

The invisible victims — Impact of the pandemic on patients without COVID-19

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Abstract

The coronavirus disease (COVID-19) pandemic has shocked the world to a standstill. Routine healthcare has been severely disrupted. Healthcare service is a finite resource and in the current pandemic situation the risks of providing care to individual patients, whether they be confirmed, probable or suspected cases, should be balanced against the ability to provide safe routine long-term care to others. But how far can the healthcare system protect itself and fear the unknown, before it starts causing harm by omission? Herein we provide a review of cases that were misdiagnosed, left stranded in the system or had to face unnecessary delays due to the lack of an organised pathway.

Keywords: COVID-19, Pandemic, Healthcare delivery.

DOI: <https://doi.org/10.5455/JPMA.36>

Introduction

The ongoing pandemic caused by severe acute respiratory syndrome coronavirus 2 (SARS-COV-2) has taken the healthcare hostage. Well-developed, developing and under-developed countries alike have been affected by this menacing virus. Pakistan is no exception to the above. The healthcare system of Pakistan is complex. Federal and provincial government healthcare subsystems compete with private sector.^{1,2} Government-provided healthcare is delivered mainly through vertically managed disease-specific mechanisms. The country's health sector is also marked by urban-rural disparities in service delivery and workforce. This along with Pakistan's population growth has generated an unmet need for healthcare.³ Public institutions that address critical health issues are often located only in major towns and cities and, as it is, are stretched to their limits. Few means exist to govern the quality, standards, protocols, ethics, or prices within the private health sector, which results in disparities in health services.³

The spread of coronavirus disease (COVID-19) has

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complicated an already fragile and fragmented healthcare system. Coupled with the fact that the doctors and nurses are not adequately trained in identifying, differentiating and managing this disease, a sense of fear is present leading to knee jerk responses which can add a lot of misery to the patients' existing problems. There is also a lack of understanding of infection prevention and control among doctors and nurses. Upon reviewing the existing curriculum taught in medical schools, one would realise that there is hardly any formal training. One might find a single session on hand hygiene and infection control practice at best. This fear of the unknown is compounded by COVID-19's features, including asymptomatic carriers, easy disease transmission and acquisition.

The number of infected patients is increasing rapidly daily, and has caused a burden on the healthcare systems in more ways than one. An aspect which may be missed is the provision of care to patients without COVID-19. Doctors are bound by their moral and ethical responsibility for beneficence to patients. In situations like natural disasters and epidemics, a healthcare worker has many competing interests, including duty: 1) to patients; 2) to oneself and protection from risk of harm; 3) to one's family; 4) to colleagues, who will have to face increased workloads and risk of harm when one is absent; and 5) to society.

Over the past four weeks, we have come across numerous cases reflecting the above made worse by the current COVID-19 crises. We call these patients and their families affected directly or indirectly by health system "the invisible victims of corona crisis". A few of these examples are highlighted below.

Case 1: What happens when there is no forward planning?

A 38-week pregnant lady was referred to us, near term who was due to have an elective Caesarean section in her referring hospital. She was asymptomatic otherwise. The hospital from where she came had made a policy to test anyone undergoing an elective procedure for COVID-19. This came out to be positive. The referring hospital refused to entertain her from then onwards in spite of the

fact that she had been following up with them since the beginning of her pregnancy. The referring hospital had not made any plans in case the test came back positive for anyone undergoing an elective procedure for what should be done. She was left stranded. Eventually through her own efforts she got admitted to one of the leading hospitals in the city and received the recommended treatment.

Case 2: The value of history-taking and empathic communication is just as important now

An elderly lady with diabetes, hypertension, and end-stage renal disease requiring dialysis three times a week, missed a session due to COVID-19-related lockdown in the city. She developed shortness of breath and went to the hospital where she gets her regular dialysis on the next scheduled session. As she was short of breath, the attending doctor requested a chest x-ray and found her to have bilateral infiltrates. Based on this, dialysis was refused and she was given a refer-out letter which stated the possibility of COVID-19. This was done without providing any details as to where to go. The patient was symptomatic and no consideration was given to this. The patient's family took her to three different hospitals all of which refused her on the same premise without thinking about likely possibilities or doing formal assessments. The fourth hospital admitted her, evaluated and found her to be in pulmonary oedema, arranged dialysis with which she got better immediately. They also did a COVID-19 nasopharyngeal swab which turned out to be negative. This lady went through a 24-hour ordeal of being bumped from one centre to the other with breathing difficulties. It came across as if no one was interested in thinking though possibilities and working towards the patient's benefit. All the first three hospitals did was save themselves without consideration as to what would happen to the patient. By just handing the referral letter they assumed their responsibility was over. This could have been potentially fatal. Ideally the hospital should have made arrangements as this would not be an unexpected situation given the current circumstances and the dialysis team should have arranged a refer-out to a specific place rather than leaving it to the patient which would have facilitated her care and avoided unnecessary misery.

