

COMMENT

COVID-19 threat and frontline paediatric care professionals

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'this is not a dream, but a true good vision that will come true'
 [ὄνκ ὄναρ, ἀλλ' ὕπαρ ἐσθλόν, ὃ τοι τετελεσμένον ἔσται]

Homer

'How prepared are paediatric health professionals for a future pandemic?' The answer by Professor Alan Michael Weindling, Professor of Perinatal Medicine at the University of Liverpool (UK), to this question by the Paediatric Virology Study Group (PVSG), almost two years ago, in the context of the '4th workshop on Paediatric Virology' revealed a difficult reality: 'Those who work in developing countries may be, but most paediatric health professionals probably are not. Consider how long it took clinicians to appreciate the nature of the AIDS and therefore its best treatment and management' (1). Professor Weindling also supported the commitment to 'lifelong learning', as well as the necessity of increased preparedness of the paediatric care professionals based on the ongoing, at that time, health crises of Ebola and Zika viruses (1,2).

Since 2007, the PVSG has focused on continuing medical education of the frontline paediatric professionals (3). The necessity for their increased preparedness against common viral infections, as well as emerging epidemic viral threats has been analysed in detail (4-8), while in 2018, the '4th workshop on Paediatric Virology' was dedicated to the

100 years of the 1918 Spanish flu pandemic on the Greek Aegean Sea island of Skyros, which devastated its population in less than 30 days (9-18). Despite all the discussions, recommendations and encouragement on the necessity to promote infection control measurements, to increase medical preparedness against a future pandemic threat and to intensify research efforts on novel immunization strategies and targeted anti-viral agents, the COVID-19 pandemic threat found the frontline paediatric care professionals unprepared, in fact. They were requested to fight on the frontline, in parallel to their colleagues in adult medicine, without proper scenario-based, undergraduate or postgraduate medical education, no successful targeted therapeutic agents and no effective management and prevention strategies against the new virus, SARS-CoV-2; for this reason, the message by the PVSG at the beginning of the current COVID-19 pandemic threat was referred to the humanitarian and solidarity role of the front line health medical and nursing professionals as well as their pragmatic needs (Table I).

To date, in Greece, a country, which until March 30th, 2020 had 1,212 cases and 46 reported deaths with confirmed SARS-CoV-2 infection (19), the aim to increase the preparedness of the frontline paediatric care professionals in a short period of time has focused on advancing infection control measurements in primary, secondary and tertiary paediatric care. Paediatric care professionals in the COVID-19 reference centres, as well as in general paediatric departments and neonatal units all over the country have attended scenario-based educational interventions. These evolving educational interventions have been organized by the local Hospital Committees for Infectious Diseases in collaboration with the COVID-19 reference centres in Greece and the National Public Health

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Table I. Message by the Paediatric Virology Study Group (PVSG) on the recent COVID-19 pandemic threat - Wednesday, March 11th, 2020.

In the light of the recent COVID-19 pandemic threat, we would like to express our support to the health personnel, medical and nursing, which has been called in every hospital, medical and health unit, worldwide, to offer its services with self-sacrifice in the fight against SARS-CoV-2. Health professionals on the frontline have been requested to manage, counsel, reassure, inform and guide their patients having as a principal aim the effective protection of public health. In anticipation of the required new therapeutic and preventative tools against this new virus, their key contribution, sense of responsibility and dedication to humanity have been exemplary, indeed, and should be highlighted as an outstanding example of the implementation of the value of humanitarianism and solidarity into clinical practice.

Organization over the last month, while paediatric medical and nursing personnel have been encouraged to attend international webinars on COVID-19. Moreover, additional changes have been tried to be performed regarding the development of triage in paediatric emergency settings, the usage of personal protective equipment (PPE), appropriate decontamination and isolation facilities, as well as general paediatric equipment, negative pressure rooms in tertiary paediatric care as well as new beds in paediatric intensive care units (PICU). Recently, at the 'Aghia Sophia' Children's Hospital in Athens, the Paediatric Infectious Diseases Unit 'MAKKA', which ceased to treat children with infectious diseases on August 2014, was scheduled to re-open, with a capacity of 20 beds - including 2 beds under negative pressure - and admit paediatric cases with COVID-19.

The fact that these 'last-minute' changes are in the correct direction is really encouraging. The future will show - for one more time - if these changes will promote further changes in an organized, evidence-based, effective manner or not. As the clinical course of the SARS-CoV-2 infection in the majority of paediatric population is asymptomatic or mild, paediatric preparedness and current therapeutic protocols for children seem that will not be eventually needed (20-22). If this estimation is proven in the ensuing future, for paediatric health care professionals, the COVID-19 threat will remain only an excellent virtual preparedness exercise, formulating major incident plans for potential paediatric victims. This exercise, though, should re-evaluate the priorities in medical education and clinical practice, especially in a country, like Greece, which still encounters the consequences of the 10-year financial crisis of 2010.

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