



Practice development

Nursing initiatives in the emergency department during the COVID-19 pandemic: The COVID-19 Update Team

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ABSTRACT

The COVID-19_pandemic is a challenge facing healthcare systems worldwide. Emergency Departments are frontline units that need to be properly prepared to protect clinicians from SARS-CoV-2. During the first wave of the pandemic, four emergency nurses of the Nicosia General Hospital in the Republic of Cyprus formed the COVID-19_Update Team. The team aimed to update guidelines about infection prevention and management of COVID-19 disease and inform health care professionals of the emergency department. This report describes the initiatives developed by this team and its future plans.

Keywords: COVID-19 pandemic, SARS-CoV-2, emergency department, nursing initiatives, protective measures

THE PANDEMIC OF COVID-19 IN THE REPUBLIC OF CYPRUS

On the 11th of March 2020, World Health Organization (WHO) announced the Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2) pandemic; two days earlier, the first 2 cases of the coronavirus disease 2019 (COVID-19) were diagnosed in the Republic of Cyprus (Koios: Covid-19 spread in Cyprus, 2020). Cyprus is a small country in the East Mediterranean basin with a population of 875.900 (Statistical Service of Cyprus, 2018). The global spread of COVID-19 has been putting enormous pressure on healthcare systems around the world, including Cyprus; this is true especially for Intensive Care Units (ICUs), expected to effectively support those most severely affected by SARS-CoV-2 (Li et al, 2020). Emergency Departments (EDs) are also deemed as crucial frontline units towards management of the pandemic (Hou et al., 2020). Triage nurses and physicians are those obtaining a thorough history from all walk-in patients, even when COVID-19 symptoms are absent. Therefore, EDs are a key line of defense through early recognition and timely isolation of SARS-CoV-2 positive cases, thus reducing the risk of contamination for other patients and healthcare providers. In response to COVID-19 pandemic, administrators of EDs faced several challenges, such as additional precautions for infection control (Kim et al., 2020), safety issues



amongst staff (Chua et al., 2020; Möckel et al., 2020), educational needs and clinical leadership (Whitwell et al., 2020).

EMERGENCY DEPARTMENT OF THE NICOSIA GENERAL HOSPITAL

The Nicosia General Hospital (NGH) is the largest public tertiary hospital in the Republic of Cyprus, based in Nicosia, the capital city of Cyprus. Subsequently, the Emergency Department (ED) of the NGH is the reference center for serious cases; 12 physicians and 72 nurses are employed there to provide services to over 140 patients per day who visit it. During the first wave of the pandemic, this ED continued to offer emergency services to all patients in need, while at the same time it also served those reporting COVID-19 symptoms. According to the severity of their symptoms, patients with COVID-19 were either admitted to ICU or COVID-19 unit in the NGH, transferred to the COVID-19 referral hospital, or discharged. Thus, the clinical nurse manager of the ED on each shift was responsible for maintaining a safe work environment for staff, as well as a therapeutic environment for service users. That included at the same time protecting clinicians and COVID-free patients from contracting SARS-CoV-2, and safely managing COVID-19 patients.

The COVID-19 Update Team

On the 30th of March 2020, four ED staff nurses (one Advanced Nurse Practitioner [ANP]-PhD candidate, and three master's students in Advanced Emergency and Critical Nursing Care), each with more than ten years of clinical experience in the specific department, proposed to the clinical nurse manager of the ED the formation of the "COVID-19 Update Team". The following factors were pivotal towards the conception of such a team:

- Worldwide recognition of the severity of the COVID-19 outbreak
- Alarming reports of the spread of the virus to healthcare professionals (International Council of Nurses, 2020)
- Responsibility of the department to prevent clinical staff, medical and nursing students, and non-COVID patients from contracting the SARS-CoV-2
- Accumulating evidence on the protection measures against SARS-CoV-2 and on emerging therapies.

The team would be responsible (a) to gather information on preventive measures and novel therapeutic strategies, (b) prioritize the needs of healthcare professionals for information, (c) present data, in the form of brochures, on the bulletin board of the ED, (d) to provide relevant educational sessions to the healthcare workers of the NGH and (e) to implement guidelines to address safety issues between staff.

One week later, the proposal was accepted by the clinical nurse manager of the ED and the duties of team were established. It was not unusual for the ED to be the first department to pursue such educational goals; emergency nurse-led educational programs in the management of sepsis and ischemic stroke had already been running in the NGH.

