

The Physical Activity and Exercise Tool-Kit: Effectiveness of a New Resource for Diabetes Educators

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Physical activity and exercise (PAE) are essential in the prevention and management of diabetes. Diabetes educators (DEs) are often looked to as the primary source of information for those living with diabetes and are well positioned to provide counselling on PAE. However, DEs often receive little training in exercise prescription and do not feel adequately prepared to effectively counsel patients regarding PAE. While DEs' personal perceptions (e.g., self-efficacy) have been shown to be key determinants of their behaviour, their beliefs in their clients' abilities (e.g., other efficacy, perceived attitudes) have received little attention. The present study examined the effectiveness of the 'Physical Activity and Exercise Tool-kit' in increasing both DEs' perceptions surrounding PAE counselling and of their clients' abilities in, and attitudes towards PAE. Using a 2 (group) by 2 (time) quasi-experimental design, DEs (N = 121) were assigned to either an intervention or standard care condition. The intervention group was provided with training on PAE counselling including the "Physical Activity and Exercise Tool-kit," a theory driven, evidence based resource specifically designed for DEs. The standard care group was referred to Canada's Physical Activity Guide. Measures of counselling efficacy, referral efficacy, attitudes, and perceived difficulty, as well as other efficacy, and perceived client attitudes were administered at baseline and 6 months. To examine the effectiveness of the 'Tool-kit' three separate repeated measures MANOVAs were conducted. Examination of DEs' efficacy beliefs revealed a significant group by time interaction ($p = .03$). Follow-up tests indicated that the interaction was significant for counselling efficacy ($p = .02$) such that participants in the intervention group were more confident about PAE counselling at 6 months ($M_{6mo} = 68.3$) as compared to baseline ($M_{base} = 54.0$) and as compared to the standard care group at both time point ($M_{base} = 48.9$, $M_{6mo} = 50.4$). In addition, there were multiple significant main effects for time across the separate analyses. Follow-up tests revealed significant increases over time in DEs' counselling efficacy ($p = .01$), perceived difficulty ($p < .001$) and confidence in their clients' ability to manage PAE ($p = .001$). These findings suggest that the 'Tool-kit' represents an effective training resource for DEs in the area of PAE counselling. While there is the need for examination of the effectiveness of the 'Tool-kit' over the longer term, and on the translation of increased counselling efficacy to improved PAE counselling, the present study suggests that incorporation of the 'Tool-kit' may have best practice implications for the way in which PAE is promoted in diabetes care.

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