

# ASSOCIATION OF PERCEIVED FAMILY SUPPORT THROUGH GLYCEMIC CONTROL IN NATIVE GREEK PATIENTS MANAGING DIABETES WITH DIET ALONE

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Patients with diabetes must change their lifestyle to cope with their condition, and such changes are largely influenced by the patients' social support networks<sup>1</sup>. Social support can be beneficial when patients perceive it as desirable and appropriate in nature and duration;<sup>2</sup> however, social interactions that patients perceive as potential threats to their independence may hinder self-care behavior.<sup>3,4</sup> In fact, patients with diabetes tend to have negative feelings about being offered more help than they desire.<sup>5</sup> In a previous study, which assessed the relationship between family support and glycemia in Greeks with type 2 diabetes, we found that higher levels of perceived family support were correlated with better glycemic control.<sup>6</sup> However, only a small number of the study's patients were maintaining normoglycemia through diet alone. In the present study, we proceeded to examine the relationship of family support with glycemia in Greeks managing diabetes through diet alone.

Twenty-two men and 20 women, all native Greeks, mean (SD) age:  $57.7 \pm 11.1$  years; mean duration of diabetes following a diet:  $5.7 \pm 4.6$  years, were studied. All patients responded to the Family Support Scale questionnaire during outpatient visits at a public health system diabetes clinic in Athens,<sup>6,7</sup> and the level of hemoglobin A1c was measured (reflecting overall glycemic control during the preceding six to eight weeks; upper acceptable level for diabetics: 7.0%<sup>8</sup>). Analysis of Family Support Scale scores against hemoglobin A1c level was performed using linear regression.

Mean Family Support Scale score was 48.16 ( $\pm 7.60$ ) and mean hemoglobin A1c was 5.93 ( $\pm 0.44$ )%. Hemoglobin A1c was correlated with the Family Support Scale score in a biphasic mode: Family Support Scale scores lower or equal to 50 showed a strong negative correlation ( $r = -0.46$ ;  $P = .05$ ) with hemoglobin A1c, while scores greater than 50 showed a weak positive correlation ( $r = +0.31$ ;  $P > .10$ ).

In this study, we observed that among Greeks with type 2

diabetes who are treated with diet alone, the perception of having a supportive family appears to be beneficial, to a certain degree. Close-knit communities and extended families are very prevalent in Greek society, whether in Greece or elsewhere.<sup>9</sup> Strong social ties have been associated with low levels of hemoglobin A1c in diabetics and non-diabetics alike among Greeks residing in Australia.<sup>9</sup> The influence of familial support was also shown in a recent cross-cultural study of adolescents with type 1 diabetes, in which adolescents in Italy, perceiving greater family support, had better overall glycemic levels over a 6-month period, compared to adolescents in Scotland (with mean hemoglobin A1c of 7.6% and 9.1%, respectively).<sup>10</sup>

In conclusion, our findings regarding the association of perceived family support with glycemic level in native Greeks with type 2 diabetes,<sup>6</sup> exemplify the importance of a supportive and adaptive environment in the management of patients with diabetes. This consideration is important in close-knit communities such as those of people living in, or originating from, Mediterranean regions. The family members of diabetics should not be discouraged from getting involved with the management of the disease. On the contrary, family members' positive attitudes, knowledge, and preparedness are beneficial to patients with diabetes.

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