

Knowledge, Attitudes and Perceptions of COVID-19 among Chronic Hemodialysis Patients in the Nephrology Department of the Amirou Boubacar Diallo National Hospital (HNABD) in Niamey

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Abstract

Original Research Article

Introduction: Chronic haemodialysis patients and kidney transplant patients are vulnerable patients with a high risk to develop severe complications of Covid-19 [2]. The objective of our study is to determine the knowledge, attitudes and perception of COVID-19 and vaccination of chronic hemodialysis patients in the nephrology department of the Amirou Boubacar Diallo national hospital in Niamey. **Method:** This is a study on the knowledge, attitudes and perceptions of COVID-19 of chronic haemodialysis patients in the nephrology department of the Hôpital National Amirou Boubacar Diallo (HNABD) in Niamey. **Results:** Our study included 200 chronic hemodialysis patients. The average age was 46.44 +/- 13 years, with extremes ranging from 18 to 80 years. Almost all patients (98%) had heard of COVID-19. However, 9.50% did not believe in the existence of COVID-19, and only 5% had witnessed cases of people with the disease. More than the majority of patients were aware of the clinical manifestations of COVID-19, the modes of transmission, and barrier measures. A third of patients (32%) claimed that there was a treatment for this pandemic. Only a small number (2.5%) of patients were confined. 38% of patients said that the dialysis room would be a risk factor for contamination. And 41% of patients were in favor of vaccination. **Conclusion:** The existence of COVID-19 is no longer in doubt, and Nigerien haemodialysis patients have a good level of knowledge about covid-19. Awareness-raising about barrier measures, disease surveillance methods and, above all, vaccination should be increased.

Keywords: Knowledge, attitudes and perceptions, COVID-19, chronic hemodialysis patients, Niamey.

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INTRODUCTION

Coronavirus disease 2019, or COVID-19 is an emerging infectious disease caused by a coronavirus strain called SARS-CoV-2. First reported in Wuhan, Hubei province, China, in December 2019, it has spread around the world like wildfire. Niger recorded its first case of COVID-19 on March 19, 2020 [1]. Patients with chronic kidney disease (CKD), and particularly those receiving dialysis or a kidney transplant, are among the fragile patients at high risk of developing severe complications during Covid-19 [2]. In Niger, since the advent of this pandemic, no study has been carried out to assess the level of knowledge and prevention of incident CKD patients on dialysis.

MATERIALS AND METHODS

The study took place in the nephrology department of the Hôpital National Amirou Boubacar Diallo de Niamey (HNABD). It was a CAP study involving two hundred renal failure patients with more than 3 months of hemodialysis at the time of the study. Criteria for non-inclusion were lack of consent to the study, and patients admitted for emergency hemodialysis. A pre-tested questionnaire was used to collect data from patients prior to the field study.

The respondents were informed of the purpose of the study and a written consent was obtained prior to the interview. Data analysis and processing were carried

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out by using SPSS 20 software. Respect for anonymity was taken into consideration during data collection, in accordance with the rules of medical ethics.

RESULTS

Our study included 200 chronic hemodialysis patients. The mean age was 46.44 +/- 13 years, with extremes ranging from 18 to 80 years. Almost half (46%) of patients had attended school, and almost all (98%) had heard of COVID-19. The most cited channel of information was television (96%). Nevertheless, 9.50% did not believe in the existence of COVID-19. 69% of patients were aware of the manifestations of COVID-19, and the main signs cited were coughs and colds. 57% of patients said they knew about barrier measures. The main means of prevention cited were following hygiene rules (26%), wearing a mask regularly (38%), and keeping a physical distance of one meter between people (27%).

However, 32% claimed that there was a cure for the pandemic. 2.5% of respondents had been confined for an average of 15.18 days, with extremes ranging from 8 to 20 days. From the 3rd day onwards, confinement had caused anxiety and sadness in 40% of respondents, and financial and psychological difficulties in 80% of cases. 38% of patients said that the dialysis room would be a risk factor for contamination. And 41% of patients were in favor of vaccination.

DISCUSSION

Sociodemographic aspects

In our study, the average age was 46.44 +/- 13 years, with extremes between 18 and 80 years. The most common age group was between 51 and 60. Hebibi in France and Ben Achour in Tunisia reported average ages of 70 and 63.9 respectively [3,4], while Charles Mbele Onana in Cameroon reported an average age of 46.9 [5]. This variability in age shows that end-stage renal disease occurs at an early age in countries with limited resources. This may be explained by poor health coverage, delayed diagnosis of kidney disease, but also by reduced life expectancy in these countries. 74.5% of our patients were male.

This predominance of males is mostly found in the literature and could be explained by fact that chronic renal failure is more frequent in men than in women [3-5].

Knowledge of covid-19

Our study revealed that 98% of patients had heard of COVID-19. The most cited information channel was television (96%). This may be explained by the government's media coverage of COVID-19 in our country. The majority of patients believed in the existence of COVID-19. The same observation was made by Olayinka in Nigeria [6] and Essouga in

Cameroon [7]. 69% of patients claimed to know how the disease manifests itself, and the main signs cited were coughs and colds, fever and headaches. Our results further reflect the impact of government awareness campaigns.

The main ways of prevention cited were observing hygiene rules (26%), wearing a mask regularly (38%), and keeping a physical distance of one meter between people (27%). For Halima [6], 83.2% observed hygiene rules and wore masks regularly, and 80.2% maintained a physical distance of 1 metre between people. Our results are well below those of Essouga [8] in Cameroon, where regular hand-washing accounted for 75%.

Among the respondents, 32% stated that a treatment against COVID-19 was available. Chloroquine (29%) and vaccination were mentioned by 59%. Our results are better than those of Mohamed K. from Saudi Arabia, where 4% said there was no treatment.

Attitude and Perception of Confinement

2.5% of respondents had been confined. The average duration was 15.18 days, with extremes ranging from 8 to 20 days. 20% of those confined had begun to feel bored from the 3rd day onwards, and feelings were predominantly anguish and sadness, with 40% each. Indeed, studies carried out in China show that the pandemic and the sanitary measures taken to contain it, such as quarantine (or confinement), put pressure on mental health.

A study of more than 52,000 people using a ad hoc scale measuring a wide range of psychological symptoms (anxiety, depression, compulsion, etc.) showed that 35% of participants had mild to moderate symptoms, and 5% had symptoms requiring medical attention [9].

Financial difficulties were present in 80% of cases. Indeed, confinement had worsened the living conditions of these patients, who were already in an extremely precarious state.

38% of respondents said that the dialysis room was a risk factor for COVID-19 contamination. The close proximity of dialysis rooms, frequent contact with health workers and the repetitive nature of dialysis sessions all contribute to increasing the risk of contracting this disease. 41% of our patients were in favour of vaccination. This relatively low rate reflects a certain mistrust observed in the population.

CONCLUSION

The existence of COVID-19 is a reality, and Nigerien haemodialysis patients have an acceptable level of knowledge about covid-19.

It is therefore necessary to step up awareness campaigns on barrier measures, means of monitoring the disease and, above all, vaccination.

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