

Pediatric Teleconsultation in the Context of the COVID-19 Pandemic

F. Bennaoui^{1,2*}, S. El Moussaoui^{1,2}, N. El Idrissi Slitine^{1,2}, F.M.R Maoulainine^{1,2}

¹Department of Neonatal, Mohammed VI University Hospital Marrakech, Marrakech, Morocco; ²Childhood Health and Development Research Laboratory, Faculty of Medicine, University Cadi Ayyad Marrakech, Marrakech, Morocco

ABSTRACT

Three billion individuals worldwide are currently confined to fight the COVID-19 pandemic. In this context, since physical examinations are less present. Teleconsultation is the delivery of health care services using the phone, information or communication technology. In the current pandemic scenario, teleconsultation can supplement health-care delivery in the absence of in-person visit. Our study aimed to assess the efficiency and security of teleconsultation with only a smartphone to manage the flow of pediatric emergencies in Morocco. This prospective observational cohort study was conducted on the first 500 patients, who received a teleconsultation by contacting pediatricians by smartphone, using audio, videos or photos, during two months April and May 2020, the patients were calling from all Morocco. The average of age was 2 years and 4 months with extremes ranging from 4 days to 15 years. Gender: male-60.7% and female-39.3%. The communication type was written message-100%; Photos-15%; Voice mail-8%. Our attitude was give as Prescription-69%; Tips-43%; Specialist advice-15%; Emergencies-6%; Diet-5%; Balance-5%; Consultation-4%; Radiological assessment-3%; Family treatment-1%. This study is the first to assess the utility of emergency pediatric teleconsultation with a simple smartphone application to manage emergency in a population with suddenly restrained access to pediatricians. This approach permitted us to preserve social distancing.

Keywords: COVID-19; Teleconsultation; Pediatric; Morocco

INTRODUCTION

The novel coronavirus disease (COVID-19) first reported from Wuhan, China, was declared a pandemic by the World Health Organization on the 11th of March, 2020 [1]. Morocco's first cases to be identified as positive by the 2nd of March 2020 were a man who had travelled from Italy.

3 billion individuals worldwide are currently confined to fight the COVID-19 pandemic [1]. In this context, since physical examinations are less present. The emergent COVID-19 pandemic dictates an urgent switch to teleconsultation. Teleconsultation is the delivery of health care services using the phone, information or communication technology. In the current pandemic scenario, teleconsultation can supplement health-care delivery in the absence of in-person visit.

It became imperative to control flow of patients to hospitals to minimize the risk. However, medical services to pediatric patients, needed to go on uninterrupted consultation. Switching to teleconsultation was a practical strategy. With the increasing demand for medical care, limited medical resources inevitably lead to problems such as inadequate and overly expensive medical

services [2]. Teleconsultation, the main form of telemedicine, uses information technology to achieve long-distance clinical health care, which promotes the sinking of high-quality medical resources and improves the overall efficiency of the health care system [3,4]. However, the country has limited experience with telemedicine. Certain patients may not be exposed to concepts of video calling, far less video consultation. However, Morocco has high prevalence of smartphone usage. Since this app has video calling facility, we determined to use it as a means for teleconsultation.

Objectives

Our study aimed to assess the efficiency and security of teleconsultation with only a smartphone to manage the flow of pediatric emergencies in Morocco, during the COVID-19 pandemic.

METHODS

This prospective observational cohort study was conducted on the first 500 patients who received a teleconsultation by contacting pediatricians by smartphone, using audio, videos or photos. During two months April and May 2020, the patients were calling

Correspondence to: F. Bennaoui, Department of Neonatal, Mohammed VI University Hospital Marrakech, Marrakech, Morocco, E-mail: fatihabennaoui@yahoo.fr

Received: February 22, 2021; **Accepted:** March 08, 2021; **Published:** March 15, 2021

Citation: Bennaoui F, Moussaoui SE, Slitine NEI, Maoulainine FMR (2021) Pediatric Teleconsultation in the Context of the COVID-19 Pandemic. J Antivir Antiretrovir. 13:003.

Copyright: © 2021 Bennaoui F, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

from all Morocco.

RESULTS

The average of age: 2 years and 4 months with extremes ranging from 4 days to 15 years.

Gender: male-60.7% and female-39.3%.

The symptoms were in this specialties are Dermatology-32%; Digestive-30%; Infectious-25%; Allergies-14%; Respiratory-9%; Psychological-6%; Neurological-5%; Uro-genital-5%; Dietetics-4%; Hematological-3%; Vaccination-2%; Trauma-2%; Ophthalmology-2%; and questions about Growth in 2% of cases.

The Communication type was written message-100%; Photos-15%; Voice mail-8%.

Our attitude was given as Prescription-69%; Tips-43%; Specialist advice-15% ; Emergencies-6%; Diet-5%; Balance-5%; Consultation-4%; Radiological assessment-3%; Family treatment-1%.

DISCUSSIONS

This study has looked at three aspects: first, the feasibility of carrying out video consultations in Morocco using a commonly available mobile app; second, its impact on reducing the number of patients visiting the clinic and third, the patient satisfaction and acceptance of teleconsultation. This approach permitted us to preserve social distancing.

Considering the potentially long time frame of the COVID-19 pandemic, with several new restriction periods and the need to maintain strict social distancing and sanitary precautions during the next few months, Pediatric teleconsultation is an easy and efficient solution to maintain healthcare access and limit and regulate access to pediatric emergency centers.

Before extending this option, patient and pathology demography should be strictly compared to extrapolate the potential effect on daily use of emergency departments. One limitation could be the smaller number of patients seen daily.

CONCLUSION

This study is the first to assess the utility of emergency pediatric teleconsultation with a simple smartphone application to manage emergency in a population with suddenly restrained access to pediatricians. Teleconsultation did not allow complete medical care but, in a difficult time like the global pandemic, was well accepted by patients. It is a simple way to maintain continuity of care while reducing contamination risk by avoiding direct contact between patients and healthcare professionals.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

FUNDING

This research received no external funding.

REFERENCES

1. World Health Organization. WHO Director-General's opening remarks at the media briefing on COVID-19. 2020.
2. Kong GL, Xu DL, Yang JB. Combined medical quality assessment using the evidential reasoning approach. *Expert Syst Appl.* 2015;43(13):5522-5530.
3. Douthit N, Kiv S, Dwolatzky T, Biswas S. Exposing some important barriers to health care access in the rural USA. *Public Health.* 2015;129(6):611-620.
4. Nouhi M, Fayaz-Bakhsh A, Mohamadi E. Telemedicine and its potential impacts on reducing inequalities in access to health manpower. *Telemed E Health.* 2012;18(8):648-653.