

## **Studying the effect of Covid-19 pandemic on receiving routine care in patients with heart disease in Kerman and providing corrective solutions**

### **Abstract**

**Introduction & Aims:** The covid-19 disease has caused widespread effects on the economic, social, and health systems. The present study aimed to investigate the impact of the corona epidemic on the referral and follow-up treatment of patients with heart diseases in Kerman city and provide corrective solutions.

**Methods:** The present study is a mixed-method study of the sequential explanatory type conducted in two phases. The first phase of a comparative descriptive quantitative study was conducted on the number of services provided and routine cardiovascular care service components for two years, 2018 & 2019. In the second phase, a systematic review of the literature was carried out. Using relevant keywords and searching in Scopus, WoS, and PubMed databases, the experiences of the world related to the solutions and interventions of routine care of cardiovascular patients were extracted during the covid-19 pandemic. Then, using quantitative results, a qualitative content analysis study was conducted based on semi-structured interviews with targeted and snowball sampling methods with cardiologists, treatment managers, and supervisors. then in an expert panel meeting with the presence of selected cardiologists, the final corrective solutions were presented. Descriptive statistics were used for the quantitative part, and the conventional content analysis method was used for data analysis. Excel software was used to process quantitative data, and MAX-QDA version 10 software was used to classify qualitative data.

**Results:** All four categories of paraclinical services, pharmaceuticals, routine tests, and outpatient and inpatient referrals decreased during the covid-19 epidemic, ranging from 1% to 90%. The international experiences regarding the strategies adopted in the covid-19 epidemic for the care of cardiovascular patients were categorized into 4 categories and 11 sub-categories. The categories included: Telehealth/medicine technologies, reconfiguration of outpatient care, training and empowerment, and reconfiguration of inpatient care. The qualitative section categorized the challenges into 4 categories: human resources, patients, hospital management, and vaccine drugs, and 20 subcategories. The solutions are also categorized into 8 categories including: telemedicine/health, patient education, reducing exposure of heart patients to covid-19 patients in the hospital, hospital management, use of clinic capacity and office visits, human resources

management, preparing a preparation plan for Providing service to heart patients during the epidemic and setting up the home care program was categorized.

**Conclusion:** In order to maintain routine care continuity of cardiovascular patients, policymakers should use different solutions, including the formulation of a comprehensive plan for the preparation of hospitals during the epidemic, the use of telemedicine/health technology, the management of inpatient services to maintain the safety of patients and reduction of unnecessary services and management of ambulatory care and training and empowerment of providers and patients and the general community.

**Keywords:** Covid-19, epidemic, routine care, cardiovascular disease



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Title:

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