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Titolo tesi: Self-care in Type 2 Diabetes Mellitus

ABSTRACT

Background. Diabetes is one of the most common non-communicable diseases in the world, affecting worldwide 425 million worldwide, and this number is expected to rise up to 693 million by 2045. Of these cases, 90% are attributable to type 2 diabetes mellitus (T2DM), which carries a high risk for severe micro-vascular and macro-vascular complications. The burden of T2DM is elevated both in terms of quality of life and usage of the health care system. Despite self-care is a recognised cost-effective strategy to manage T2DM, there is the need to: (1) have a theoretically sound instrument to measure self-care; (2) describe determinants of self-care related, not only to single self-care behaviours, but to the whole process of self-care, which is complex and dynamic; (3) deepen the understanding of how determinants, i.e. values, act on self-care.

Objectives. The overall objective of this doctoral program was to describe and explore self-care of adults with Type 2 Diabetes Mellitus in an outpatient population with a theory-driven approach. Specific objectives were: (1) to develop and test the psychometric properties of a new instrument based on the Middle Range-theory of Self-care of Chronic Illness: the Self-care of Diabetes Inventory (SCODI); (2) to describe self-care and to identify clinical and socio-demographic determinants of self-care; (3) to describe basic human values and self-care, and to investigate the associations between basic human values and self-care.

Methods. The first study is a validation study. SCODI's 40 items were developed from clinical recommendations. A multidisciplinary panel of experts assessed content validity. A multicentre cross-sectional study was conducted in a consecutive sample of 200 type 1 and type 2 diabetes patients. Dimensionality was evaluated by exploratory factor analyses. Multidimensional model based reliability was estimated for each scale. Multiple regression models estimating associations between SCODI scores and glycated haemoglobin (HbA1c), body mass index, and diabetes complications, were used for construct validity. The second study was a multicentre observational cross-sectional study, conducted involving 540 adults with a confirmed diagnosis of T2DM from 6 outpatient diabetes services in Italy. Socio-demographic and clinical data were collected from medical records. The SCODI was administered to measure self-care. Multiple quantile regression models were performed to identify determinants of each self-care dimension. The third study was also a multicentre (5 centres) cross-sectional study with T2DM patients (n = 390). Socio-demographic and clinical data were collected from charts and two questionnaires were administered: the SCODI to measure self-care and the Portrait Values Questionnaire to measure basic human values. Multiple regression models were used to assess associations between the basic human values and self-care.

Results. The SCODI proved itself valid and reliable and overcame limitations of previous instruments. In the second study, self-care maintenance and self-care confidence were adequate in most, self-care monitoring was adequate in half, and self-care management had the poorest score in this T2DM population. Characteristics significantly associated with self-care were confidence, gender, age, income, employment, family support, time from diagnosis of T2DM, diabetes self-management education, and comorbidity. In the third study, Self-Transcendence and Conservation, the most important values in our sample. Self-care maintenance scores were the highest, followed by self-care confidence, self-care monitoring, and, again, self-care management. People who value more Openness to Change and Self-Enhancement performed significantly worse self-care compared to the other groups.

Conclusion. These studies laid the foundations for clinicians and researchers. There is now a theoretically grounded instrument and language to be used about self-care in T2DM. Determinants of T2DM showed a profile of those who might be more at risk of performing worse self-care, which can guide tailored interventions and patient centred care. We know that self-care management is the behaviour people struggle the most with. Self-care confidence underlies and influences all the other self-care dimensions. These findings stress the need for Diabetes Self-Management Education (DSME) in particular for people with a recent diagnosis and co-morbidities, and for those who score low on the SCODI. Values underlie every decision and mediate self-care; they can be used for goal setting in DSME. Furthermore, patients' values and preferences are the most forgotten component of Evidence-Informed Decision-Making and need to be taken into account throughout all the stages of patients' care.