

Cohort Profile of Algerian Type 2 diabetes patients in primary care. Metabolic control and morbidity profile.

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- **Background:** Type 2 diabetes mellitus (T2DM) is a worldwide problem of relevance. In 2019 the IHME¹ declared it to be the 6th highest cause of mortality in Algeria¹ . given the high population load of cardiovascular risk factors (CVRf), improving the management of diabetes in Algeria is the priority set by the ministry of health by setting up an information system (barometer) (2).
- **Objective:** describe the metabolic control and morbidity profile of diabetic patients, of the three waves of inclusion 2014, 2015 and 2020 in the 30 barometers centers of Algeria. Method: A descriptive, prospective, multicentric study of 16829 diabetes patients from three waves of inclusion 2014, 2015 and 2020 in 30 barometers (electronic clinical record) centers across the country. All patients had type 2 diabetes with or without complications.
- **Results:** The sex ratio was 0.64 (male/female), the mean of HbA1C was (%) was 7.65% (Std Dev 1.38%) without differences between centers. The mean age was 64.71 years (Std Dev 11.1), and the mean BMI was 29.08 kg/m²(Std Dev 4.9) , the mean SBP was 128,34 mmHg.

Waves	2014	2015	2020	
Patient (nbr)	3129	8785	4915	16822
Age	65.50 (± 11.1)	65.22 (± 11.11)	61.54 (± 10.61)	64.08± 10.94
Sex Ration (M/F)	0.6	0.61	0.7	0.65
BMI	29.12 (± 4.86)	29.03 (± 5.00)	29.24 (± 4.9)	29.22±4.92
HbA1c	7.76 (± 1.42)	7.67 (± 1.39)	7.44 (± 1.44)	7.62±1.41
SBP (mmHg)	127.95 (± 19.03)	128.32 (± 17.71)	128.75 (± 17.33)	128.34±18.02
Total cholesterol (g/l)	160.3 (± 39.6)	162.86 (± 39.2)	165.46 (± 41.27)	162.8±40.02
Triglyceride (g/l)	153.9 (± 45.48)	155.6 (± 45.59)	156.97 (± 46.13)	155.49±45.73

Discussion : the glycemic control was acceptable among the majority of T2DM with 35.5% less than 7%. 37% of patients were obese (BMI>30) and 25% have high blood pressure (>140mmHg). In comparisons between waves of inclusion, differences in biological parameters were attenuated.

Conclusion: The determination of the biological and morbidity characteristics of Algerian diabetes population highlights that the Algerian diabetes patients that the Algerian diabetes patients have high prevalence of cardiovascular risk factors and new prevention strategies needs to be implemented.

References:

1. The Institute for Health Metrics and Evaluation (IHME). Annual report of GLOBAL BURDEN OF DISEASE 2019.
2. M Belhadj et al, Médecine des maladies Métaboliques - Mars 2019 - Vol. 13 - N°2