

**#0039**

***Diabete and covid 19 in SBA region ( west of Algeria)***

**Demmouche Abbassia\*, Belmous Asmaa ; Bouazza Sofiane ; Abdallah Touati Djihène,**

**Author/s :**

Demmouche Abbassia\*, Belmous Asmaa ; Bouazza Sofiane ; Abdallah Touati Djihène,

**Organizations/Affiliations :**

Biotoxicology laboratory, Department of Biology, Faculty of Natural Sciences and life-Djillali Liabes University of Sidi Bel Abbes, Algeria

**Abstract**

**Background:** The objectives of this study is to determine the impact of food supplements and covid-19 on the post-covid diabetes in Sidi Bel Abbès region.

**Subject :** This is a retrospective and prospective study of 216 patients with covid-19 carried out in the endocrinology department at the CHU Hassani Abdelkader hospital Sidi Bel Abbes over a period ranging from two months (March-April 2022). The data were collected from a questionnaire, parameters studied (sex, age, BMI, PAL, supplementation, vaccination and type of vaccine, Corticosteroid) are collected. The results were analyzed with SPSS V28.

**Results :** Out of a total of 216 patients, 38 cases of post-covid diabetics (17.5%). The analytical study revealed that the BMI and PAL of the patients is significantly linked to the post-covid diabetes ( $p < 0.001$  for the two parameters), i.e. 57.9% of the cases have  $BMI > 30$  ; 36.8% of cases have low PAL, 63.2% moderate PAL. In addition, the results reveal that vitamin supplementation is significantly linked to the post-covid diabetes ( $p < 0.001$ ) ; 97.4% do not take vitamin D, 10, 5% do not take Vitamin C and 60.5% do not take Zinc. The statistical study showed that there is a significant relationship between corticosteroids and post-covid diabetes ( $p < 0.001$ ), 34.2% of cases are treated with corticosteroids.

**Conclusion :** These results confirm the existence of a relationship between the parameters studied: body mass index, level of physical activity, food supplements and corticosteroids may be risk factors for the post-covid diabetes.

**Keywords:** post-covid diabetes, covid-19, BMI, Physical Activity Level (**PAL**), food supplements, corticosteroids.