

**Evaluation of the cost-effectiveness of three methods of
plasmapheresis, hemoperfusion and remdesiver in patients with
COVID 19 in Imam Khomeini Hospital in Ardabil.**

Abstract

Background: Coronavirus infection started in Wuhan, China in late 2019 and early 2020 with a large number of people infected, leading to high mortality.

Aim: The aim of this study was to evaluate the cost-effectiveness of three methods of plasmapheresis, hemoperfusion and remediation in patients with COVID 19 in Imam Khomeini Hospital in Ardabil.

Materials and Methods: The present study is a cross-sectional study that is practical in terms of research results (descriptive in terms of research purpose and quantitative in terms of research process). This is an economic evaluation study. All patients hospitalized with COVID 19 in Imam Khomeini Hospital in Ardabil from the beginning of the disease until the end of 2020 who were treated with plasma exchange, hemoperfusion and remediation were included in the study. A researcher-made checklist was used to collect data. Data included age, sex, length of hospital stay, and other related expenses, including visitation, diagnostic services, transportation, absenteeism, and medication costs, were extracted from recorded information and interviews with patients. To determine the effectiveness, the analysis of the effectiveness of therapeutic

interventions was based on mortality rate, length of hospital stay and intubation rate. after collecting information based on statistical methods and using analysis and Data analysis was performed.

Results: 320 patients were evaluated. 59.4% of patients were treated with plasmapheresis, 20.3% with hemodialysis and 20.3% with remedSavir. 51.7% of patients had died and the highest death rate was in the group of patients receiving RamedSavier. The longest hospital stay, intubation rate and cost were related to patients receiving RemedSior. According to the adapted results, with increasing age and being a woman, the chance of death due to coronary artery increases by 1.05 and 1.98 times, respectively, and those who received RemedSiver increased 21.22 times compared to other patients with different treatment methods. They had a higher chance of death.

Conclusion: reatment with plasmapheresis and hemoperfusion has a protective effect against coronary death, but administration of remedCivir has increased the chance of coronary death.

Keywords: Covid 19, Plasmapheresis, Homoperfusion and Remdisiver