

# Hematology and transfusion medicine facing COVID-19: perspectives beyond the pandemic

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## COVID-19 is rapidly changing our lives

The COVID-19 pandemic is one of the most extreme challenges that we have ever met in our professional practice. Urgent responses to the pandemic have impeded normal work and dramatically changed the daily routine activities of much of the world's population. For all health-care workers, the pandemic has completely disrupted normal medical practice and daily work. Obviously, physicians and nurses are inevitably thrown into the middle of the pandemic, and they are forced to protect both patients and themselves. The occurrence of illness and the obligation to undergo quarantine frequently lead to staff shortage, which makes the work even more difficult [1]. At present, we protect our patients against infection; soon we might have to treat them for both hematological disease and COVID-19 infection. This situation will drive further organizational changes in hospitals and within individual wards.

## Lessons from the ongoing COVID-19 pandemic

The five most important lessons that the pandemic has taught me up to mid-April 2020 are as follows:

1. *Organization of the physician's practice and workplace is changing considerably:* We know that a new division of duties in the clinical team is possible, that is, some people can work remotely, others can conduct research, and yet others can involve solely in teaching. These duties can be rotated. Our departments had to solve many problems and provisional solutions have been implemented; some of them can already be regarded as revolutionary, and some of them will be used as a regular and lasting new practice.
2. *Postulated new model of health care for patients is feasible:* Some patients do not have to visit a doctor or go to a hospital so often. The need to produce administrative documentation in many cases disrupts the efficient work of physicians, does not help our patients, and is not necessary. Many procedures can be simplified to the benefit of physicians and patients. The pandemic has shown the need for a digital revolution in health care.
3. *Accurate information is priceless at the appropriate time and place:* The pandemic has taught us that fresh and authentic data on 70 patients can be much more valuable than large cohort studies lasting many years.
4. *Exchange of medical data and experience is crucial for everyone:* The pandemic has demonstrated that 1-h teleconference or webinar might be more efficient than a 1-day meeting, and

nobody has to travel anywhere. We have been presented with evidence confirming that there are too many medical and scientific conferences nowadays. Nobody has the right to keep knowledge to him/herself and plays his/her own game with it.

5. *Knowledge is the true value:* The pandemic actually shows that what the world looks like without just one vaccine. I hope that this is sufficiently a clear signal for anti-vaccine advocates [2, 3]. It is a warning for populists, who lack expert knowledge and whose programs are based on ignorance. In the period of pandemic, there is only one enemy and cooperation is mandatory so that we can find ourselves in the right and safe place in the post-pandemic era. We all are responsible for the advancement of true knowledge.

## Our tasks

The rapid development of the pandemic and the lack of relevant evidence-based guidelines have resulted in the creation of a number of web-published recommendations and the organization of webinars. Such initiatives are very useful and can successfully replace journal publications and medical conferences. On the other hand, the unexpected abundance of the said online content and events has obscured the essence of our main professional objectives during the pandemic:

1. *Treatment of primary disease is the priority:* Delay in timely chemotherapy or any other anticancer therapy undoubtedly leads to progression of malignancy and, consequently, a life-threatening condition. We have to deliver safe treatments to our patients, such as chemotherapy, targeted therapy, blood component therapy, and supportive therapy. We cannot delay the administration of chemotherapy because of the risk of contracting infection from the patient.
2. *Ensuring protective environment for patients and ourselves:* It can be done by adhering to the principles of nonspecific prevention and specific prophylaxis, following local, national, and international guidelines, and finally using our common sense, which is equipped with knowledge acquired from medical studies and experience gained during professional practice. Prevention against the virus is of utmost importance, as we cannot treat malignancy when a patient suffers from severe COVID-19 pneumonia.
3. *Recommendations are useful, but we have to stick to the rules in our hospital:* It is mandatory to follow the basic principles of infection control. The local and national law can determine the adequate

procedures. However, it is impossible to predict everything, so we have to be prepared for making individualized decisions on how to care for the patient.

## The present and the future

As a medical community, we are in the center of the pandemic: for better and for worse. COVID-19 has already exposed major weaknesses in the system of public health management. We all know that the government has done too little [4, 5]. The health care system in our country, including resources, physicians, and nurses, is heavily underinvested. The media and politicians show us simply how easy it is to manipulate information in the current reality. It is not fair to use the pandemic for political purposes, to accuse medical staff of disseminating the virus, and to require that physicians and nurses work with COVID-19 patients while failing to provide them with personal protective equipment, security measures, and insurance. It is now clear that when epidemiologists warned of a pathogen with pandemic potential, it was high time to make adequate decisions to support health care and reorganize social priorities for the general population [4]. Not everything has to be evidence-based; sometimes it is anticipation-based, and should never be evidence-biased.

## Beyond the pandemic

We cannot fix what has already happened. We can hope and work for a better future [1]. For now: save the lives, treat the patients, teach successors, and publish your achievements. The pandemic will speed up the advancement of medical technologies. Safer or more effective oral compounds are ready for use. They will give the opportunity for a more successful and safer therapy, less complications, or home-based therapy. The process of licensing and reimbursement of new drugs should be faster. Compounds licensed in the USA should be immediately approved in Europe. Drugs reimbursed in Europe should also be reimbursed in Poland. New immunotherapies are usually safer and more efficacious than conventional chemotherapy. Oral drugs are better and safer than intravenous medications, both for patients and hospitals. Prevention is cheaper than treatment of complications.

Prognostic models for the duration of the pandemic are changing every day and in every center. Each scenario is possible, but it will

surely finish in one day. Request to refrain from going into unproven therapies or citing misleading data and hyped-up anecdotes on social media and television. Too many otherwise-intelligent people have been willing to throw the principles of evidence-based medicine into the trash [1].

An effective response to COVID-19 requires novel, more creative legal tools. With COVID-19 spreading in our communities, the time has come to devise and implement public health laws that emphasize support rather than restriction [5].

## Call for papers on COVID-19

We are a medical, academic, didactic, and scientific community, responsible for the future of hematology and transfusion medicine in our country. We should document our experience. I urge you to submit papers describing your experience with the COVID-19 pandemic. Brief Communication and Clinical Vignette provides you with an easy format to report your clinical cases as well as your experience in creating protective environment, with your antiviral strategy, and with safe treatment provided to patients.

### Authors' contributions

JS – the only author.

### Conflict of interest

None.

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### Ethics

The work described in this article has been carried out in accordance with the Code of Ethics of the World Medical Association (Declaration of Helsinki) for experiments involving humans; EU Directive 2010/63/EU for animal experiments; and Uniform requirements for manuscripts submitted to biomedical journals.

## References

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1. Steensma D. Editor's Corner: At World's End. *ASH Clinical News* 2020 Apr 3. [Epub].
2. Styczyński J. 50 years of *Acta Haematologica Polonica*: value of vaccinations in patients with hematological disorders. *Acta Haematol Pol* 2019;50:181.
3. Styczyński J. ABC of viral infections in hematology: focus on herpesviruses. *Acta Haematol Pol* 2019;50:159–66.
4. Haffajee RL, Mello MM. Thinking globally, acting locally – the U.S. response to Covid-19. *N Engl J Med* 2020 Apr 2. [Epub ahead of print].
5. Parmet WE, Sinha MS. Covid-19 – The law and limits of quarantine. *N Engl J Med* 2020;382:e28.