

LETTER TO EDITOR**Call interview for early detection and appropriate treatment to decrease COVID-19 pandemic burden**

Fariba Ghorbani¹, Shadi Shafaghi^{2*}, Sima Noorali², Guitti Pourdowlat³

1. *Tracheal Diseases Research Center (TDRC), National Research Institute of Tuberculosis and Lung Diseases (NRITLD), Shahid Beheshti University of Medical Sciences, Tehran, Iran*
2. *Lung Transplantation Research Center, National Research Institute of Tuberculosis and Lung Diseases (NRITLD), Shahid Beheshti University of Medical Sciences, Tehran, Iran*
3. *Chronic Respiratory Diseases Research Center, National Research Institute of Tuberculosis and Lung Disease, Shahid Beheshti University of Medical Sciences, Tehran, Iran*

*Corresponding Author:

Address: Lung Transplantation Research Center (LTRC), National Research Institute of Tuberculosis and Lung Diseases (NRITLD), Shahid Beheshti University of Medical Sciences, Tehran, Iran.

Email: shafaghishadi@yahoo.com

ORCID: 0000-0002-9960-8854

Date Received: August, 2021

Date Accepted: September, 2021

Online Publication: April 15, 2022

Abstract

One of the most important concerns during the covid-19 pandemic is an imbalance in health services. Considering significant mortality among hospital staff and the general population, a great apprehension was raised in society. Consequently, many patients with symptoms were rushed to hospitals. In this regard, to keeping clinics away from overcrowding, call interview with patients plays a crucial role in not only patients screening but also treatment approach.

Keyword: Call interview, Health services, Isolation, Telemedicine

Introduction

During the covid-19 pandemic, one of the most important concerns is an imbalance in health services (1). In this regard, all requirements including medical equipment, drugs, hospital bed capacity rather than health providers need to be managed. Indeed, to prevent the loss of energy in the health system and also, avoid missing the patients who need education and treatment, call interview with symptomatic patients plays a crucial role in not only patients screening but also treatment approach.

Considering significant mortality among hospital staff and the general population, a great apprehension was raised in society. Consequently, many patients with symptoms including cough, fever, chest pain, malaise, etc. were rushed to hospitals.

According to CDC (center for disease control and prevention) guideline, most of the COVID-19 patients (81%) have mild disease and should stay at home for recovery (2), therefore, a supporting system is imperative in this situation.

In hospitals, people are more prone to be affected via respiratory droplets and an available platform of close contact for the disease dissemination will be created even up to 50% (3,4).

Call interviews conducted by a trained physician to obtain information about patient's complaints can be a reliable strategy to reduce the burden resulting from the above-mentioned situation. These key physicians are on call to guide patients on what they should do at home and when they need more assessments and further evaluation by monitoring the warning signs.

In this scenario, persons are categorized into four groups including:

1-Who have unspecific symptoms with no history of being at risk for contamination.

This group must be reassured of their health and recommend staying at home.

2- Patients who are suspected to be involved with covid-19 but can be managed as an outpatient.

In the absence of dyspnea or oxygen saturation demotion, when symptoms, lab data (leukocytosis, leukopenia, lymphopenia, thrombocytopenia, elevated ESR and CRP) or chest computed tomography indicate covid-19, drug regimen can be started at home care

setting with considering daily vital signs and if possible O₂ saturation with pulse oximeter especially for patients with comorbidity. A call interview or video visit is recommended for handling and management of these mild to moderate cases in daily follow-up.

3- Ill covid-19 patients after hospital discharge. Hospitalization is more requisite in case of severe lung involvement and decreasing in O₂ saturation or underlying medical condition (5). Sometimes patients are discharged after initial stabilization due to insufficient facilities and further care and supports should be resumed at home. The decision for the need to hospital readmission before being critical is possible by daily call interview.

How to perform home isolation and avoid infection transfer among caregivers and family members are some questions yet to be answered. Also, patients' complaints regarding oxygen consumption, lack of energy, recurrent symptoms, type of diet, etc. can be covered by interviewers.

4- The family members of COVID-19 patients.

Health providers should train caregivers about the prevention of covid-19 spreading by explaining how to use the mask, separate bedroom, and bathroom (if possible), preparing food, handling and disposing of trash.

By preparing educational pamphlets and movies, people would be aware of their concerns, however, analysis of patients' complaints and getting a reliable history are necessary for the covid-19 pandemic. By training general practitioners and get the certification to request proper lab tests, radiography, and prescribe appropriate drugs available according to national protocols, clinics could be kept away from becoming overcrowded.

It is worth to mention that employing screening applications is very useful but not possible for all people and they may not rely on computer programs. On the other hand, active follow-up with a physician will complete this remote visit.

The most effort should be better placed to apply for early treatment because it can reduce viral shedding and protect the patient from critical conditions (6). Call interview or virtual visits via telemedicine leads to better home isolation and shorts the queues of patients

waiting for visiting at the emergency departments (7). Even though patients who need further evaluation and consultation with specialists, could get a code from the interviewer. By this code waiting time will be shortened and different physicians will be involved in a medical pyramid model.

Conflict of interest

Author declares no conflict of interest.

References:

1. Remuzzi A, Remuzzi G. COVID-19 and Italy: what next? *Lancet*. 2020.
2. Wu Z, McGoogan JM. Characteristics of and Important Lessons From the Coronavirus Disease 2019 (COVID-19) Outbreak in China: Summary of a Report of 72 314 Cases From the Chinese Center for Disease Control and Prevention. *JAMA*. 2020 Feb.
3. Klompas M. Coronavirus Disease 2019 (COVID-19): Protecting Hospitals From the Invisible. *Ann Intern Med*. 2020 Mar.
4. Shim E, Tariq A, Choi W, Lee Y, Chowell G. Transmission potential and severity of COVID-19 in South Korea. *Int J Infect Dis*. 2020.
5. Cascella M, Rajnik M, Cuomo A, Dulebohn SC, Di Napoli R. Features, Evaluation and Treatment Coronavirus (COVID-19). In: *StatPearls* [Internet]. StatPearls Publishing; 2020.
6. Wu J, Li W, Shi X, Chen Z, Jiang B, Liu J, et al. Early antiviral treatment contributes to alleviate the severity and improve the prognosis of patients with novel coronavirus disease (COVID-19). *J Intern Med*. 2020 Mar;n/a(n/a).
7. Hollander JE, Carr BG. Virtually Perfect? Telemedicine for Covid-19. *N Engl J Med*. 2020 Mar.