

## Experience in Setting up a Psychiatric Epidemic Treatment Center at COVID 19 in Senegal

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### Abstract

Senegal, like other countries in the world, is facing the Covid-19 pandemic. An unprecedented and unforeseen situation has arisen in a West African sub-regional reference hospital specialising in the treatment of psychiatric pathologies. During their hospitalisation for psychological decompensation, patients were contaminated with the Covid-19 virus. Because of the persistent stigma carried by patients undergoing psychiatric treatment and the impossibility of being admitted to conventional treatment centres, the authors explain the experience of setting up an epidemiological treatment centre in a psychiatric setting.

**Keywords:** COVID-19; Epidemic Treatment Center; Psychiatry; Senegal

### Introduction

Since 2 March 2020, Senegal has been confronted with the SARS-Cov-2 coronavirus epidemic, as have other countries in the world. Several localities in the country have recorded cases of contamination. As part of the response to this global scourge, conventional epidemic treatment centers (ETCs) have been set up and contacts of a confirmed case of Covid-19 are usually isolated and confined. In Senegal, by May 2020, all Covid-19 positive persons with or without symptoms, mild or severe, have been managed in ETCs. Contact persons are confined to standard accommodation (hotels, hostels, etc....).

During the month of April 2020, an unexpected situation arose that was not taken into account in the national pandemic response strategy in Covid-19. This was the presence of a Covid-19 infection in a psychiatric hospital in the Senegalese capital. In France, several establishments had very quickly created dedicated units (floor or even building in isolation) to care for patients suffering from psychological disorders and Covid-19 [1]. In the country's only sub-regional public referral facility, specialised in the care of patients with mental disorders, the reorganisation of care related to the epidemic had not yet been put in place. Other countries in the world have been brutally confronted with health crises in psychiatric settings. The Chinese experience has highlighted the vulnerability of psychiatric hospitals to the risk of transmission to Covid 19, reporting a cluster in a psychiatric hospital in Wuhan with 50 patients and 30 carers [2]. The lack of preparation, coordination and resources to deal with the epidemic in psychiatric settings has weakened the management of hospitalised patients. On 20 April 2020, the National Psychiatric Hospital of Thiaroye (CHNPT) recorded its first covid-19 positive case. The "zero" case of covid-19 was a care assistant. Sixty-nine people were reported as contacts of case zero, including thirty-five hospital staff who were confined to hotels in the capital. Twelve mental health inpatients who were also 'contacts' of case zero and their companions were confined within the CHNPT in two requisitioned hospital wards.

After virological tests, nine people were found to be infected with covid-19. They were two nurses, a ward girl, three cleaners, an orderly and two patients in the ward where case zero was working. This unusual situation in a psychiatric environment, the specificity of psychiatric management and the clinical state of certain patients who were still unstable did not allow them to be admitted to conventional Epidemic Treatment Centers (ETCs). Indeed, suspected cases were collected by the local health district and following positive tests, patients were referred to the dedicated conventional epidemic treatment centers.

From then on, an adapted management strategy became necessary. The Senegalese Ministry of Health and Social Action therefore decided to set up a “specialised” ETC within the CHNPT for covid-19 positive psychiatric patients. The two patients with psychiatric disorders who had previously been hospitalised in the facility were kept there for the management of their Covid-19 infection.

This was the first experience of setting up an ETC in a psychiatric setting in Senegal. There was no previous experience of this in Senegal. In experience and fear in relation to the management of covid-19 positive psychiatric patients in conventional ETCs characterised the context.

The authors will review the process of setting up the first psychiatric epidemic treatment centre in Senegal and the management of cases in the ETC.

### Presentation of the structure

Created in 1961, the psychiatric hospital of Thiaroye remained for a long time a dependency of the psychiatric department of the Fann University Hospital. In this context, its vocation was to take care of “irrecoverable” chronic patients from the Fann University Hospital and former asylums (Lazaret of Saint-Louis, Koutal of Kaolack, Kénia of Ziguinchor, etc.).

Law n° 75 - 80 of 9 July 1975 relating to the treatment of mental illnesses and the internment regime of certain categories of insane persons and its application decrees create a specialised closed institution at Thiaroye. These texts formally organised the internment of patients who were the subject of an administrative or judicial decision.

With the 1998 hospital reform, the hospital was made a level 3 Public Health Establishment by decree N°2000-1167 of 29 December 2000 under the name of Thiaroye National Psychiatric Hospital. A sub-regional reference structure specialising in the care of patients with mental disorders, the CHNPT now has a capacity of 215 beds.

### Process of setting up the ETC

Twelve psychiatric patients, including two positive cases and ten contact cases, were isolated in a hospital ward initially identified for suspected cases as soon as their status was announced. The initial management required the immediate creation of a local epidemic management committee at Covid-19 within the CHNPT. The committee held daily meetings to develop an appropriate strategy to deal with this unprecedented situation. Responders immediately received accelerated theoretical and practical training in the hospital’s affiliated health district and in conventional treatment centres. Issues related to safety, hygiene, nutrition, waste management, resuscitation, human resources, infrastructure and equipment were addressed. A report on the initial state of the ETC is submitted to the Ministry of Health. The structure was visited by members of the mental health division of the Ministry of Health and Social Action and an infectious diseases specialist from the national reference centre. The objective of the visit was to support the facility with management kits and to define the patient circuit. During the visit, the ETC premises were identified with a capacity of twelve beds, i.e.:

- Four two-bed cabins
- Four four-bed shared rooms

- A dressing room
- A nurse on-call room
- A doctor's on-call room
- One hygienist on-call room
- Toilets (M/F)
- A pharmacy room
- Undressing area
- A laundry room
- A kitchen
- Two different accesses are also identified, which can be used to set up a secure circuit for care staff and patients.

