy at 6 months (p=0.023; p=0.026; p=0.021, respectively) and reduced A1C (from 7.5 ± 1.4% to 7.1 ± 1.2%; p=0.047).

CONCLUSIONS: Providing DC's with supplemental resources increased exercise involvement and confidence in patients with diabetes. Future implications include providing DC's standard access to these resources on a wider scale.

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