




News from the Medical World

-  **Yasemin Durduran¹**
 **Tevfik Küçükkartallar²**
 **Bahar Kandemir³**
 **Fatma Gökşin Cihan⁴**

¹Necmettin Erbakan University, Meram Medical Faculty, Public Health Department, Turkey
²Necmettin Erbakan University Meram Medical Faculty, Department of General Surgeon, Turkey
³University Meram Medical Faculty, Infectious Diseases and Clinical Microbiology Department, Turkey
⁴Necmettin Erbakan University Meram Medical Faculty, Family Medicine Department, Turkey

Corresponding Author:
 Fatma Gökşin Cihan,
 Necmettin Erbakan University
 Meram Medical Faculty, Family
 Medicine Department, Turkey
 mail: goksincihan@yahoo.com

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 konuralptipdergi@duzce.edu.tr
 konuralptipdergisi@gmail.com
 www.konuralptipdergi.duzce.edu.tr

Experiences of A University Hospital During The COVID-19 Pandemic in Turkey

ABSTRACT

Abstract: New Corona Virus Disease (COVID-19) was identified on January 13, 2020, as a result of first researches conducted in patients who developed similar respiratory symptoms in Wuhan Province, China at the end of December 2019. After the diagnosis of the first case on March 10, 2020 in Turkey, 'COVID-19 Action Plan' was prepared to inform all employees to act in coordination and to define their duties and responsibilities. Although the hospitals function mainly on treatment in the epidemic, screening and preventive measures have to gain momentum during the epidemic process, especially for the staff. For this reason, sharing the occupational health and safety policies carried out in hospitals, will contribute the upcoming period. The aim of this paper is to report the efforts to protect the health of both hospital staff and patients during the Covid-19 pandemic in a tertiary hospital. We think that this will set an example for different pandemic processes that may be experienced in future.

Keywords: Pandemics, Masks, Fever, Safety, Covid-19

Türkiye’de COVID-19 Salgın Sürecinde Bir Üniversite Hastanesi Deneyimi

ÖZET

Yeni Corona Virüsü Hastalığı (COVID-19), Aralık 2019'un sonunda Çin'in Wuhan Eyaletinde benzer solunum semptomları geliştiren hastalarda yapılan ilk araştırmalar sonucunda 13 Ocak 2020'de tanımlandı. Türkiye'de 10 Mart 2020 tarihinde ilk vakaya tanı konulmasıyla tüm çalışanların koordinasyon içinde hareket etmesi ve görev ve sorumluluklarının tanımlanması amacıyla 'COVID-19 Eylem Planı' hazırlanmıştır. Her ne kadar hastaneler esas olarak salgın hastalığın tedavisi üzerine işlev görseler de özellikle personel için tarama ve önleyici tedbirler salgın sürecinde hız kazanmalıdır. Bu nedenle hastanelerde yürütülen iş sağlığı ve güvenliği politikalarının paylaşılması önümüzdeki döneme katkıda bulunacaktır. Bu çalışmanın amacı, üçüncü basamak bir hastanede Covid-19 salgını sırasında hem hastane personelinin hem de hastaların sağlığını koruma çabalarını rapor etmektir. Bunun gelecekte yaşanabilecek farklı pandemik süreçlere örnek olacağını düşünüyoruz.

Anahtar Kelimeler: Pandemi, Maske, Ateş, Güvenlik, Covid-19

New Corona Virus Disease (COVID-19) was identified on January 13, 2020, as a result of first researches conducted in patients who developed similar respiratory symptoms in Wuhan Province, China at the end of December 2019. Although the hospitals function mainly on treatment in the epidemic, which is spreading in our country as in the rest of the world, screening and preventive measures have to gain momentum during the epidemic process, especially for the staff. For this reason, sharing the occupational health and safety policies carried out in hospitals, will contribute the upcoming period (1). The aim of this article is to report the efforts to protect the health of both hospital staff and patients during the Covid-19 pandemic in a tertiary hospital. We think that this will set an example for different pandemic processes that may be experienced.

Konya is Turkey's seventh province in terms of population (2). Our hospital is a major health center with 1130 bed capacity, intensive care services, laboratories and 3500 employees. Following the outbreak of COVID-19 cases in the world and the guidelines issued by the Ministry of Health (MoH), preliminary arrangements were made in our hospital with the collaboration of hospital chief physician, occupational health physician, public health, infectious diseases and clinical microbiology departments to protect the hospital staff during the pandemic process.

After the diagnosis of the first case on March 10, 2020 in Turkey (3), 'COVID-19 Action Plan' was prepared to inform all employees to act in coordination and to define their duties and responsibilities. The 'Pandemic Execution Commission' was constituted and the action plan was shared with all medical faculty departments. All physical examinations and interventional procedures, especially those requiring close contact, postponed except emergency conditions and cancer patients. In order to keep the beds ready for the possible cases, hospitalization was reduced in clinics, except for emergencies. The encrypted doors at the service entrances were replaced with sensor doors. In accordance with the MoH algorithm, patient triage was made by measuring body temperature at controlled hospital entrances. Body temperatures of the hospital staff are also measured daily at the entrance. Possible cases were lead to the COVID outpatient clinic, which was isolated from the other areas and designed according to the "Patient management in the Covid-19 outpatient clinic" (4) guideline of MoH, to be evaluated further. The Covid-19 outpatient clinic had isolated rooms for physical examination, blood sample collection and chest x-ray, and had an isolated door, elevator and route for computerized tomography (CT) unit without interfering with other people and staff. In addition, the shortest and most convenient route from inpatient clinics, emergency and intensive care units to CT unit was

