

# COVID-19 Economic Impact on Health Sector, Challenges, and Practical Strategies

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## Dear Editor,

The coronavirus epidemic has affected countries' economies and businesses in many ways. One of the sectors with the most brutal economic hit is the health sector. Health systems are facing the most serious global pandemic crisis of the century. Most health systems in developing and developed countries have faced a shortage of resources and capacities to meet people's health needs, even under normal circumstances (1, 2). In particular, the COVID-19 pandemic is putting most hospitals under unprecedented pressure. Although the COVID-19 pandemic started with a health shock, it will eventually lead to an economic shock in hospitals. Following the removal and reduction of restrictions, reopening, and reducing the observance of health and safety principles by the people, we are facing an increase in the incidence and hospitalization of patients with coronavirus.

As the number of COVID-19 patients increases, hospitals are forced to increase their capacity to admit COVID-19 patients. In this situation, hospitals should close some wards and allocate their capacity to patients with coronavirus. However, it should be noted that most hospitals provide specialized services and cannot delay delivering services to non-coronavirus patients for a long time simply because of treating coronavirus patients. Also, in the future, the death toll of non-COVID-19 patients can be much greater than COVID-19 deaths, and non-COVID-19 patients may be adversely affected in most communities (3, 4). Hence, strategies such as home care and telehealth to expand access to essential health and the design of separate wards in hospitals can increase hospital-specific income and provide conditions for patients with acute non-COVID-19 conditions such as cancer, transplant, cardiovascular disease, etc., to receive treatment.

Personal protective equipment (PPE) is special equipment that hospitals need to diagnose or treat COVID-19,

and PPE is most important in preventing coronavirus transmission in treatment centers (5). In hospitals, large amounts of the budget were spent on sterilizers, ventilators, disinfectant fogging machines, disinfectant refill, sanitizer bottles and refill, disposable coveralls, surgical masks, gloves, safety helmets, eye protection, high-visibility clothing, safety footwear, and safety harnesses. Part of this need is necessary and unavoidable, but excessive consumption in non-essential cases is a concern for increasing hospital costs. Unexpected increase in demand leads to supply chain disruption, scarcity, and limited access to medicines, medical supplies, and personal protective equipment, resulting in hospitals acquiring them at higher prices and increasing overall hospital costs. Actual need estimation, canceling non-emergency procedures, optimization and rationalization of consumption, and prioritization are the proposed cost management strategies.

We should not ignore the cost of medicines that hospitals have. COVID-19 is a new disease, and there is no vaccine or specific drug against coronavirus yet. Some medications can alleviate symptoms and prevent or treat COVID-19. The cost and access to prescription drugs are significant concerns for hospitals and health systems. Due to high demand, the supply chain of drugs is disrupted, and an underground or shadow economy is formed. In this situation, there is a concern that hospitals will supply medicines at a higher price. Distribution management, government intervention in producing and purchasing effective drugs, appropriate drug tariffs, pharmaceutical alternatives, use of international capacities in drug supply, and tax exemption for drug imports can reduce drug costs.

During such a crisis, more than ever, maintaining the support staff and the clinical team is more important



than the equipment, facilities, and hospital beds. The most effective way to treat coronavirus in hospitals is to deliver proper patient care through human resources. Therefore, in addition to the adequate workforce, preventive and protective measures are needed to provide safe, high-quality, and appropriate care, which has increased hospital costs. Moreover, we should not ignore unexpected expenses such as mental health problems of employees, absenteeism, and infection with the COVID-19 virus. Strategies such as appropriate organizational citizenship behavior, improving the mental health of employees and increasing resilience, proper allocation, and optimizing the utilization levels of all resources involved can increase system efficiency and control the waste of financial resources. Also, increasing the preparedness, flexibility, and capability of the workforce engaged in the crisis can be crucial.

In response to this global outbreak, another factor affecting the economy of hospitals during the coronavirus outbreak is overhead costs. The addition of beds, purchase of medical equipment, reduction in hospital admissions, and canceling elective surgery affect the hospital's overhead costs. Operating rooms, laboratories, diagnostic radiology, general routine inpatient care, intensive care unit, outpatient clinic, and emergency rooms create approximately one-third of hospitals' total operating costs (6). Setting up isolation wards, adding more beds, creating a new inpatient ward, and not admitting the patients affect overhead costs, and eventually, these costs are imposed on the hospital.

Many hospitals have already had financial problems, and the coronavirus crisis has exacerbated these problems. In our opinion, hospitals and health systems have suffered the most in two ways: The first aspect is the drastic reduction of unnecessary treatments, which is the primary source of income for hospitals, and the

second aspect is the costs that must be spent to deal with the spread of the coronavirus and treat COVID-19 patients. Generally, researchers suggest practical cost management and bankruptcy prevention strategies for hospitals, including extensive insurance coverage for coronavirus-related services, eliminating or reducing hospital taxes, using the capacity of people and charities to provide medical and non-medical consumables, using volunteer forces to provide services, effective structural change, separation of COVID-19-designated hospitals and wards from others, and use of motivational mechanisms for staff.

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