Although the case rates in the Republic of Cyprus were low (Koios: Covid-19 spread in Cyprus, 2020), the pandemic was in full blow throughout China and Europe. So, on the 10th of April 2020, the team decided to start its meetings, in order to determine initial actions. The meetings were scheduled to take place twice a week (Tuesday and Friday), in a place available to the staff of ED but out of working hours.

FIRST TASKS OF THE COVID-19 UPDATE TEAM: INFECTION PREVENTION AND MANAGEMENT OF DISEASE AMONG HEALTHCARE PROFESSIONALS

Howard Catton, the International Council Nurses' Chief Executive Officer, stated that, since March 2020, the 1500 nurses who died in hospitals around the world from SARS-CoV-2, are more than those who died during the First World War (International Council of Nurses, 2020). In the beginning of the pandemic, it was reports from China that first demonstrated COVID-19 cases among healthcare professionals (Zhan et al., 2020). Based on that early experience, the team decided that, during the first wave of the COVID-19 outbreak, priority should be given to inform healthcare professionals in taking the necessary protective measures.

First, the members of the team focused on collecting data on the effective protective measures from WHO, the US Centers for Disease Control and Prevention (CDC), the Cyprus Ministry of Health and PubMed (part of the United States National Library of Medicine), given that the pandemic was ongoing, and information was accumulating rapidly. Both WHO and CDC provided guidelines on COVID-19, which were adapted by the Ministry of Health of the Republic of Cyprus. The latter has the responsibility of updating information for Cyprus related to the pandemic and ensuring that their website contains useful announcements, decrees, guidelines for workplaces, press releases etc. in Greek, English and several other languages (Ministry of Health. Republic of Cyprus. New Coronavirus disease [COVID-19], 2020).

Second, the team performed a thorough investigation on the adequacy of personal protective equipment (PPE) available to the ED personnel, such as N95 and surgical masks, full face shields or goggles for eye protection, disposable gloves and gowns. The administration of the NGH had earlier organized training courses for the clinicians of the ED on the use of PPE and other protective strategies during patient care. The team also focused on prevention and offered continuous reminders of diligent hand washing, proper PPE use and the significance of equipment and surface disinfection. Moreover, the psychological PPE (P-PPE) was included in the topics discussed. P-PPE regards a group of evidence-based interventions towards protecting psychological well-being of healthcare employees and support them to activate their own resilience coping strategies (Maben & Bridges, 2020). Specifically, the aim of P-PPE is to reduce mental and psychological distress and promote peer support and solidarity among employees, psychological safety, while relevant interventions are incorporated into everyday routine without increasing workload in healthcare workers (IHI, 2020).

Lastly, the team developed guidelines for the protection not only of the ED staff but also of patients visiting ED. In particular, the team developed instructions on the secure transport of staff in and out of the ED. In addition, the team presented guidelines on the steps to be taken in case of a staff member getting infected with the virus.

To fight the pandemic, our ED had to adjust to the new reality. The team implemented a collaborative strategy, addressed challenges in determining the education needs of the staff and the infection control management and each member did its utmost for responding to these challenges. Barriers to this practice development were overcome very soon as managers and ED personnel accepted the need for defining behaviors and procedures related to the pandemic and they embraced the COVID-19 Update Team. Nevertheless, it would be valuable to study the effectiveness of its actions after the end of the pandemic.



CONCLUSIONS

At the time of writing this article (the 30th of November 2020), the Republic of Cyprus is experiencing the 2nd wave of the pandemic, as is the rest of Europe. From the 1st of October 2020 until the 30th of November 2020, there were 8793 new cases and 27 deaths (Koios: Covid-19 spread in Cyprus, 2020). EDs are again the first hospital departments to manage suspected SARS-CoV-2 patients, thus exposing their clinicians to a considerable risk of contracting the virus. Several improvements have been made to the Nicosia Emergency Department and it is now better prepared to face the pandemic. The actions of the COVID-19 Update Team have helped in this direction. The team plans to keep up to date through weekly presentations, not only the ED personnel but also healthcare workers of all departments of the NGH; to keep developing and adapting to novel knowledge and clinical protocols related to SARS-CoV-2. The COVID-19_pandemic has forced healthcare systems to change and adapt. Nurses have the knowledge and skills to play a pivotal part towards that goal.

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