

- Statistical Package for Social Science (SPSS) 25.0 software was used for statistical analysis and illustration.

RESULTS

The mean concentration of IL-6 was 2.36 pg/ml \pm 0.64 pg/ml, 5.84 pg/ml \pm 1.12 pg/ml, and 21.21 pg/ml \pm 6.57 pg/ml for the common, severe, and critical groups respectively ($p < 0.001$). Our result shows that serum IL-6 levels increased as the disease progressed toward critical condition (Table 1 and Figure 1).

Table 1: Serum IL-6 levels increased as the disease progressed toward critical condition

Covid-19 Group	Number	Mean IL-6 (\pm S.D.)	p-value	F-Value
Normal	30	2.36 \pm 0.64	<0.0001	201.85
Severe	30	5.84 \pm 1.12	<0.0001	
Critical	30	21.21 \pm 6.57	<0.0001	

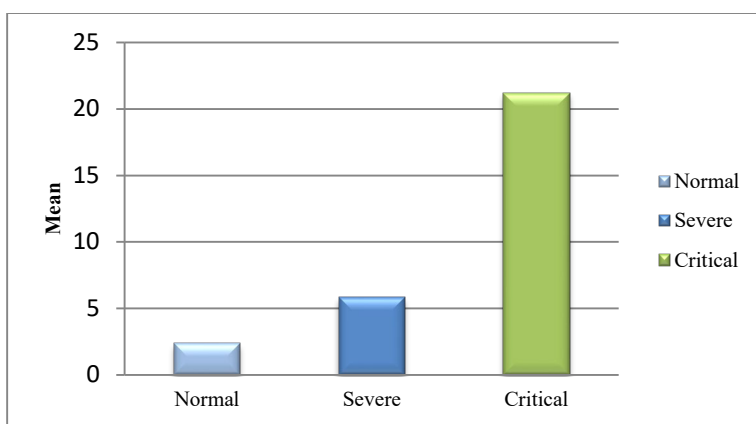


Figure 1 Distribution of IL-6 Pg/ml according to groups

DISCUSSION

Serum IL-6 concentration was tested and analyzed in all groups of Covid-19 patients. We obtain a consistently high level of IL-6 in a severe and critical group of patients as compared to a normal group of Covid-19 patients. It is recognized that excessive, multifunctional host immune response may play an important role in the development and maintenance of the critical stage of Covid-19.

CONCLUSIONS

Serum IL-6 should be included in diagnostic workup to stratify disease severity. Therefore, full monitoring of the severity of COVID-19 and effective early intervention are the fundamental measures for reducing mortality.

DECLARATIONS

Conflicts of Interest

The authors declared no potential conflicts of interest concerning the research, authorship, and/or publication of this article.

Future Scope of this Study

Our research work will help make novel strategies for the diagnosis, treatment, and prognosis of Covid-19 patients. This study may be helpful to reduce mortality due to Covid-19.

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