Supporting healthcare workers on front lines of the Covid-19 fight

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To the Editor,

Infectious diseases play an important role in the health system. The World Health Organization (WHO) has faced multiple challenges over the last decades. Infections like: TBC, Smallpox, HIV/AIDS, influenza, hemorrhagic fever (Ebola), coronavirus infection, measles, and also issues like antibiotic-resistance have been some of those challenges. One of the current concerns is the prevention and management of SAR CoV-2. This infection started unexpectedly by the end of December in Wuhan, China (1). Later, it spread over to other countries, and Italy was one of the most affected ones (2,3) reaching over

10,000 by 28 March 2020. This number exceeds the number of fatalities in China (3,301). Despite the numerous unknown aspects of this infection, the

healthcare system had to face a multidimensional emergency. The quick spread of the infection in many countries made the WHO to declare the pandemic on 11th March, 2020 (4). The healthcare system was not ready to deal with a such rapid spread of the infection. Many physicians and health care workers (HCWs), firstly in China, then in Italy and later in other countries got infected, and some of them unfortunately lost their lives (5). COVID-19 infection is a human-to-human transmission that globally involved many countries and was declared a public health emergency of international concern. Despite no accurate current data are available yet, as the pandemic is developing, losses of HCWs may happen although the recommended pre-cautions are used (5,6). Over the last months all the world has been fighting the COVID-19 pandemic and Italy more than every other country has been suffering the cruel attack of the virus (7) affecting over 100 countries in a matter of weeks. A global response to prepare health systems worldwide is imperative. Although containment measures in China have reduced new cases by more than 90%, this reduction is not the case elsewhere, and Italy has been particularly affected. There is now grave concern regarding the Italian national health system's capacity to effectively respond to the needs of patients who are infected and require intensive care for SARS-CoV-2 pneumonia. The percentage of patients in intensive care reported daily in Italy between March 1 and March 11, 2020, has consistently been between 9% and 11% of patients who are actively infected. The number of patients infected since Feb 21 in Italy closely follows an exponential trend. If this trend continues for 1 more week, there will be 30 000 infected patients. Intensive care units will then be at maximum capacity; up to 4000 hospital beds will be needed by mid-April, 2020. Our analysis might help political leaders and health authorities to allocate enough resources, including personnel, beds, and intensive care facilities, to manage the situation in the next few days and weeks. If the Italian outbreak follows a similar trend as in Hubei province, China, the number of newly infected patients could start to decrease within 3-4 days, departing from the exponential trend. However, this cannot currently be predicted because of differences between social distancing measures and the capacity to quickly build dedicated facilities in China. "DOI:10.1016/S0140-6736(20)". Although all the available competences and abilities, it looked like Italy was fighting this battle alone and the deaths of citizens, healthcare workers and the

economic collapse was terrifying. SAR-CoV-2 in Italy was firstly identified in Lombardy, and later it spread quickly all over the country (2,3). In order to help the Italian healthcare system to face up to the situation, retired physicians such as general pratictioners or hospital specialists were recalled to work, the private system offered its help and an immediate graduation of new doctors followed. Based on dates published by the Protezione Civile and the Italian Health Ministry on 23 April 2020, and according to the report of the Italian National Institute of Health, in Italy there were 177.143 patients confirmed with COVID-19 of which 23.188 died. From all infected patients a large amount 19.628 (11%) were HCWs of which 69 died (8). But they weren't alone, because friends far from Italy came to help them to face with this unknown virus. On the other hand, the situation in Albania, a neighboring country of Italy, was completely different. In the meantime this country officially reported 634 positive cases with COVID-19 of which 27 died (9). Although the spreading of the virus started quickly, the Albanian government draconian measures gave the healthcare system a chance to manage the situation with confidence. Basically Albania can be defined as a country that chose a very strict quarantine lock-down strategy. This made it possible to treat the majority of patients and to avoid an overloading of the healthcare system. Actually, at the time we are writing this paper, the number of patients diagnosed with COVID-19 in Italy is 214.457, and 23.988 of them were HCWs with a number of fatalities of 29.684 cases. Whereas at the same time WHO declared 3.672.238 cases with COVID-19 and 254.045 deaths, and in Albania the cases were 832 and 31 deaths (10) . Albania is a small country, but it has had a historical relationship with Italy for more than 500 years. The relationship between the two countries goes beyond the cultural and the historical background. For more than 500 thousand years Italy has hosted Albanian immigrants and during all this time, in particular during the last years the relation between the two countries has grown to become stronger and multidimensional. Italy has been engaged and has offered its support in many different projects and investments including those linked to infrastructures, schools and hospital build- ings, etc. There are multilevel collaboration projects and exchanges of experience involving security, health, education, economy, etc. These reasons and many others have increased and have further developed the strategic partnership between the two countries in addition to the historical and traditional relationship. In respect and gratitude of the help and support received from Italy over the years, and focusing on the mission to provide the necessary help for the HCWs, which also got sick and even died, two medical staff teams from Albania flown to Italy. The first group composed by 30 HCWs flew to Italy in the late March to give its contribution, together with Italian colleagues, for assistance of the patients with COVID-19. This team was sent to the Brescia Hospital (Spedali Civili) to support clinical activities in departments with COVID-19 patients. Later, in April, a second group of 60 HCWs was sent again to Italy. This important mobilization one more time reflects and displays the lack of borders and their need of help during times of necessity. Although infections and deaths in health personnel are still present, these HCWs showed an unprecedented heroism. They did not think of anything else but just to help their colleagues, their friends, and the Italian people. On the other hand public people gave its support and honored them as heroes. The healthcare system faces regularly situations in which the life of HCWs are at risk, but this never hinders them from showing immense compassion and solidarity.

Conclusion

The healthcare system faces many challenges, among which also this COVID-19 pandemic. It is the responsibility of the governments and the policy-making institutions to create well-structured programs to protect the population and health- care personnel. We have learned that we cannot do it without each-other: clinicians without nurses, patients without HCWs, HCWs without non-medical staff. The support that a small country like Albania gave to its neighbor Italy shows one more time the great example of humanity, love and bravery of the HCWs demonstrated in an example of great collaboration. **Thanks and gratitude to all the health personnel who faced COVID-19 and to those of them who lost their lives in this battle.**

Conflict of Interest: Each author declares that he or she has no commercial associations (e.g. consultancies, stock ownership, equity interest, patent/licensing arrangement etc.) that might pose a conflict of interest in connection with the submitted article

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