IMPLEMENTATION OF A CARDIOVASCULAR EMERGENCY TELEPHONE LINE IN RESPONSE TO LOCKDOWN DUE TO COVID-19 PANDEMIC

To the editor:

The 2019 coronavirus disease (COVID-19) pandemic has restricted health care access for patients with cardiovascular (CV) disease. Multiple reports worldwide observed a reduction in hospitalizations for acute CV diseases such as acute myocardial infarction (AMI), heart failure and aortic dissection. According to studies in the United States and Europe, case fatality rates for patients hospitalized with AMI have increased during the COVID-19 pandemic. In parallel, an increase in out-of-hospital cardiac arrests was reported.

North and South American countries have become intense zones for COVID-19 transmission, and in Argentina there is an increasing number of daily confirmed cases. To help maintain medical care access and encourage patients to conduct early consultation despite fear of COVID-19, we decided to implement a CV emergency telephone line.

We described the implementation and performed an outcome analysis of this CV emergency telephone line during lockdown due to the COVID-19 pandemic.

A retrospective analysis of prospectively collected data was performed. Telephone calls to a CV emergency line from May 18 to July 12, 2020 made in a private center specialized in cardiovascular diseases in Buenos Aires were consecutively analyzed, including the number of patients attended, the percentage of patients who required evaluation in the emergency department (ED), those who were hospitalized and their final diagnosis after admission. A 24-hour CV emergency telephone line was implemented for patients with symptoms such as dyspnea, chest pain, syncope, or palpitations. It was brought to public knowledge via internet, social media and public propaganda.

Personnel education was carried out through a virtual platform, adapted from the one used to perform virtual visits, by specialists in critical care, ischemic heart disease, and heart failure. More than 30 cardiologists and 6 staff from the administrative sector participated.

Incoming patients’ calls were received by the administrative staff. Through previously instructed triage questions, they identified severe symptoms (on-going chest pain, dyspnea at rest, or neurological manifestation in progress), and requested immediate emergency assistance. If patients did not meet severity criteria, the call was derived to the cardiologist. After consultation, possible outcomes according to symptoms and inquiries were: 1) problem resolution, 2) reorientation to an outpatient consult, 3) referral to the ED (Figure 1). The criteria for referring patients to the ED depended on physician’s criteria.

A total of 199 emergency calls were received by on-call cardiologists, 35.1 percent required evaluation in the ED, and 19 percent of them required hospitalization. All patients referred to the ED were eventually evaluated.

Final diagnoses of hospitalized patients were acute coronary syndrome 46 percent, complete atrioventricular block 23 percent, decompensated acute heart failure 15 percent, cardiac tamponade and atrial flutter 8 percent.

As the COVID-19 pandemic progresses, reports of complications from unattended acute CV diseases increase, with a potential collateral damage that adds on to the COVID-19 morbidity and mortality. There is great concern that many patients may be more reticent.
to present to the hospital with symptoms due to fear of contracting COVID-19 or straining a healthcare system perceived as overburdened caring for COVID patients. As a result, patients may be presenting to the ED later in their disease course, resulting in worse outcomes. To decrease unattended CV disease impact, it is necessary to implement active measures such as telemedicine, education through social media platforms, radio and television rectifying misconceptions and reassuring patients that seeking medical care in hospitals is safe. And ensuring that patients can be treated safely in the case of CV emergencies through the development of treatment pathways completely separate to those being used for patients with COVID-19 to reduce their exposure to the risk of infections. There must be continued efforts to reduce fear and emphasize the importance of early recognition and prompt treatment of acute CV such as AMI in order to reduce potentially avoidable morbidity and mortality. The medical community, scientific societies, and health authorities must continue to make clear to the public: “heart care can’t wait.”

A CV emergency telephone line improved health care access for a significant number of patients that required urgent medical attention during lockdown due to COVID-19 pandemic. This is measure could be useful in countries still fighting COVID-19 such us North and South America, but also in those European countries that are going through the second wave.

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