

Good Practice Recommendations from the Brazilian Society of Nephrology to Dialysis Units Concerning the Pandemic of the New Coronavirus (Covid-19)

Recomendações de boas práticas da Sociedade Brasileira de Nefrologia às unidades de diálise em relação à pandemia do novo coronavírus (Covid-19)

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ABSTRACT

Dialysis units are environments potentially prone to the spread of Covid-19. Patients cannot suspend treatment, and they often have comorbidities, which assigns them a higher risk and worse prognosis. The Brazilian Society of Nephrology prepared this document of good practices, whose technical recommendations deal with general measures that can be implemented to reduce the risk of transmission and prevent the spread of the disease in the unit.

Keywords: Covid-19; Coronavirus Infections; Hemodialysis Hospital Units; Renal Dialysis; Pandemics.

RESUMO

Unidades de diálise são ambientes potencialmente propensos à disseminação da Covid-19. Os pacientes não podem suspender o tratamento, e são frequentemente portadores de comorbidades, o que confere maior risco e pior prognóstico. A Sociedade Brasileira de Nefrologia elaborou esse documento de boas práticas, cujas recomendações técnicas tratam de medidas gerais que podem ser implementadas para reduzir o risco de transmissão e evitar a disseminação da doença na unidade.

Palavras-chave: Covid-19; Coronavirus Infections; Unidades Hospitalares de Hemodiálise; Diálise Renal; Pandemias.

On March 1, 2020, with the confirmation of the second case of coronavirus infection (Covid-19) in the country, the Dialysis Department and the Board of the Brazilian Society of Nephrology (SBN) prepared recommendations for Dialysis Units concerning the epidemic by the new coronavirus. With the pandemic state decreed by the World Health Organization on March 11, other international organizations, such as the Centers for Disease Control and Prevention (CDC), the American Society of Nephrology (ASN) and the Sociedad Latinoamericana de Nefrología e Hipertensión (SLANH), also published recommendations directed to dialysis units on March 10, March 11 and March 13, respectively. In the progress, Brazil entered the epidemiological phase of community transmission of

the disease, when the number of cases increases exponentially and there is no longer the possibility of identifying the transmitting source.

In view of the epidemiological scenario and scientific advances, the SBN updated its recommendations, which are technical indications of good practices and must be adapted to the context and local reality, depending on adequate funding by public managers. The SBN has been striving in search of resources for renal replacement therapy in Brazil at this time of the pandemic.

There is still a scarcity of well-established data on the behavior of the virus and the natural history of the disease,¹ so any changes to this document may be necessary due to other scientific evidence that may appear.

General measures for Dialysis Units²⁻⁵:

- Dialysis units must provide adequate information to their patients and employees about basic preventive measures. One is to emphasize and intensify frequent hand hygiene with 70% alcohol gel or washing with soap and water. It should also educate patients and employees to avoid touching their eyes, mouth and nose without proper hand hygiene; avoid close contact with infected individuals; cover mouth and nose when sneezing or coughing, use a disposable handkerchief; clean and disinfect frequently touched objects and surfaces; avoid sharing personal objects (such as toothbrushes, cutlery, plates and glasses); and, if they are infected, avoid contact with other people, staying at home whenever possible.
- We recommend intensifying the hygiene of objects and surfaces frequently used by the public, such as door handles, chair arms, telephones and elevator buttons. Recent evidence suggests that some coronaviruses can remain infectious on inanimate surfaces for up to 9 days. Disinfecting surfaces with 0.1% sodium hypochlorite or 62-71% ethanol significantly reduces coronavirus infectivity after 1 minute of exposure⁶.
- Patients and employees should be encouraged to avoid, if possible, public transportation.
- We recommend Dialysis Units to encourage their patients' to vaccinate against the influenza virus, in the absence of contraindications.
- Dialysis Units must take administrative measures to reduce, as far as possible, the number of passers-by and companions.
- Companions of patients and staff with respiratory symptoms should be discouraged from attending the Dialysis Unit.
- The Dialysis Unit and its rooms must be well ventilated.
- Meetings via video conference should be encouraged whenever possible.

Care for dialysis patients²⁻⁵:

- Suspected cases must receive medical evaluation and guidance before entering the dialysis site. After assessment, the conduct should be taken in accordance with the patient's clinical condition and with the recommendations in

force by the local health authorities and the Ministry of Health.

- Before attending to a suspected or confirmed case, the healthcare professional must wear a waterproof disposable apron, surgical mask, disposable cap, gloves and goggles.
- The use of a surgical mask is recommended for patients with respiratory symptoms and their companions throughout their stay in the dialysis unit⁴.
- The multidisciplinary clinical care team must wear a surgical mask. It is also suggested that the other employees (maintenance, cleaning, receptionists, and security guards) of the dialysis unit use a surgical mask. The surgical mask should be replaced with a new one whenever it is wet.
- Healthcare professionals at the Dialysis Unit responsible for the assistance of confirmed or suspected cases should wear masks type N95, N99, N100, PFF2 or PFF3 whenever they are going to perform aerosol-generating procedures, such as, for example, orotracheal intubation, non-invasive ventilation, cardiopulmonary resuscitation or manual ventilation before intubation.
- If possible, assign a toilet for the exclusive use of the suspected case. If this is not possible, clean the normally touched surfaces of the toilet (faucet, door handle, trash can cover, counters, light switch) with soap and water or disinfectant, according to the procedures described in Technical Note 26/2020/SEI/COSAN/GHCOS/DIRE3/ANVISA⁷.
- If the patient is unable to wear a surgical mask because of breathing difficulties, towels should be provided and asked to cover the nose and mouth when coughing or sneezing. The towels used must be collected and destined for cleaning and disinfection, or disposed in a milky white bag for management as group A solid waste, according to the RDC ANVISA No. 222 guidelines, of March 28, 2018.
- In Dialysis Units with a private isolation room, patients with suspected or confirmed Covid-19 infection should be dialyzed in an isolation room.
- In Dialysis Units where there is no room for isolation, patients with suspected or confirmed Covid-19 infection should preferably be dialyzed

in a separate ward and on the last shift. The patient must be separated by at least 1.82 meters from the nearest patient (in all directions)³.

- In Dialysis Units with many suspected or confirmed cases, it is recommended, if possible, an exclusive dialysis shift or the opening of additional shifts.
- We suggest considering single use of the dialyzer in patients with confirmed or suspected cases of Covid-19.
- The suspected case should be encouraged to perform hand washing or frequently use alcoholic solution for hand hygiene, especially after coughing or sneezing, making available the necessary supplies.
- During the dialysis procedure, keep the patient with a surgical mask, as well as patients close to the one under suspicion of infection.
- Regarding the duration of isolation and precautionary contact measures in confirmed cases, the duration of isolation and the time of discontinuation must be an individualized decision on a case-by-case basis. Some factors should be considered in this decision-making process, such as the presence or disappearance of symptoms related to the infection, date of the infection and the clinical and laboratory status with a confirmatory test (PCR) for Covid-19.
- In patients with Chronic Kidney Disease on dialysis, SBN does not recommend measures that reduce the time or frequency of dialysis

treatment in suspected or confirmed cases of Covid-19 infection.

The proposed measures serve to inform and alert, preventing the spread of the virus and promoting preservation of care to the population with Chronic Kidney Disease undergoing dialysis treatment.

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