

Background Diabetes is one of the most prevalent disorders worldwide, necessitating serious interventions to prevent complications. The majority of patients have uncontrolled diabetes which could be linked to medication non-adherence. In the current setting many patients are receiving quadruple oral therapy due to refusal to receive insulin therapy.

Purpose To explore barriers to insulin adherence among patients with uncontrolled diabetes from the perspectives of the patients and their healthcare providers (pharmacists, physicians, nurses, health educators, social workers and nutritionists).

Material and methods The first phase of the study was investigating all barriers to medication adherence through semi-structured interviews with patients and their healthcare providers. The interview guide was created based on a conceptual model developed for the purpose of this study. Interviews were recorded, transcribed and analysed using a thematic content approach. A subgroup analysis of data focusing on insulin use was further conducted and recommendations for practice improvements were provided.

Results Thirty patients and healthcare providers were interviewed. Four main themes emerged from the subgroup analysis: lack of patient education (about the disease, the use of insulin, dose adjustments); phobia of insulin (side effects, addiction, self-injection, pain); environmental and cultural factors (working conditions, religious rituals, cost, travelling); and social stigma (rejected by people, lack of family support). Suggestions for practice improvements include educating the patient through an online portal created for diabetes, creating care plans which take the patient's working conditions and religious rituals into account, creating a platform for educating the public to eliminate and correct myths about insulin use, and creating country-specific guidelines which take into consideration patients' refusal of insulin and highlights the steps that should be followed by healthcare providers to convince the patient about the use of insulin or provide an evidence-based alternative approach to managing highly uncontrolled diabetes.

Conclusion There are many barriers that contribute to patients' refusal of insulin use. Urgent interventions and policies need to be implemented to reduce diabetes complications and increase the awareness of the benefits of using insulin.

REFERENCES AND/OR ACKNOWLEDGEMENTS

The authors thank all the pharmacists who were very supportive in the conduct of the study and all the participants who contributed to enriching our knowledge about their experiences.

No conflict of interest.

5PSQ-004 OBSERVATIONAL STUDY OF THE EVOLUTION OF BLOOD GLUCOSE LEVELS AFTER THE CHANGE TO INSULIN DEGLUDEC

ML Moya-Martin, C Castillo-Martin, M Fernandez-Gonzalez, C Donoso-Rengifo, L Rendón de Lope*, J Cordero-Ramos, M Murillo-Izquierdo, MD Alvarado-Fernandez, S Santana-Martinez, E Romero-Carreño. *Hospital Universitario Virgen Macarena, Pharmacy, Seville, Spain*

10.1136/ejhp-2019-eahpconf.437

Background Degludec is a new-generation basal insulin analogue with a longer acting, better pharmacokinetic and pharmacodynamic profile and with four times less variability than its comparative insulin, glargine.

Purpose We evaluated the impact in glycated haemoglobin (HbA1c) and variability of glucose levels after the change to degludec from any other basal insulin.

Material and methods A retrospective observational study was made using 129 diabetic patients from the Diabetes Day Hospital, using the features described in the results to characterise them. Three months' later the variation of the levels of HbA1c, body mass and insulin units were monitored. In addition, we chose a 79-patient subgroup to analyse glycaemia variability, using capillary glucose levels 3 consecutive days before the change to degludec and after 12 weeks.

Results One-hundred and twenty-nine patients were included in the study, 32,6% females and 67,4% males, with an average age of 57.1 ± 17.3 years. Between them, 25,6% had diabetes type I and 74,4% diabetes type II, and an evolution of 14.7 ± 8.6 years after the diagnosis, also with a body mass index of 30.8 ± 5.1 kg/m², and HbA1c levels of $8.67\% \pm 1.9\%$. The most common reasons to change the basal insulin were repetitive hypoglycaemias (34,9%), bad glucose sugar levels' control (40,3%), glycaemia variability (16,3%) and the necessity of repeating the basal dose (8,5%). The previous treatment was basal insulin treatment (12,4%) versus basal bolus (87,6%). The results after a 3 month period with degludec are shown in Table 1. No severe hypoglycaemias were reported.

Abstract 5PSQ-004 Table 1

	Beginning	Levels after 12 weeks	P-value
HbA1c	8.67±1.9	7.47%±1.1	0.0001
Average glycaemia	182.4±60.9	146.5±32.2	0.0001
Standard deviation	55.2±23.3	43.3±18.3	0.0001
Coefficient of variation	31.1±11.5	28.7±9.2	0.046
Basal insulin dose	0.44 U/kg	0.42 U/kg	0.030
Rapid insulin dose	0.42 U/kg	0.38 U/kg	0.039
Weight	83.4±16.02	83.6 kg±16.04	0.484

Conclusion Above the HbA1c, new glycaemic control quality standards are being used to measure progress in the quality of life of diabetic patients with new treatments. All of them show a dramatic improvement after changing from glargine to degludec in only 3 months. Nevertheless, glargine is still the elected basal insulin for insulin-dependent diabetic patients, and more studies should be done to prove the superiority of degludec.

REFERENCES AND/OR ACKNOWLEDGEMENTS

None.

No conflict of interest.

5PSQ-005 SAFETY AND EFFICACY OF FAST-ACTING INSULIN ADDED TO TOTAL PARENTERAL NUTRITION

M Aznar Garcia, J Canto Mangana, D Rubio Calvo, A Martos Rosa, A Jofré Peralta, F Ávila Cabrera, J Urda*. *Empresa Pública Hospital de Poniente, Pharmacy, El Ejido Almería, Spain*

10.1136/ejhp-2019-eahpconf.438

Background Total parenteral nutrition (TPN) support requires a multidisciplinary approach from experienced healthcare professionals such as pharmacists, to minimise potential complications. However, on a daily basis clinical practice is common