OP-0193 Prevalence and Clinical Characteristics of Diabetes Mellitus in Lebanon: a National Survey

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INTRODUCTION

- Diabetes Mellitus (DM) in all its subtypes has been rapidly increasing worldwide, with particularly higher peaks in some Arab countries.
- This national study aimed to assess the prevalence and clinical aspects of DM in the Middle-Eastern country of Lebanon.

METHODS

- A national multi-stage, random household sample survey was conducted, using face-to-face interviews with one questionnaire per household.
- A total of 4500 households were selected from all areas based on a pre-existing sampling frame of the Lebanese population.
- Within selected households, 17,832 persons were accounted.

RESULTS

Table 1. Characteristics of surveyed households (N= 4500)

Variables	
Mean number of residents	3.96 (SD=1.77)
Households with only one person	278 (6.2%)
Range of household membership	1-15
Geographic distribution (n,%)	
Greater Beirut	1320 (29.3)
Mount-Lebanon	950 (21.1)
North-Lebanon	920 (20.4)
South-Lebanon	750 (16.7)
Bekaa	560 (12.5)
Household prevalence of diseases	
Diabetes	1313 (29.2%)
Hypertension	1406 (31.2%)
Hypercholesterolemia	1131 (25.1%)

* Higher crowding indicates lower socio-economic status

Table 2. Socio-demographic characteristics of the sample and disease prevalence rates (N=17,832)

Variables	
Mean age in years (SD)	35.9 (20.4)
Gender (n, %)	
Male	8,937 (50.1)
Female	8,895 (49.9)
Geographic distribution (n, %)	
Greater Beirut (urban/suburban)	4,844 (27.2)
Elsewhere (small towns/rural)	12,988 (72.8)
Prevalence of selected diseases (95%CI)	
Diabetes	7.95 (7.55-8.35)
Hypertension	9.03 (8.61-9.45)
Hypercholesterolemia	7.37 (6.99-7.75)

Table 3. Socio-demographic characteristics of persons with diabetes (N= 1418)

Variables	n (%)
Mean age in years (SD)	60.3 (13.0)
Age ≤40 years	6.7%
Gender (n, %)	
Male	786 (55.4)
Female	632 (44.6)
Mean age at diagnosis (SD)	49.4 (15.9)
Age ≤25 years	63 (4.5%)
Age ≤10 years	17 (1.2%)

Figure 1. Prevalence of diabetes by age groups in Lebanon (2016) (N=17,832)

Table 4. Clinical characteristics of diabetes cases in Lebanon (N= 1418)

Variables	%
Current use of Oral Anti- Diabetic drugs	91%
Current use of Insulin injections	18%
Last HbA1c during the previous 6 months	76%
Hypoglycemia requiring medical care	12%
Prevalence of complications	23%

Figure 2. Prevalence of complications among people with diabetes (N=1418)

CONCLUSIONS

- Diabetes management appears to be deficient in Lebanon based on delays in standard control testing, hypoglycemic episodes and diabetes-related complications.
- Diabetic care should be devolved to PHC physicians as “gate-keepers” coordinating with specialists and keeping track of follow-up.

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