EPH268

Underlying systemic motifs that prevent diabetes patients from seeking and utilizing health services in a country with a high prevalence of diabetes

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Introduction

In low- and middle-income countries, users of health services face frequent access barriers (1-2)

In Mexico, studies have shown that among patients with chronic non-communicable diseases, 10 % do not seek care and 11 % do not receive it when sought (3)

Diabetes mellitus (DM), with an estimated prevalence of 18.4 % (4), represents one of the most prevalent diseases in the country; however, there are no prior analyses of care-seeking and unmet-care patterns specific to this condition (5).

Objective

To identify the motifs for not-seek and not-use of the health services by diabetes patients in a country with a high prevalence of the disease.

Methods

ENSANUT
ENCUESTA NACIONAL DE SALUD Y NUTRICIÓN

Data Source

This study analyzed data from the National Health and Nutrition Survey (ENSANUT 2018, 100K subsample), a nationally representative survey designed to identify vulnerable populations and to characterize healthcare-seeking behavior in Mexico. All analyses accounted for the complex survey design and sampling weights.

Study Focus

The analysis focused on ambulatory care utilization.

Definitions

- **Healthcare seeking:** any medical consultation sought within the past month..
- **Healthcare utilization (non-utilization)**: having a perceived need for medical attention but not seeking or not receiving care.

Population Groups

The analysis included comparisons across the total population, non-diabetic individuals, and patients with diabetes to identify systemic differences in healthcare seeking and utilization patterns.

Sub-analysis by diabetes type:

Patients with diabetes were further stratified into three mutually exclusive categories:

1. **Simple DM:** individuals attending routine follow-up visits only.
2. **DM with multimorbidity:** individuals with diabetes plus one or more chronic physical or mental conditions.
3. **DM with acute or other needs:** individuals seeking care for unrelated or acute conditions (e.g., infections, preventive check-ups).

In this analysis, "non-diabetic" refers to participants without diabetes, including both healthy individuals and those with other non-diabetic conditions identified in the survey.

Variables

Sex
Age group (10-year intervals)
Income level
Healthcare provider (public vs. private)
Locality (urban vs. rural; federal entity)
Indigenous language

Statistical Analysis

Descriptive statistics were reported as medians (IQR) for continuous variables and proportions (%) for categorical variables.

Comparisons between independent groups used Pearson's χ^2 test for categorical and Mann–Whitney U or Kruskal–Wallis tests for continuous variables.

A two-tailed $p < 0.05$ was considered statistically significant.

Analyses were conducted using SPSS v29 and R v4.3.

Results

Data were obtained from the 2018 National Health and Nutrition Survey (ENSANUT), including a weighted sample of 10.46 million individuals residing in localities with fewer than 100,000 inhabitants. Of this population, 14.2% reported having diabetes, distributed as 8.0% with simple diabetes, 3.5% with multimorbidity, and 2.7% with acute or other conditions. However, among those who reported a health problem in the last month, the diabetic population represented only 3% (N = 314,298). Within this subgroup, 0.77% had simple diabetes, 0.36% had multimorbidity, and 1.88% had acute or other conditions.

Table 1. Sociodemographic Characteristics by Diabetes Group (ENSANUT 2018, 100K subsample)

Variable	Category	Simple DM	DM + Multimorbidity	DM + Other Conditions	p-value
Total		100.0% (79,977)	100.0% (37,979)	100.0% (196,342)	—
Sex	Men	30.0% (24,021)	14.2% (5,404)	37.8% (74,196)	0.24
	Women	70.0% (55,956)	85.8% (32,575)	62.2% (122,146)	
Age group (years)	20–39	9.6% (7,698)	2.1% (791)	6.3% (12,298)	0.30
	40–59	52.6% (42,090)	28.5% (10,820)	45.4% (89,111)	
	≥60	37.8% (30,189)	69.4% (26,369)	48.4% (94,933)	
Locality	Rural	65.7% (52,567)	46.0% (17,461)	48.6% (95,480)	0.56
	Urban	34.3% (27,410)	54.0% (20,519)	51.4% (100,861)	
Region	North	25.2% (20,156)	4.4% (1,654)	23.4% (45,932)	0.05
	Center	22.7% (18,151)	72.9% (27,688)	40.9% (80,333)	
	Mexico City–State of Mexico	2.4% (1,907)	0.4% (132)	9.2% (18,137)	
	South	49.7% (39,763)	22.4% (8,506)	26.5% (51,940)	

Figure 1. Main Reasons for Not Seeking Healthcare by Diabetes Group (ENSANUT 2018, 100K subsample)

