

Assessment of COVID-19 vaccine literacy among cancer patients: A cross sectional Tunisian study

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Background:

In the context of the COVID-19 pandemic, Vaccine literacy (VL) is considered as an important determinant of vaccine hesitancy and uptake. Cancer patients constitute a target group for COVID-19 vaccination. Thus, we aimed in this study to assess COVID-19 VL among cancer patients in Tunisia.

Methods:

A cross sectional study was conducted, during the month of February 2021, in the Salah Azaiez institute of cancer including all inpatients aged ≥ 18 years. A standardized VL scale was used, composed of two dimensions: functional VL and interactive-critical VL, using a four point Likert scale. A global score was calculated for each scale (ranging from 1 to 4); A cutoff of 2.5 was defined according to the literature. The students' t and Anova tests were used for comparison of VL mean scores according to the studied characteristics. A p value < 0.05 was considered as statistically significant.

Results:

A total of 200 patients were enrolled in this study with a mean age of 54.4 ± 12.7 years. A low VL score (≤ 2.5) was observed among 27.5% and 81.0% participants for functional and interactive critical scales respectively. Higher functional VL score was associated with a higher educational level (3.7 ± 0.5 among individuals with a university degree level vs 2.5 ± 1.2 among illiterate, $p < 0.001$). Interactive critical VL significantly increased with educational level ($p < 0.001$) and was significantly higher among healthcare workers (2.5 ± 1.3 vs 1.7 ± 0.9 , $p < 0.001$), those who accepted to get the COVID-19 vaccine (2.0 ± 0.9 vs 1.6 ± 0.8 , $p = 0.002$), who did not believe that vaccines are unsafe (1.9 ± 0.9 vs 1.4 ± 0.7 , $p < 0.001$) and that there is no need to be vaccinated since natural immunity exists (2.1 ± 1.0 vs 1.7 ± 0.8 , $p = 0.016$).

Conclusions:

Vaccine literacy among cancer patients included in this study is weak. Effective communication strategies about COVID-19 vaccination should build VL and consider the level of patient's health literacy to redress vaccine hesitancy and uptake.

Key messages:

- This study showed a low interactive-critical vaccine literacy score.
- Communication strategies in vaccination campaigns should be aligned with people's vaccine literacy.