In addition, fear and uncertainty in the management of Covid 19 positive psychiatric patients has developed among the hospital staff.

At the beginning of the care of patients, the nursing team was reluctant and understaffed. The fear of accessing the premises at the risk of being contaminated was almost present among all the workers. This fear was present among the security staff, the surface technicians and the administrative staff who feared being contaminated in turn. Indeed, frontline health care workers face many challenges, such as direct exposure to patients with high viral loads, exposure to the risk of contamination, physical exhaustion, adapting to rigid work organisations, managing material shortages, unusually high numbers of deaths among patients, colleagues or relatives, and ethical issues related to decision making in a stressed health care system [3]. The local management committee organised a day of awareness raising and training on the epidemic, which resulted in better involvement of all staff.

Security guards and surface technicians were equipped with personal protective equipment (PPE). They were responsible for monitoring patients on a permanent basis and for cleaning the premises. The hospital hygienists assisted the workers in the process of dressing, undressing and decontaminating the premises in accordance with the recommendations. Green, sterile and "red" contaminated areas were demarcated. Waste was collected in two drums and incinerated in an isolated site within the hospital. The kitchen provided meals to patients in disposable cutlery in a hygienic manner. Patients were managed simultaneously by psychiatrists and infectious diseases specialists from a conventional ETC. The doctors were supported by nurses and nursing assistants. The tests were initially performed by the health district team, after which the pharmacist-biologist, assisted by a technician trained in the affiliated district, took the samples from the patients. No serious cases were noted among the Covid-positive psychiatric patients during the management.

The day care team consisted of:

- An Infectiologist
- A psychiatrist
- A general practitioner
- A CTE major

- A state nurse
- A nurse's assistant
- A hygienist
- A maintenance officer.

The night shift was provided by the hospital's Emergency Department (ED) team, which was reinforced with human resources.

The pharmacy was responsible for the permanent availability of PPE and stock management.

At the end of the fourteen days of isolation, the test results of the ten contact patients were negative. Patients who were still psychiatrically unstable were referred to the hospital's inpatient wards for further treatment. The remaining patients were discharged home.

The two Covid-positive psychiatric patients were successively tested negative after twenty and thirty days of treatment. One of them was still psychiatrically unstable and continued to be treated in hospital. The other patient went home.

A few days later the facility received another suspected psychiatric case, tested positive for Covid, who also had multifocal TB. The same management pattern was followed for the third case registered at the psychiatric hospital.

The institution received further support from the health authorities for individual and collective protection measures.

The hospital's local epidemic management committee continued to evaluate the management system in place with weekly meetings. An expression of need for additional human resources involving Red Cross agents, equipment, care and protection materials was transmitted to the competent authorities for better management of subsequent psychiatric cases positive to Covid 19.

### Major difficulties encountered

The ETC encountered difficulties in its care, marked by the fear that had won over the workers at the beginning and which had repercussions on the supervision of patients who moved freely within the hospital, exposing the staff. The ETC premises were also not cleaned regularly due to the stigmatisation of patients.

Staff also had problems with the supply of consumables (masks, gloves, personal protective equipment) which were not available in sufficient quantities. Other major difficulties included the lack of resuscitation beds and a shortage of specialists (resuscitators, infectious diseases specialists, internists). Human resources were insufficient. Medical equipment, such as electrocardiograms and resuscitation equipment necessary for proper management, were not available.

The National Psychiatric Hospital in Thiaroye maintained the isolation and management of possible suspected and positive Covid-19 cases. The aim is to avoid being surprised by other similar cases at a later stage. The local alert and vigilance committee for the response continues to hold regular coordination meetings. Barrier measures are respected by staff and clients who use the facility.

### Conclusion

Senegal experienced its first case of Covid-19 infection on 2 March 2020. A national epidemic management committee (NEMC) was set up very early on to organise an effective response to the epidemic. An unprecedented and unforeseen situation arose in a national and sub-regional reference hospital for the treatment of mental patients. On 20 April 2020, the National Psychiatric Hospital of Thiaroye

recorded its first case of Covid-19. The zero case had infected mental patients undergoing treatment for psychic decompensation. This situation was not taken into account by the NEMC in their response strategy. A special ETC was created within the structure to deal with the management of psychiatric comorbidity with Covid-19.

Based on the experience of managing psychiatric patients with Covid-19 with the establishment of a special ETC at Thiaroye Psychiatric Hospital, we can say that this situation was unexpected. Fear and uncertainty set in among the carers and the administrative and technical staff. The management of these cases of contamination showed us our limits in the management of infectious co-morbidities in patients suffering from psychiatric disorders in the context of an epidemic. The structure as well as the health authorities of the NEMC had not taken this possibility into account. It seems necessary for the health authorities to ensure that a suitable and permanent framework is set up within the facility, equipped to prevent a similar situation in the future.

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