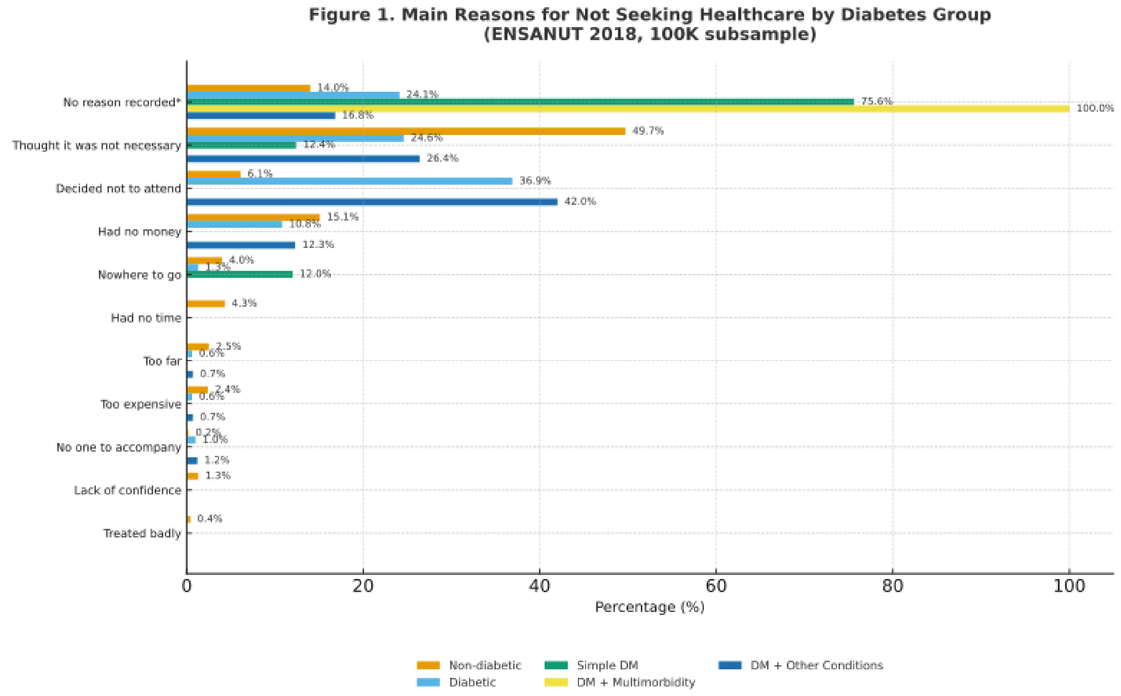
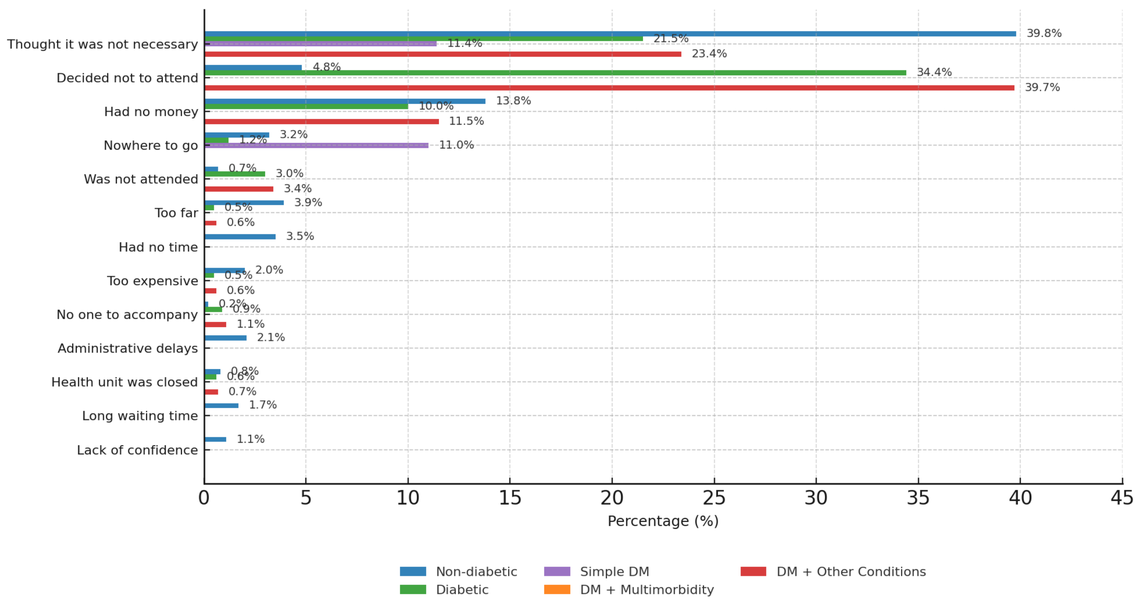


Figure 2. Main Reasons for Not Receiving Healthcare (n-UHS) by Diabetes Group (ENSANUT 2018, 100K subsample)



Discussion

Although people with diabetes have higher healthcare needs and are expected to use services more frequently, our findings reveal the opposite pattern: patients with diabetes—particularly those with multimorbidity—experienced more barriers and lower service responsiveness compared with non-diabetic individuals.

This paradox suggests a systemic access gap within the healthcare system, where individuals with greater medical needs face reduced opportunities to obtain timely care.

Possible explanations include:

Limited continuity of care or service saturation at the primary level,

Reduced confidence in public healthcare institutions among chronically ill patients,

Fragmentation of services for complex patients.

Making these differences more explicit in the figures and tables highlights the structural inequities underlying diabetes care in Mexico, and reinforces the need to strengthen equity-oriented health system responses.

References

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