

Review Article

Role of Social Media in Diagnosis and Management of COVID-19; An Experience of a Pulmonologist

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Abstract

COVID-19 is the recent and one of the severe pandemic faced by the whole world. No country was left without feeling its wrath. Due to blurred picture regarding the pathogenesis of this disease it posed a great (treatment) challenge for healthcare professionals all over the world and particularly the challenge was even greater in Pakistan.

Such situation in Pakistan aroused mainly due to controversial isolation/quarantine and burial policy by Government, misconception and rumors among public about COVID-19 and social stigma attached with a COVID-19 positive case. As a result majority of patients with mild and moderate disease started avoiding Government and private hospitals. Only severe cases of COVID disease with respiratory insufficiency presented in emergency department. In order to prevent conversion of mild and moderate cases into severe ones, the Pulmonology team of Sahiwal Medical College Sahiwal utilized Social Media tools (Whatsapp and Facebook Messenger) for telemedicine to address medical issues of the vast majority. This methodology was also adopted to make timely diagnosis of severe cases for prompt medical attention and prevention of spread of disease by advocating social distancing and masking.

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Introduction

After first diagnosed case of COVID-19 in Wuhan, it quickly spread to more than 213 countries of the World. Pakistan saw its first case of COVID-19 in February 2020 and number of cases increased dramatically afterwards (139,225 cases till date).¹ Currently Pakistan is going towards its peak in terms of COVID-19 cases with more than 6000 new cases per day.² Government of Pakistan adopted a strict policy for quarantine, isolation and burial of COVID-19 suspect and confirmed cases which led to unrest among nation who are very sensitive about burial rituals.³ This led to an unfortunate situation in which rumors and misconceptions spread among society and patients were frightened to attend hospitals in

mild and moderate disease. Sole presentation of cases was severe disease with hypoxic respiratory failure.⁴ People with mild to moderate disease were unable to get medical attention due to social stigma attached with COVID which led to progression of disease in severe stages in almost all cases.⁵ There was also accelerated spread of disease due to lack of social distancing and masking.⁶

In order to prevent this situation Department of Pulmonology Sahiwal Medical College Sahiwal took a bold step of utilizing telemedicine to contact these bulk of patients with mild and moderate COVID disease.

The initiative was taken in last week of May 2020.

Social Media tools (Whatsapp and Facebook messenger) were utilized for this purpose. A specific whatsapp number and Facebook ID was propagated among various whatsapp groups of journalists, civil society, medical professionals and general public. A specific time (4:00 pm to 8:00 pm) was fixed for consultation. People were asked to contact through these social media tools if they experience symptoms like fever, sore throat, loss of smell and taste, body aches and shortness of breath in last 10-15 days. People could interact through live calls, pictures of x-rays and other reports, voice messages and typed messages. 240 patients contacted using these social media tools.

Observations

The response was very encouraging and following observations were made.

- 1- Majority of patients were relevant and belonged to special cohort which were intended to be targeted by Pulmonology team i-e patients with short history of respiratory symptoms or acute worsening of respiratory symptoms. A very minor number of patients with other diseases contacted who were referred to respective sub-specialty doctor.
- 2- Patients were not hesitant to discuss their condition and were confident to get good medical advice.
- 3- Patients obeyed preventive measures of self-isolation and self-quarantine with good compliance.
- 4- Patients used prescribed medications with good compliance and were eager to discuss any side effect with doctor.
- 5- Patients gave regular feedback of their disease condition.
- 6- Patients were able to use pulse oximeter and oxygen supply successfully and interpreted results of pulse oximeter successfully.
- 7- Many cases with moderate disease improved with telemedicine and only a few had to consult hospital emergency room.
- 8- Patients successfully dealt with cases with same signs and symptoms in their family due to their own experience.
- 9- Patients learned use of mask and social distancing and advocated to others.
- 10- With good quality radiology films, it was easy to determine lung involvement in COVID cases.

The only apparent draw backs were

- 1- Requests of consultation beyond fixed time
- 2- Quality of X-rays pictures was poor in some cases

Conclusions

Telemedicine especially with the use of social media tools is very helpful in diagnosing COVID-19 cases and also for reassurance of the patients. People felt more convenience while using telemedicine as a tool for consultation with the designated medical professionals. Its use should be extended all over Pakistan in order to facilitate patients who are reluctant to get medical help. The idea can also be extended to help patients of other sub-specialties if a team of telemedicine consultants is made.

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