

Vaccination coverage of diabetic patients in a Family Health Unit: preliminary results

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Abstract

Introduction

Infectious diseases are a major threat to individual and public health worldwide. Patients diagnosed with diabetes mellitus (DM) are a vulnerable group, since the disease reduces the effectiveness of the immune response to some pathogens, and vaccination is recommended by the Directorate-General for Health and other reference entities.¹⁻⁴ The percentage of vaccinated patients, that is, the vaccination coverage, allows us to reflect on vaccine-preventable diseases in this population.

Objectives

To characterize patients with DM enrolled in a Family Health Unit (FHU) in the North of the country; calculate the proportion indicators related to their vaccination coverage.

Methods

Quantitative, descriptive, cross-sectional and retrospective study. Population made up of 791 patients with DM diagnosis enrolled in the FHU. Patients ≥ 18 years old, with a DM diagnosis made until 03/31/2021, with an active diabetes nursing care were included. Migrants patients or with sporadic enrolment and pregnant women were excluded. A simple random sample was selected (260 patients), data collection was performed at SCLínico/Vacinas, by 5 nurses, April-May/2022; 17 were excluded due to death and five because they no longer had an active diabetes program; so, the final sample had 235 patients. A positive opinion was obtained from the Health Ethics Committee of Northern Regional Health Administration. Due to the characteristics of the study, the informed consent was waived. Anonymity and confidentiality of data are guaranteed.

Results and discussion

The random sample consists of 235 patients with a mean age of 70,2 years (SD=11.04; range 40-94), mostly female (51,3%), with DM Type 2 (92,8%), average diagnosed on average for 12.7 years (SD=9.33; range 2-52), with an average glycated hemoglobin (A1c) of 7.32% (SD=3.99), with 48.1% have good metabolic control rate (A1c<7%). Regarding comorbidities, patients are mostly non-smokers (88.9%), do not have alcoholic drinking habits (82.6%), have dyslipidaemia (57.0%), arterial hypertension (66.0%) and are overweight (46%). Concerning complications, most do not present macrovascular pathology (87.2%) or microvascular (92.3%). Analysing the indicators of proportion of vaccination coverage, there is a high vaccination coverage in the vaccines provided by the National Vaccination Programme (NVP), [Tetanus-Diphtheria (100%); Measles, Mumps and Rubella (97.9%); Influenza (86.4%) and COVID-19 (97.4%)] and a low vaccination coverage in the others [Hepatitis b (3%), Pneumococcal 13 (13.2%), Pneumococcal 23 (7.7%), Herpes Zooster vaccine (0%)]. When compared, the results obtained show considerable differences with other studies of vaccine coverage in diabetics.^{3,4}

Conclusions

The analysis of the indicators allows to conclude that there is a different vaccination coverage for the vaccines under study, being higher in the vaccines provided by the NVP. Other

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vaccines, even if recommended and reimbursed, are not free for most patients, which is reflected in a very low vaccination coverage (<14%) and increases the vulnerability of patients to these diseases. Defining local policies and strategies to minimize the vulnerability of this population group to vaccine-preventable diseases represents a public health measure with an impact on the health and quality of life of patients and contributes to the good practice of care, called to be of excellence.

Key Words

Primary Health Care; Vaccination Coverage; Immunization Programs; Diabetes Mellitus; Nursing Research.

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