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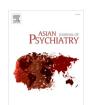
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# Prospective survey of psychiatric patients during the first confinement of the COVID 2019 pandemic

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#### ABSTRACT

In the early steps of an emerging infectious disease epidemic such as Covid-19, uncertainties about the nature of the disease, its spread and impact can lead to emotional distress. In addition, the studies on confinement during an epidemic have shown a psychological impact of this measure on the feelings of anxiety and depression in the general population.

Method: We assessed the psychological health of 550 patients followed up in outpatient psychiatry, via a pandemic-related teleconsultation during the first confinement period between March and June 2020. Patients were assessed at the beginning and at the end of the confinement on their personal situation, social relationships, professional activity, anxiety and mood. We also evaluated patients' symptomatology and their quality of life. Results: Patients were well informed about Covid-19 via the media and complied with the confinement and barrier procedures. They appreciated the phone-calls and the teleconsultation follow-up. A small proportion of patients were completely socially isolated mainly at the beginning of the confinement (10%).

There was no difference between the beginning and the end of the confinement in terms of depressive and anxiety symptoms or quality of life. The women were more anxious and depressed than men. Only smoking was significantly increased during this period.

*Conclusion:* The expected and feared health catastrophe in psychiatry during this first phase of the pandemic in 2020 did not occur. Will the psychiatric wave appear in the "post- pandemic", the future will tell.

## 1. Introduction

The Covid-19 pandemic has been raging around the world since december 2019, resulting in the deaths of nearly 3 million people worldwide and 100,000 deaths in France by April 2021.

China was the first country to apply, among other solutions, containment and home care strategies to control the pressure on the health care system (Lu et al., 2020; Wang et al., 2020). Following other

countries (such as Korea and Italy), France decided on 17 March 2020 to apply this measure, adapting it to the French population in order to reduce the spread of the virus through the general population. In the early stages of an emerging infectious disease epidemic, such as COVID-19, uncertainties about the nature of the disease, its propagation and its impact, but also the annoyance, isolation and difficulties in accessing medical services can lead to emotional distress. In addition, studies of epidemics that have required containment have shown the

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psychological impact during containment, which increases with the duration of confinement. These restrictions showed that they have a negative repercussion on the mental health of different categories of people. For example, non-essential workers were obliged to work at home (38% of the global population) resulting in major psychological distress (Szcześniak et al., 2021). Thus, when isolation is prolonged over periods of 4-6 months, anger (16.6%) and anxiety (7.6%) are found in the general population. In the post-pandemic period, there is also an increase of 7% in depression and 4-41% in post-traumatic stress disorder (PTSD). Low socio-economic status, interpersonal conflict, low social support, being female and low resilience are the main risk factors for developing psychiatric disorders according to Mowbray et al. (Mowbray, 2020). In the post-pandemic period, these authors strongly recommend the development of preventive monitoring of psychiatrically vulnerable patients. Incoherent and contradictory information (via the media and social networks) is also a source of stress, as shown in a study by Purgato et al. in 2018 (Purgato et al., 2018). Thus, after the terrorist attack in Boston during the marathon, an increase of 3-4 times in neurological disorders was noted (Guerriero et al., 2014; Torales

An Egyptian study in May 2020 (El-Zoghby et al., 2020) on a sample of 510 adults from the Egyptian population through an anonymous survey assessed the effects of the Covid-19.

pandemic. The pandemic event was considered a severe impact for 41% of the sample, leading to increased stress at work (34.1%), at home (62.7%) and financially (55.6%). Only 24% felt supported by friends and 40.6% by family. More than half felt depressed and terrified by the pandemic (50.5%). Another Algerian study surveyed a general population sample of 678 people (40.3% female), using an online questionnaire during the first wave of the Covid-19 pandemic between 23 March 2020 and 12 April 2020. 50.3% of subjects were anxious and 46.6% had a sad mood and ruminated all day about the pandemic and how to protect themselves from it; 87.3% found it difficult to follow containment recommendations and reported changes in their daily life (time in bed, reading, time spent on the internet), an increase in handwashing 10 times a day in 51.77% and 36.73% between 10 and 20 times a day (Madani et al., 2020). Thus, communication during these pandemic episodes used as a prevention and detection tool has a decisive role. If the impact of a pandemic has been evaluated on the general population, what about the population of patients followed in psychiatry? This is the question we asked ourselves in our Ville Evrard hospital located in the department of Seine Saint- Denis, the poorest department in France in economic terms.

