

Introduction

In late 2019 the World Health Organisation (WHO) reports of a severe atypical respiratory condition spreading through Wuhan Province China. World wide, National Health authorities and Hospitals were alerted that this condition is a disease caused by a new strain of coronavirus, identified as Covid-19 .

COVID-19. 'CO' stands for corona, 'VI' for virus, and 'D' for disease. Formerly, this disease was referred to as '2019 novel coronavirus' or '2019-nCoV.' The virus was first reported in Europe in the French city of Bordeaux on 24th January 2020 and first reports in Ireland was on 29th February 2020. The patient (Patient Zero) a male student traveling home from Italy was admitted to the National Isolation Unit at the Mater University Hospital Dublin. SVUH Dialysis Nurses and Clinical Engineers provided chronic, acute and emergency dialysis 24/7 during Covid-19.

Discussion

Understanding COVID-19

- COVID-19 is **spread by close person to person contact** through respiratory droplets from speaking, **coughing or sneezing**.
- **Symptoms may appear 2 to 14 days after exposure** to the virus that causes COVID-19. A person does not need to have symptoms to spread the virus.
- COVID-19 can only be diagnosed with a laboratory test.
- An antibody test can show if you were previously infected and if your body has created antibodies in an attempt to defend itself from COVID-19.

In rare cases, the virus can lead to severe respiratory problems, kidney failure or death, so contact your doctor promptly if you have symptoms. Johns Hopkins university Medicine

Most common symptoms

Fever, dry cough, tiredness

Less common symptoms

aches and pains, sore throat ,diarrhoea
conjunctivitis
Headache, loss of taste or smell
a rash on skin, or discolouration of fingers or toes

Serious symptoms

Difficulty breathing or shortness of breath
chest pain or pressure
loss of speech or movement

Precautions

Centres should take patients' temperatures at check-in.

Have separate waiting areas for sick patients that are at least six feet from other patients (some centers allow healthy patients to wait outside or in their cars until it's their turn to be seen)

Patients with respiratory symptoms should be given wear masks to wear and they should be dialysing six feet away in all directions from healthy patients. In some centers, patients with respiratory symptoms may be dialysed in a separate area.

Visitors with signs/symptoms of infection should not be permitted to enter the dialysis center

Use cleaning procedures that kill the coronavirus, along with routine cleaning and disinfection procedures.



Summary

The Department of Clinical Engineering was involved in the design, installation and commissioning of Covid-19 emergency dialysis systems on 4 floors of the Nutley Wing. **A total of 64 treatments were carried out of which 61 were to Covid-19 positive patients.** Infection control , renal nursing and nephrology worked closely with clinical engineers in providing emergency dialysis systems while still maintaining the delivery of the day to day acute and chronic haemodialysis service. Some Patients hospitalised in ICU with Covid-19 developed moderate or severe kidney injury which required CRRT Continuous Renal Replacement Therapies (CRRT)



Clinical Engineers Gagan Singe and Frank Kelly Dialysis Nurses Leilani Uy, and Gladys Sadang in Nutley Wing St Monica's Ward Covid-19 Emergency dialysis station