Perceived vulnerability to Covid-19 among health care workers in a Tunisian University Hospital

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Background:
Health Care workers (HCWs) are constantly on the front line during the current pandemic, facing a permanent influx of patients with a significant risk of viral contamination. Our study aimed at estimating the corona virus disease high risk perception and evaluating determinant factors of the perceived vulnerability to Covid-19 among HCWs in the region of Mahdia (Tunisia).
Methods:
We conducted a cross sectional study among HCWs in the University Hospital Tahar Sfar Mahdia in Tunisia in December 2020. The perceived vulnerability to disease was assessed using the validated perceived vulnerability to disease scale (PVDS).
Results:
A total of 173 professionals were recruited with a mean age of 35.35 ± 9.4 years. Among them, 66% were women. One third of participants (33.3%) were doctors. The majority of them (86%) have experienced a high level of risk perception. The older HCWs ($p = 0.04$), the nursing personnel ($p = 0.02$), as well as, those with pre-existing chronic diseases ($p = 0.04$) perceived greater vulnerability to Covid-19. It was also significantly associated ($p = 0.01$) with undressing faults. Being older (standardized $\beta = 0.193$, $CI = 0.601\text{-}7.707$, $p = 0.003$), having pre-existing chronic diseases ($\beta = 0.184$, $CI = 0.478\text{-}8.888$, $p = 0.05$), high risk perception ($\beta = 0.162$, $CI = -0.087\text{-}10.47$, $p = 0.02$) and undressing faults ($\beta = 0.224$, $CI = 0.582\text{-}1.306$, $p = 0.008$), were found to be the determinant factors of the perceived vulnerability to disease PVD in a multivariate linear logistic regression model (adjusted $R2 = 0.129$).
Conclusions:
Perceived vulnerability to Covid-19 is mainly manifested by an atmosphere of fear of getting infected, but also by compliance with barrier measures. This fact is aligned with health authorities's strategies to ensure a society totally free of Covid-19.
Key messages:
- During the current Covid-19 pandemic the majority of health care workers worldwide have experienced a high level of risk perception which negatively impacts their mental health.
- Health care workers must be provided with the personal protective equipment PPE essential to protect themselves against the Covid-19 transmission.