The objective of this survey in our hospital was to evaluate the quality of information on the Covid-19, the impact on the consumption of addictive products (alcohol, tobacco, cannabis), the appearance of anxiety-depressive symptoms, and the quality of life of the patients, in order to better understand the effects of confinement on the health and well-being of the patients followed in psychiatry.

## 2. Method

From the beginning of the containment, a teleconsultation procedure was set up to allow a clinical monitoring of psychiatric patients at the Ville-Evrard Hospital in a simple manner and in a secure medical setting during the epidemic and containment period from 30 March to 30 June 2020.

The prospective survey carried out by doctors, nurses and psychologists from the medical-psychological centres (CMP), took place over 3 months (April to June 2020) by means of two 10-minute interviews at the end of a standard appointment between April and June. It consisted of a semi-structured interview and standardised clinical scales. This remote management was part of telemedicine, which is recognised and recommended by the French health authorities. The interview was composed as follows:

- A collection of socio-demographic data (gender, age, level of education, marital status with or without children, number of people in the household)
- A semi-structured interview evaluating the impact of confinement on life habits during confinement, evaluating social relations, information on COVID, respect for barrier gestures and confinement, leisure activities, financial aspects
- An anxiety visual analogue scale (VAS) rated from 0 to 10
- An anger VAS scored from 0 to 10
- A depression VAS for rated from 0 to 10 And by 3 hetero-evaluation scales:
- Depression MiniDiag (MINI: Mini International Neuropyschiatric Interview) (Sheehan et al., 1998),
- CGI severity (Guy, 1976),
- GAF (Global Assessment of Functioning Scale) (L'évaluation clinique, 2021)

The questionnaire was registered with the authorities under INDES No: MR 47,141,50420 with the authorities. Patients gave oral consent not to object.

#### 3. Results

## 3.1. Sociodemographic characteristics

550 outpatients aged 46.40 (14.35) years, (53.1% of women;n = 292) followed at Ville- Evrard Hospital responded to the questionnaire, The majority of patients were without profession (n = 320; 58.2%), only 4.4% were teleworking (n = 27); 8.7% were on sick leave (n = 48), 37 were on short-time work (6.7%), 4, 9% were working face-to-face (N = 27). The diagnoses were distributed as follows: 57% psychotic disorders, 33% mood disorders and 8% personality disorders and 2% other.

## 3.2. Living conditions

The majority of people lived with an adult (61.5%), less frequently with a child (18.2%) and 12.4% with a pet.

## 3.3. Information on COVID

During the first telephone interview (V1), the majority of people felt completely or fairly well informed in 78% of cases (n = 239; 43.5 N = 189; 34.4 and this result remained stable during the three months of confinement V2 (79%).

## 3.4. The use of addictive products

at V1 the declared consumption of alcohol was 11.6% (N = 64), 4.1% (N = 21) for cannabis and 36.9% (N = 193) for tobacco; at V2 only the consumption of alcohol was increased to 18.3% the consumption of cannabis (4.8%) remained stable as well as that of tobacco (37.8%).

## 3.5. Social contacts

The majority of patients had contact at least once a day to once a week, with in decreasing order more than once a day for N=143(26%), once a day for N=151(27.5%), once every two days for N=111(20.2%), once a week for N=72(13,1%), 7% of patients were completely isolated (n=39) and 6.2% (34) did not answer this question.

At V2, 37.1% of patients had contact more than once a day, 22% once a day, 18.9% once every other day and 6.8% once a week. Interpersonal contact increased at V2 but not significantly (P>0.05).

Compliance with confinement instructions for discharges: The reasons for going out were mainly utilitarian, for shopping in 62.4% of cases, only 13.8% for sport, 7.6% for health problems and 5.1% for work.

#### 3.6. Frequency of outings

At V1 the frequency ranged from once a day, every other day to once a week (distributed almost equally 20.9%, 20.9% and 25.3%. The majority of patients went out at least once a week. 10% went out less than once a week or not at all. At V2, outings were more frequent overall: 15.9% more than once a day, 27.3% once a day, 32.6% once every two days and 10.6% once a week.

## 3.7. Emotional scores

The scores on the visual analogue scales "VAS" remained stable during confinement, with no significant difference:

The VAS anxiety score was 3.7(  $\pm$  2.8) at V1 to 3(  $\pm$  3, 44) at V2; p = 0.23, the VAS anger score went from 2.44(  $\pm$  2.9) at V1 to 2.47 (  $\pm$  2.7) at V2, p = 0.19 and the VAS depressed mood score from V1 3(  $\pm$  2.5) to 2.88(2,562) at V2, p = 0.07.