Case 3: Should all diagnostic tests be clinically justified?

An elderly gentleman with poor functional status was admitted with fever and shortness of breath at night time. He was evaluated for fever. The possibilities were urinary

tract infection versus respiratory tract infection. The complete blood count showed high white cell count with neutrophilia and normal platelets. The workup was more suggestive of urinary tract infection as urine DR had numerous bacteria with nitrites and high white cell count. Chest X-ray was unremarkable but poor quality due to motion artifacts and improper position. Because of this, there were doubts about possible infiltrates. The patient was maintaining oxygen saturation on room air. Based on just the fact that he had fever and shortness of breath, COVID-19 nasopharyngeal swab was sent the following morning in haste. Unfortunately, while having his lunch the same day he aspirated and passed away. A brief CPR was performed and endotracheal tube was passed which showed large amount of food content in the trachea. This was a clear case of urinary tract infection followed by large volume aspiration which led to his death. As the patient passed away and the COVID-19 test was requested, it was difficult to decide whether the deceased should have a normal burial or a limited one. This was especially important as patient was head of a village where the body had to be taken by car — an eight-hour drive. There would be a large number of people attending the funeral to pay their respects. The family was explained the consequences and after much deliberation agreed to wait for the PCR report and in the meanwhile kept the body in the mortuary in Edhi centre. The following afternoon the PCR report came back as negative and deceased was taken to his native village for burial. This is a clear example of unjustified test request and its associated complexities.

Case 4: Timeliness of ordering a test and its processing

A middle-aged lady with hypertension and diabetes was due to have an elective orthopaedic surgery. Her hospital had requested for COVID-19 nasopharyngeal swab. After it was done, her elective admission was cancelled and rescheduled a week later due to city-wide lockdown. When she went in for her admission later, she was informed that the COVID test will be repeated and she will be kept in the isolation unit awaiting the result. The PCR test report was delayed and she had to stay in the isolation unit for 2 days instead. The patient had to bear the additional cost of repeat test and overstay in the isolation unit through no fault of her own. All of this could have been avoided as there was no reason for the second PCR. If the repeat test was done on an outpatient basis, the additional costs of staying in the isolation unit could have been avoided. The patient belonged to low-middle-class family and had to borrow money to pay for the additional costs.

Case 5: Should fear be the one dictating our lives?

One of our patients who lives in a district away from Karachi contacted us with complaint of shortness of breath. She is a middle-aged lady, with multiple co-morbid diseases, including congestive heart failure with past history of such episodes. At another time, a number of differential diagnoses would have come to one's mind, and as our training has guided us, proceed to treat the patient after a thorough review of her history, a systemic examination, review of records and investigations as required. Unfortunately, she was denied this opportunity as the usual doctor was not available in her vicinity. A local GP would visit the clinic once a week only in the current lockdown, and that too during limited hours. The family was reluctant to take her to the nearest hospital, for the fear of the virus, and a comparatively larger hospital in the next city had been turned into a quarantine centre. Her symptoms were evaluated over the phone. COVID seemed unlikely, and medication was prescribed. Even more unlucky for her, the pharmacy had closed as it was evening. Despite seeing the difficulty their patient was in, her family chose to keep her overnight at home in her difficult state. It was only till the next day that she got the treatment she needed, and managed to get physically checked by a doctor much later. Two issues come forward in this case; first, the non-availability of clinics during regular hours, and second, the fear and reluctance of the public to seek medical treatment. The importance of having a safe place for patients to come and seek treatment cannot be emphasised enough.

Case 6: And we come full circle - the importance of a contingency plan

A middle-aged lady presented to the hospital with severe shortness of breath. The attendant gave a history of cough, fever and shortness of breath for preceding three days. On arrival, she was found to be in critical condition and in metabolic acidosis. Evaluation suggested a high chance of COVID-19 infection with multi-organ dysfunction based on CT scan and routine blood tests. The hospital's policy was not to admit any COVID-19 patients, suspected or confirmed. This was not communicated to the family at triage. The patient was referred out after initial resuscitation which included intubation and putting her on a ventilator. Interestingly, the hospital did not have a portable ventilator and the family was advised to shift the patient to another facility by arranging an ambulance and transferring out the patient with an endo-tracheal tube in-situ and an Umbo bag for oxygenation. The patient and her family were left

to their own without due consideration to the gravity of the situation and associated health risks. This was potentially life-threatening. There should have been a refer-out plan — where to and how?

