Title

The role of socio-cognitive factors on diabetes self-management in adults: a cross sectional analysis using an extended version of the Theory of Planned Behavior

Authors

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Background: Previous studies highlighted the utility of the extended Theory of Planned Behavior (TPB) socio-cognitive factors to understand diabetes self-management behaviors (DSMBs) performance. However, the studies accounting for multiple DSMBs within the TPB model are currently limited.

Objectives: The purpose of this study is to explore the role of the extended TPB socio-cognitive factors on: 1) the intention to perform multiple DSMBs and 2) the actual performance of several types of DSMBs.

Methods: Adult community-based patients with diabetes (N=284) were asked to complete a self-reported questionnaire to assess the extended TPB factors (cognitive and affective attitudes, subjective norms, moral norms, and perceived behavioral control (PBC)), and actual DSMBs performance (self-monitoring of blood glucose (SMBG), healthy eating, physical activity, and foot care). Structural equation modelling was applied for the analysis. Sociodemographic and clinical variables were included in the model to explore their relevance.

Results: Intention to perform multiple DSMBs variance was largely explained (65.9%) by the extended TPB factors. A significant association was observed exclusively between intention and SMBG. We found that PBC directly predicted healthy eating and foot care behaviors, while that physical activity is more likely determined by the presence of a state of depression rather than by the extended TPB factors. Our analysis showed that age and insulin taking acted as contributors of intention and exerted a noticeable direct influence on some specific DSMBs.

Conclusions: The results provide a comprehensive understanding of DSMBs in adults with implications on intervention design for diabetes management.