Women were significantly more anxious (p 0.04) and depressed (p < 0.001) than men, while anger was comparable in both groups (p > 0.15).

Hetero-assessment of depression by the miniDIAG: at V1 21.6% of the population assessed was depressed; this score decreased slightly but without significant difference at V2 (18%), p > 0.05.

Comparison of the CGI severity score between V1 and V2: at V1 the score was 2.84 (1.49) significantly higher than at V2: 2.58 (1.50); p=0.04 (result indicating an improvement in the patients' clinical condition).

#### 3.8. Comparison of the global score to the EGF

At V1 the score was 63.3(19.63) versus 68.30(17.61) at V2 (p = 0.001), a result indicative of an improvement in patients' overall condition.

#### 4. Discussion

Our study involved 550 patients with psychiatric pathology followed up as outpatients in Seine saint Denis. The patients were quite young (46.40  $\pm$  14.35) and for the vast majority not professionally active.

They were well informed about the Covid via the media and respected the barrier gestures and the confinement instructions like any other citizens. They appreciated the calls and the follow-up by teleconsultation. A small proportion of patients were socially isolated.

## 4.1. Women had more anxiety-depressive symptoms than men

Outings were more frequent at V2, probably coinciding with the availability of masks and hydro-alcoholic gels to the general public, allowing the population to feel safer outside.

Regarding addictions, tobacco use was the most frequent, with one third of patients smoking. It is possible that cannabis and tobacco were under-reported by the patients, as consumption over time was stable for cannabis, for example, which is in contradiction with the data for the general population (Rolland et al., 2020). The hypothesis of a difficulty in obtaining cannabis during this period of confinement (assuming that dealers were also confined) can be evoked, in contrast to alcohol, the consumption of which increased and the purchase of which remained accessible to the public in the shops.

Patients' clinical status (assessed by the CGI) and global functioning (assessed by the EGF), which is similar to quality of life, improved between the beginning and end of the confinement, in line with the stability of the rate of depression during this period. We haven't noticed an increase in suicide rates during the same period which aligns with the findings in Tandon's manuscript (Tandon, 2021). These results may reflect a capacity of adaptation of our patients to the announcement of the end of confinement, but also a protective effect of the disease in relation to social isolation, which is unfortunately frequent in our

patients. Thus, a small proportion of patients, unlike the general population, reported sleep disorders. These sleep disorders would be linked to the disruption of non-photic synchronizers (such as social rhythms, physical activity, diet.) but also promiscuity, increased time spent in bed, varied schedules, increased time spent in front of screens as described by Guichard et al. (Guichard et al., 2020).

We did not find any difference in compliance with barrier measures between men and women; contrary to the study by El-Zoghby et al. (El-Zoghby et al., 2020) which showed that women were more affected by the virus in their daily lives (significantly more frequent hand washing than men).

The new management by teleconsultation, developed rapidly in our hospital like most hospitals in the health world during this period of pandemic, has made it possible to maintain a therapeutic link for our most vulnerable patients and to show the capacity of our speciality to adapt quickly in the event of a crisis.

Telephone calls by carers during this survey were well accepted by patients.

The limitations of this survey are a possible lack of validity of the patients' answers in terms of authenticity (fear of judgement by the health care team on questions concerning addictions for example, fear of describing a severe symptomatology and of being hospitalised) or a lack of insight.

However, this survey has enabled us to demonstrate that teleconsultation is a tool that would have a permanent place in the care of our patients within the public service in situations such as the COVID-19 pandemic, but also in overall long-term care. It requires logistical organisation (equipment, safety rules, staff training, etc.) and clear, standardised procedures, taking into account confidentiality and respect for medical secrecy.

#### 5. Conclusion

During the first wave of Covid 2019, few of our psychiatric patients had to be hospitalised for psychiatric reasons. Indeed, they remained confined to their homes like the general population. The expected and feared health catastrophe in psychiatry during this pandemic phase did not happen, of course because of the mobilisation of the medical teams, but we must remain cautious. Should we expect a rebound effect at the end of the crisis?

Will the feared psychiatric wave appear in the "post-pandemic" phase among patients followed in psychiatry, but also among the general population and among the caregivers who were so much solicited during this pandemic? The future will tell.

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