



SCIENTIFIC LETTERS

Phone coaching, glycemic control and diabetes unit visits in patients treated with insulin[☆]



Apoyo telefónico, control glucémico y visitas a la unidad de diabetes en pacientes insulinizados

Type 2 diabetes (DM2) is a chronic disorder of increasing prevalence throughout the world and requires permanent attention from health professionals as well as patient self-care in order both to avoid acute complications and to lessen the risk of late complications of the disease.¹ In this regard, most patients with DM2 subjected to insulin therapy can derive benefit from a regime of personal autonomy supervised by the health professional. This allows patients to be as independent as possible while avoiding incorrect insulin dose adjustments, and also ensuring that any other decisions made by the patient are adequately validated. Such support is particularly important in periods of poor metabolic control (e.g., at the start of insulinization), when continuous therapeutic revisions are needed. Such revisions cannot always be made on a physical presence basis, particularly in healthcare recruitment areas characterized by important population dispersion or with patients who have transport problems for economic, occupational or health reasons.^{2,3} Different systematic reviews and meta-analyses support the effectiveness of telephone support in the metabolic control of diabetic patients.^{3–8} In this regard, the Andalusian Health Technologies Evaluation Agency (*Agencia de Evaluación de Tecnologías Sanitarias de Andalucía*) (Spain) recommends the use of mobile phones and SMS communication for the intensive monitoring of diabetic patients, and points to the need for clinical effectiveness trials to demonstrate that this kind of monitoring is at least as effective as physical attendance.⁹

In the Diabetes Unit of Hospital Universitario Puerto Real (Cádiz, Spain) we have a shared care protocol involving health professionals and diabetes educators for type 2 diabetic patients with poor metabolic control who start or intensify insulin treatment. The protocol requires either personal visits to the Diabetes Day Hospital or scheduled phone contacts by the health educator every 15–30 days

until optimum glycemic control has been achieved. The monitoring mode is chosen by the patient according to his or her needs. Independently of whether personal visiting or telephone monitoring is preferred, all the patients attending our Unit can contact our Day Hospital if necessary. A descriptive observational study has been carried out to evaluate the effectiveness of the protocol in terms of metabolic control and the number of contacts and visits to the Diabetes Unit according to the monitoring mode used. The study consisted of 154 patients (mean age 64.7 ± 11.6 years; 53% females) with DM2 (mean duration 13.9 ± 10.1) and poor metabolic control (mean HbA1c concentration $10.4 \pm 1.3\%$) who started or intensified insulin treatment in the previous year and were followed-up for at least 6 months. Two cohorts were examined: physical presence monitoring (84 patients; 55% of the total) and phone monitoring (70 patients; 45% of the total). There were no baseline differences between the two groups for any of the clinical variables analyzed, except smoking, which was more prevalent in the physical presence group (22% vs 9%, $p=0.02$).

The patients in the physical presence and phone coaching groups showed similar HbA1c levels at baseline (10.2 ± 1.3 vs $10.5 \pm 1.4\%$) and after 3 months (8.8 ± 1.2 vs $9.1 \pm 1.1\%$) and 6 months of follow-up (8.1 ± 1.2 vs $8.3 \pm 1.1\%$). The differences were not statistically significant. However, the patients in the phone monitoring group made comparatively fewer visits to the physician (mean 3.3 ± 1.0 vs 2.5 ± 0.7 visits during follow-up; $p=0.001$) and health educator (mean 3.8 ± 1.0 vs 1.7 ± 1.0 visits during follow-up; $p<0.001$), at the expense of a greater number of phone calls to the Diabetes Day Hospital (mean 1.9 ± 0.9 vs 0.2 ± 0.3 calls during follow-up; $p<0.001$).

In conclusion, our results support the idea that the effectiveness of phone monitoring of poorly controlled diabetics in improving metabolic control is similar to that of physical presence monitoring,^{6–8} while requiring fewer visits to the healthcare center. This may possibly contribute both to improving levels of patient satisfaction and to reducing the indirect costs associated with unnecessary patient visits. Lastly, the telephone support of diabetic patients can probably contribute to improving patient self-management of insulin therapy and diabetes education, favoring increased diabetes self-care, under the supervision of health professionals.¹⁰

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Conflicts of interest

The authors state that they have no conflicts of interest.

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Endocrinology and nutrition: Evolution of the choice of specialty in the last years[☆]



Endocrinología y nutrición: evolución de la elección de la especialidad en los últimos años

The practice of Endocrinology and Nutrition in Spain requires a Medical Degree as well as specific training in this specialty.¹ To have access to such specialized training the student must first pass a state examination organized on an annual basis by the Spanish Ministry of Health (*Ministerio de Sanidad, Servicios Sociales e Igualdad* [MSSSI]), called the MIR (*Médico Interno Residente* or Resident in Training exam). Following the examination, the candidates receive a score and order number allowing them to choose a specialized training position.² The higher the score, the better the assigned order number, i.e., a candidate with the highest score becomes the first to choose his or her specialized training position. The positions are offered and assigned by the MSSSI, and the data are made public. Endocrinology and Nutrition is one of the specialties offered each year. This Letter analyzes the offers of and the demand for the specialty in recent years and provides a map of the Spanish

Autonomous Communities and centers requested, with the best MIR examination scores. The study is based on the official specialty position assignment data of the MSSSI covering the period from the MIR examination of 2006 to that of 2015, which corresponds to the assignment of positions that took place in 2016. The analysis presents the mean, maximum and minimum values, as well as the median and percentiles 25 and 75 of the order number. Due to the asymmetrical distribution of the order numbers, medians were used for purposes of comparison.

In the period 2006–2015 the number of positions offered in Endocrinology and Nutrition ranged from a minimum of 56 in the year 2006 to a maximum of 76 in 2012. The number of positions offered increased gradually up until 2012. A slight decrease was recorded after that year, in parallel to the decrease in total residency positions, with a total of 72 positions offered in 2015.

During the period 2006–2015 the minimum order number with which the specialty of Endocrinology and Nutrition was chosen was 3, with a maximum of 4143—the latter representing the last chosen position in the period under consideration. The median order number for choosing the specialty in that period was 1394, with a mean of 1503.7. On limiting the analysis to the final 5-year period, the median was 1624.5, and the mean 1696.1. The annual evolution of the median experienced slight variations, influenced in part by the number of positions in Endocrinology and Nutrition offered each year. The maximum or highest median was recorded in 2012, with a value of 1915, and that same year a total of 76 positions in Endocrinology and Nutrition were offered (the largest number of positions offered).

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