Global Phenomenon

Such issues are not only faced in Pakistan. Doctors the world-over have noted a decrease in the numbers of patients seeking treatment in for emergencies such as myocardial infarctions and stroke.^{4,5} Routine healthcare activities have been curtailed.⁶ Misdiagnosis and delayed diagnosis have happened in previous pandemics as well.^{7,8} If the trend continues, it will be difficult to predict the morbidity and mortality rates of diseases other than COVID-19, and doctors are already concerned about it.⁹

Recommendations

“In a balanced organization, working towards a common objective, there is success” — Arthur Helps

For the purpose of this article, the objective is providing care to patients without COVID-19 in a safe environment without increasing the risk to the healthcare staff. There cannot be success without a clean, organised system for the concerned people to navigate through. The responsibility for this lies with the individuals at any healthcare set-up, big or small, and up till various medical societies and government bodies in charge of making policies. The NHS, UK, for example, has released specialty guides for management of patients with various diseases during the pandemic.¹⁰ These guidelines are updated as deemed fit. For stroke, they clearly outline the patient flow from admission to discharge, and detail regarding management of suspected TIA patients, outpatients, and rehabilitation. A leadership role is defined to ensure co-ordination of the whole service.¹¹ Other such guidelines and hospital policies are available online, which can be adapted to each institute's local practice and resources.^{12,13} Social considerations like financial limitations be taken in to account in the decision-making process. Hospital policies should be patient-centric which is especially relevant for private health care setups. Most importantly for patients being referred out, the responsibility does not end here but in-fact becomes even more important and relevant to shift them to appropriate setups after stabilization in a safe and timely manner.

Conclusion

Patients with diseases like myocardial infarction, stroke, malignancy, kidney diseases and others have not disappeared from the world. The above cases clearly bring to light that even in pandemic situations proper clinical

assessment and situational analysis be done in every patient encounter otherwise much unintended physical, psychological, social and financial harm would be done.

References

1. Kurji Z, Premani ZS, Mithani Y. Analysis of the health care system of Pakistan: lessons learnt and way forward. *J Ayub Med Coll Abbottabad* 2016;28:601-604.
2. Javed SA, Liu S, Mahmoudi A, Nawaz M. Patients' satisfaction and public and private sectors' health care service quality in Pakistan: application of grey decision analysis approaches. *Int J Health Plann Manage* 2019;34:e168-e182. doi: 10.1002/hpm.2629.
3. Shaikh BT. Private sector in health care delivery: a reality and a challenge in Pakistan. *J Ayub Med Coll Abbottabad* 2015;27:496-8.
4. Letters to the Editor: Non-COVID patients are skipping ER visits. That can be dangerous [Internet]. *Los Angeles Times*. 2020 [cited 2020 Apr 20]. Available from: <https://www.latimes.com/opinion/story/2020-04-10/non-covid-patients-skipping-er-visits>
5. As coronavirus surges, non-COVID medical emergencies take a back seat, putting patients at risk [Internet]. *NBC News*. [cited 2020 Apr 20]. Available from: <https://www.nbcnews.com/health/health-news/coronavirus-surges-non-covid-medical-emergencies-take-back-seat-putting-n1175871>
6. Agonising wait for non-Covid patients in Delhi [Internet]. *India Today*. [cited 2020 Apr 20]. Available from URL: <https://www.indiatoday.in/mail-today/story/agonising-wait-for-non-covid-patients-in-delhi-1668256-2020-04-18>
7. Metan G, Bozkurt I, Koc AN. Pneumocystis jiroveci pneumonia (PCP) misdiagnosed as pandemic influenza H1N1 in a renal transplant patient. *Infez Med* 2011;19:182-4.
8. Moody W, Loudon M, Watkin R, Steeds R, Prendergast B. Infective endocarditis: diagnosis delayed during swine flu pandemic. *Postgrad Med J* 2011;87:240-240.
9. Houston M. A doctor writes: Where are all the non-Covid-19 patients? [Internet]. *The Irish Times*. [cited 2020 Apr 20]. Available from: <https://www.irishtimes.com/news/health/a-doctor-writes-where-are-all-the-non-covid-19-patients-1.4222379>
10. Coronavirus?" Specialty guides for patient management [Internet]. [cited 2020 Apr 18]. Available from URL: <https://www.england.nhs.uk/coronavirus/publication/specialty-guides/>
11. Specialty guides for patient management during the coronavirus pandemic: Clinical guide for the management of stroke patients during the coronavirus pandemic. [Internet]. [cited 2020 Apr 18]. Available from URL: https://www.england.nhs.uk/coronavirus/wpcontent/uploads/sites/52/2020/04/C0033_-_Specialty-guide_-_Stroke-and-coronavirus-V1-update_16-April-003.pdf
12. van de Haar J, Hoes LR, Coles CE, Seamon K, Fröhling S, Jäger D, et al. Caring for patients with cancer in the COVID-19 era. *Nature Medicine* 2020;1-7.
13. Reducing the risk of transmission of COVID-19 in the hospital setting [Internet] *GOV.UK* [cited 2020 Apr 18]. Available from: <https://www.gov.uk/government/publications/wuhan-novel-coronavirus-infection-prevention-and-control/reducing-the-risk-of-transmission-of-covid-19-in-the-hospital-setting>.