marked with orange colored tapes. A lift, which can only be controlled by staff identity cards, is reserved for carrying Covid-19 patients. For patient transfers between the emergency room, clinics and intensive care unit, teams wearing personal protective equipment (PPE) were formed. In intensive care units, necessary arrangements were made to hospitalize isolated COVID-19 patients and to reduce physical contact, patient's physician informed the relatives of the patients by phone. The operating rooms and the hemodialysis unit were also arranged so that possible or diagnosed Covid-19 patients can be operated and dialyzed apart from other patients to prevent contamination. Unless compulsory, attendants were avoided for inpatients in inpatient services, and all patients' needs were provided by the service staff. During the distribution of tasks, besides residents of departments with inpatient services, public health and family medicine residents who do not give inpatient service normally were also assigned to COVID and triage outpatient clinics and emergency services. All staff were informed about possible workplace and shift changes, and alternative lists were created in case of need. In order to maintain the social distance warning messages like "Please leave it empty! Let's protect our social distance" written in big font were attached to all resting and waiting seats in the hospital.

In this process, PPE were supplied continuously. Infection control committee raised awareness by continuous training all staff and sharing up-to-date revised documents. In addition to the ongoing trainings, case management and treatment schemes, evaluation of the healthcare professionals in contact, management of outpatient and emergency patients, and the list of PPE recommended in different situations, products to be used with possible and definitive COVID-19 cases, cleaning and disinfection instructions list was shared with the staff. Posters indicating who should use PPE and putting on and removal instructions of PPE were hung all over the hospital. In order to prevent disruption, PPE distribution was made by signature. Necessary notifications were made about the use of PPE and the approach to the patients in the triage areas. Up-to-date links were added to the hospital website where healthcare workers could get information about protection (5).

At the end of their shift, the uniforms (aprons, scrubs) of the staff were washed at the hospital laundry and staff were warned not to go out with any clothes they use at the hospital. Meals were provided to all staff at the units where they are working. In the meantime, kitchen workers were not allowed to serve in inpatient clinics, and a staff working at that service distributed the food. Staff were regularly warned to maintain their social distances in all areas, not to gather more than 3-4 people in a room according to the size of the room and to use a mask. In order to prevent the risks that

may arise during the transportation of staff, the drivers and staff were informed and a seating arrangement was provided to maintain the social distance in the shuttle. Dormitories have been arranged to accommodate healthcare professionals looking after possible / definite Covid-19 cases.

Covid-19 patients who were referred to our hospital, all patients and accompanying patients who were planned to be hospitalized and / or admitting for other reasons, were informed about the risk of transmission of Covid-19 and information was added to their consent forms as this was a pandemic hospital. The matters to be considered in terms of patient and contact during the follow-up at home were prepared in accordance with the criteria of the MoH and were given to all patients who were sent to the home isolation, as a document.

While hospital is disinfected intensely, places such as elevators and toilets, which have more contamination risk, are cleaned and controlled hourly. Staff working in close contact with suspicious or diagnosed Covid-19 patients or at departments in contact with swabs -like emergency room, intensive care units, outpatient clinics, radiology and microbiology- completed 'Staff symptom assessment form' which was formed by the hospital chief department and occupational health care doctor, daily. In this form, in addition to fever, cough, respiratory distress, sore throat, muscle-joint pain, their psychological symptoms were questioned with five questions. If any sign were marked in this form, the staff was called immediately to be evaluated further. Staff who are suspected contaminated with COVID-19 were evaluated by the 'Healthcare workers covid-19 risk assessment form', which was prepared according to the 'Evaluation of health workers with Covid-19 close contact' algorithm, and followed up by the occupational health care doctor (4). The follow-up

maintained by the "COVID-19 follow-up form" prepared for the 'Covid-19' test positive healthcare workers. In addition, "COVID-19 close contact health worker algorithm", "COVID-19 related staff screening algorithm" were formed. With the start of the staff screening, 3 different lists were prepared; suspicious with contact, antibody screening test positives and proved cases by PCR test. These listed staff were followed up daily.

Interim information and motivation messages were sent to all staff by the hospital management. 'Occupational healthcare office' was located at the ground floor to ensure that staff can reach easily and safely whenever they need. In addition, the 'healthcare workers screening clinic' and the 'healthcare workers psychosocial support office', which was carried out by psychologists to protect the mental health of healthcare workers were arranged. In cooperation with the department of psychiatry, an algorithm was prepared so that psychiatrists can evaluate the staff on the same day when psychologists deem it necessary. A separate room for possible plasma donors was arranged at the same area. These departments were divided physically from other polyclinics. In order to be able to communicate at any time without coming together in the pandemic period, chat groups such as the "health worker safety" WhatsApp group, which includes staff safety committee members and health worker representatives, the COVID-19 WhatsApp group consisting of the relevant clinics and administrators, were created. Thus, the risks and problems were quickly recognized and resolved. Outpatient clinics and services were visited daily by the hospital administration.

We believe that, by above-mentioned measures achieved in our hospital, our hospital staff adapted and were protected at the pandemic period in the best way throughout March and April.

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