

The importance of nutritional status on clinical outcomes among both ICU and Non-ICU patients with COVID-19

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Abstract:

Background and aims

The current Covid-19 outbreak becomes a tremendous public health concern worldwide. Since a little information is available on nutritional status and its devastating effects on covid-19 complications in Iran, in the present study, we aimed to evaluate nutritional status of covid-19 population and its related factors.

Methods

We performed this observational study by recruiting 400 hospitalized covid-19 subjects. Thereafter, the needed clinical and para clinical data were collected and their nutritional status was then assessed using NRS-2002.

Results

Approximately 36% of the total sample size and 100% of the ICU- admitted cases were at the severe risk of malnutrition. The patients with $NRS \geq 5$ were significantly older ($p < 0.0001$). Non-survivals obtained higher scores in terms of both severity of disease (86%) and impaired nutritional status (67%), and this relationship was found to be statistically significant ($p < 0.0001$). In regard to the obtained prognostic inflammatory scores, 86% of the non-survivals obtained significantly highest scores for GPS ($P = 0.015$).

Conclusion

Nutritional status has a considerable effect on clinical outcomes of covid-19 patients, which should be evaluated. Thereafter, rapid subsequent nutritional interventions must be implemented in this regard. As well, special attention must be paid to both elderly population and individuals with underlying diseases.

Keywords: Nutritional status, COVID-19, SARS-COV-2, NRS-2002