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Transformation Management in Coronavirus Disease: from Hospitalization to Home Care

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Abstract

Proper management of the Corona pandemic is one of the most critical issues causing a serious crisis for the health care system in all countries. This management includes the prevention, treatment and control of complications. Due to the large number of cases in the recent pandemic and the limited health facilities in the hospitals, the use of more cost-effective solutions, especially home care and the use of telemedicine in the management of coronavirus is increasing day by day.

Candidates for home treatment must meet certain requirements, including the stability in the patient's general condition, the possibility of care taking at home by other family members or health care staff, access to personal protective equipment (at least gloves and masks), and not having people with heart, lung or kidney disease among the people living at home. It is also necessary to monitor the person's symptoms regularly. If the patient's symptoms worsen, especially in cases of shortness of breath, worsening of the coughs, decreased level of consciousness or fever for more than 5 days, there is a need to contact the medical system. Providing home care treatment solutions can be considered as a part of Transformation management in the recent Corona epidemic.

There is still a lot unknown about how to manage the Covid 19 patients and information in this field is rapidly increasing.

Key Words: Corona virus, Management change, Home care.

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1- INTRODUCTION

Coronavirus, first started in China in November 2019, is now a major health issue worldwide, which has suspended many social, economic and cultural programs.

Currently, nearly two years after the disease, many people in different countries are still in quarantine, and social restrictions are in place in many parts of the world. On the other hand, the economic burden of this disease on the health care systems around the world is unavoidable. Therefore, different management strategies are being implemented in different countries to reduce the life and financial burden of this disease. However, the best way to deal with this virus is to avoid infection and prevent the spread of this virus. Since the beginning of this global pandemic, management practices around the world have been changing and updating. In this regard, the present study aimed to review the developments in the field of Corona disease management (1-3).

2- MATERIALS AND METHODS

This review is conducted based on internet searches in databases of Web of Science, Google Scholar, Scopus, and PubMed, in which the articles related to the coronavirus crisis management were reviewed.

3- RESULTS

Since the onset of the Covid disease 19, various micro and macro strategies have been adopted around the world to combat the virus, which we will discuss below.

3-1. SCREENING AND EARLY DETECTION

Certainly the first way to control the disease is timely diagnosis, screening and identification of sick people. In this regard, various methods have been used in different countries. They include preparing personalized Corona diagnostic kits available to the public, screening forms based on clinical signs through electronic questionnaires, and managing the contacts with Corona patients by monitoring the clinical symptoms of the people in contact for 14 days after being in contact for early diagnosis of the patients. Furthermore, any person with clinical signs of Corona will be quarantined immediately and definitive diagnostic tests will be performed on him (3-7).

3-2. Prevention

In order to prevent the infection and slow down the transmission of the virus, contrivances were implemented in different countries according to the recommendations of the World Health Organization. They include frequent washing of hands with soap and water or disinfection with 70% alcohol solution, observing social distance, avoiding Hand-to-face contact, avoiding unnecessary leaving the house, frequent check-ups by the medical staff for Covid infections, use of masks in public places, observance of standard precautions by the medical staff while dealing with the patients.

Use of Internet systems for telecommuting, use of virtual education methods to reduce attendance at educational centers, use of telemedicine to reduce the presence of patients in medical centers, closing unnecessary public places at risk of disease transmission. To implement these preventive measures, many countries had to build or equip their necessary infrastructures. These include launching new telecommunication tools, creating routing maps to show higher risk areas for infection, launching a production line for masks and other personal protective equipment, empowering the supply chain of basic goods, installing thermometer systems in public centers, and providing the public with numerous electronic

payment machines can be considered among these measures (8-12).

3-3. Treatment management of the hospitalized patients

In case of the patients in need of hospitalization, a variety of strategies have been considered for the location and condition of the rooms for initial assessment, triage, waiting, and examination, relative to the entrance of hospitals in different countries. The common denominator of most of these strategies is to separate the triage of patients with respiratory symptoms from other patients and to establish proper ventilation at the triage site of these patients. Also, the identification of hospitals that are considered as centers for covid patients and equipping these centers with more beds and sufficient facilities and equipping the ICUs of these centers with more ventilators and respiratory protection measures are among the advances made in regard to hospitalization. Many countries are forced to establish field hospitals due to the large number of patients in need of hospitalization, especially in the peaks of the disease (13-15).

On the other hand, due to the Covid pandemic, compliance with hospital standards has become more and more important. Observing the standard distances between the beds (ideally 2 and at least 1 meter), limiting or eliminating meeting hospitalized patients, providing care in isolation rooms with negative pressure or equipped with HEPA filters, disposable asbestos bags and laryngoscopes, or observing infection control standards for medical devices (sterilization process). Observing Droplet Precautions in the hospital is one of the things to be mentioned in this area. Due to the high pressure on health care systems, the need to provide health care through more cost-effective systems is becoming more prominent every day (16-18).

3-4. Corona Home Care

Home care has been used for many years to reduce the number of hospitalizations for various diseases. This treatment is even more important in the recent coronavirus pandemic, which requires more social distance. Yet, another challenge for health care providers is to understand the desires of patients and families in the treatment process. Home care could help reduce travel, maintain and better respect patients' rights, provide patients with more psychological support, and provide them with more qualified medical care (18-20).

Due to the limited number of hospital beds, this policy has been considered as one of the basic pillars of Covid-related care in many countries. The implementation of this policy requires adequate instructions to health care providers and the adoption of appropriate decisions regarding the provision of manpower and equipment (20, 21).

Implementing home care policies can reduce the risk of nosocomial infections, increase the safety of the patient and his or her family, and help his/her faster return to normal life. Furthermore, it has been seen that the quality of nursing services has been higher in home care cases. The use of this method to follow up the patients after discharge leads to accelerating the discharge from the hospital and increasing the turnover of hospital beds (21)

Among the benefits of this policy, apart from the provision of health services, is the preparation of educational and counseling services and the increase in the level of knowledge of the patient and family members, which is of special importance in the emerging disease of Covid 19 (21, 22).

Home care services can vary from provided by the doctors, nurses, or nurse assistants at different professional levels. Home care treatments for Covid patients

are increasing day by day; Nevertheless, Choosing the proper patient for home care is of particular importance (23, 24).

4- DISCUSSION AND CONCLUSION

In the transformation management of Covid 19 pandemic, different prevention and treatment aspects must be considered. Currently, there is an increasing tendency among the medical staff to use home care treatments for the Corona disease patients. This growing trend of treating reminds us to pay more attention to the management of home care strategies.

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