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## CONFERENCE ABSTRACT

# Impact of a self-care education programme on patients with type 2 diabetes in primary care in the Basque Country

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**Introduction:** Type 2 diabetes mellitus (DM2) is a disease with high prevalence and significant impact in terms of mortality and morbidity. The increased prevalence of the disease requires the implementation of new strategies to promote patient self-management. The Spanish Diabetes Self-Management Program (SDSMP) proved to be effective in other settings. The objective of this study is to assess its effectiveness in terms of care for DM2 patients in primary care settings within the Basque Health Service – Osakidetza (Spain).

**Methods:** This is a randomized clinical trial in which patients diagnosed with DM2, 18-79 years of age, from four health regions within the Basque Health Service have been randomized into two groups: an intervention group, who has followed the SDSMP, and a control group, who has received usual care in accordance with the clinical guidelines for DM2 and existing regulations in our region. The intervention has consisted of 2.5-hour group sessions once a week for six weeks. The sessions cover target setting and problem solving techniques, promotion of physical exercise, basic knowledge of nutrition, proper use of medication, effective communication with relatives and health professionals, and basic knowledge about DM2 and its complications. This content is complemented by educational material: books, leaflets and CDs.

The primary outcome measure has been the change in glycated hemoglobin (HbA1c), and secondary outcome measures have included changes in levels of physical activity and intake of fruit and vegetables, cardiovascular risk, quality of life, self-efficacy, number of consultations and drug prescriptions.

The results have been analyzed 6, 12 and 24 months after the intervention by a repeated measures approach.

**Results:** 594 patients have been included in the longitudinal analysis, 297 in each group (Control Group and Intervention Group). They have been monitored for two years. 532 patients have completed the whole monitoring.

Overall, 59.75% of the sample were male, with mean (SD) age 63.9(8.5) years old. The majority of participants (93.25%) were recruited by healthcare staff. The HbA1c basal average was 7.1 (1.66), the average blood pressure was 136.64/79.13 (19.2/11.3) and the BMI was 30.26 (4.92).

Self-efficacy significantly improved both overall and in the different areas, namely, diet, physical activity and control of the disease. Significant differences in fruit consumption have been discovered as well. Satisfaction rate is very high.

No statistically significant differences between the control and the intervention groups have been found in the HbA1c, cardiovascular variables, nor in the frequency of visits at primary care, ED and hospital admissions. Neither in the quality of life and the physical exercise. Anyway, we could affirm that there are significant differences in basal data and the following in many of the variables, but this difference happens in both groups.

**Discussion:** Many initiatives aiming at an improvement in diabetes control have been implemented over the clinical trial period of time, within the "Strategy to tackle the challenge of chronicity in the Basque Country" frame, as the improved of diabetes clinical indicators through the clinical management "Contract Program" or D-Plan project. These initiatives have obtained positive outcomes and they have proved that diabetes control has improved in all its variables along this period of time. This situation has had direct effect on the research outcomes.

Self-efficacy increase, considered as the first step to reach a successful change of behavior, gets reinforced with a qualitative analysis that addresses the following: patients are more conscious, more able to manage diabetes properly, not just from a physical point of view, but from an emotional and social dimension, too.

**Conclusion:** Diabetes care in the Basque Country is good. Both standard care and the SDSMP can be considered suitable tools to improve diabetes control.

At the same time, an evolution towards a more collaborative professional-patient relationship model can be seen in the care provided to patients. It is not just about empowering patients; there is work to be done with health professionals so they accept this change in the role of patients.

A further research should be done to assess if this kind of interventions would obtain better outcomes in other pathologies less popular in the Health System.

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**Keywords:** chronic disease; type 2 diabetes mellitus; self-management; education; primary care

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