# Understanding the Role of Socio-Cognitive Factors on Diabetes Self-Management Behaviors in Adult Patients living with Diabetes.

## Background

People living with a chronic disease are called upon to carry out management activities on a regular basis, with implications for their families. About 400 000 people in Switzerland have diabetes, a chronic disease related to sugar metabolism disturbance, which is steadily increasing. Successful treatment and control of diabetes strongly relies on patients' ability to integrate diabetes selfmanagement behaviors (DSMBs) into their daily lives. DSMBs usually include decisions and actions regarding medication intake (insulin or antidiabetic agents), performing physical activity, adjusting diet, monitoring blood sugar, and foot care. Although DSMBs have demonstrated a positive impact in terms of preventing complications and improving quality of life, their actual daily implementation remains a challenge for most patients. Socio-cognitive beliefs are among the determinants of an individual's motivation for adopting health behaviors. For example, beliefs about benefits and disadvantages, social expectations, and one's self-perception of autonomy and control can play a key role, either as or supports for the obstacles implementation of care behaviors like DSMBs. Identifying and understanding the influence of socio-cognitive factors associated with diabetes DSMBs is essential for finding ways to help these people maintain long-term control of their disease. Notably, this is a key aspect of Health Strategy 2020 envisaged by the Swiss Government. Whereas this kind of knowledge is presently limited for this population, it would be extremely useful the development of future interventions particularly in Switzerland.

## Objective

The aim of this study is to describe the role of socio-cognitive factors on motivation to perform of DSMBs, following the Theory of Planned Behavior (TPB).

#### Method

Setting and population: The population will consist of adults with diabetes participating in the CoDiab-VD community-based cohort, approximatively 385 French speaking people living at home with standing residency in the canton of Vaud, Switzerland.

Design: Cross-sectional study design self-administered questionnaires sent to patient's homes. Participants will be asked to complete questionnaires assessing the standard variables (attitude, subjective norms, perceived behavioural control and intention, 24 items) pre-tested for this their survey. and actual **DSMBs** performance. measured with the Summary of Diabetes Self-Care Activities (SDSCA, 16 items). Sociodemographic, illness and treatment variables will also be assessed and considered in the measurements.

## Planned analysis:

- Descriptive statistics for sociodemographic characteristics and measured variables.
- 2) Structural Equation Modelling to test a model based on TPB.

### Relevance of the study

The results of this study will allow a better understanding of the influence of socio-cognitive factors on DSMBs of people with diabetes. The results will serve in particular to guide future interventions in education and long-term support of this population by identifying:

- Socio-cognitive factors as barriers or supports of self-management;
- 2) Areas of difficulty and resources for self-management;
- Characteristics of people at risk for poor self-management;
- 4) Educational and self-management support strategies for people with diabetes.

This project is part of a collaboration with Professor Isabelle Peytremann-Bridevaux, Institute of Social and Preventive Medicine (IUMSP), Lausanne University Hospital (CHUV) and Lausanne University, and Professor Olivier Desrichard, Faculté de Psychologie et des Sciences de l'Education, University of Geneva.

Along the thematic framework of research "Prevention and Health Promotion" defined by HES-SO, and "Chronicity: Health Promotion, Care Interventions and Rehabilitation" defined by HESAV. This research is meant to fill the lack of knowledge in a priority field of public health at the local and international

## Research team

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