

Impact of Covid-19 on a mental health center in Algeria

Impact du Covid-19 sur un centre de santé mentale en Algérie

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ABSTRACT

Introduction. From the beginning of the outbreak, there have been many reports of psychological distress due to the Covid-19 pandemic. To date, there is no Algerian data about the consequences of the Covid-19 on psychiatric services. We conducted a study to determine whether covid 19 is associated with changes in the rates of consultations as well prescriptions during the seven-month post-declaration of the pandemic in Algeria, compared with the same period of 2019. The implications of the current results for psychiatric service provision in Algeria were briefly discussed. **Method.** We conducted a quantitative retrospective study by collecting the patient's data from a computerized register containing the statistics of all patients who attended the center for psychiatric consultation, and copies of all prescriptions done during October, November, December of the years 2019 and 2020. **Results.** Preliminary analysis of patient's medical records indicated a significant increase in patients center attendance, with a major increase in the number of consultants (765) during the period of the study in 2020 against (494) in 2019. We found a 54,85% increase in total consultations and 60% more prescribed medications in 2020 compared to 2019 of the same period. **Conclusion.** Our findings are consistent with other studies reporting an increased demand for mental health care and the rate of psychotropics prescriptions. There is a need to adapt to that huge demand plus the monitoring of side effects and paying attention to those with vulnerabilities. Further work is needed to establish the long-term impact on public mental health and the prevention of complications.

Keywords: Covid-19, Coronavirus, Psychiatry, Algeria, Mental health.

RÉSUMÉ

Introduction. Depuis le début de l'épidémie, de nombreux rapports de détresse psychologique due à la pandémie de Covid-19 ont été signalés. À ce jour, il n'existe pas de données algériennes sur les conséquences du Covid-19 sur les services psychiatriques. Nous avons mené une étude pour déterminer si le covid 19 est associé à des changements dans les taux de consultations ainsi que la prescription au cours des sept-mois suivant la déclaration de la pandémie en Algérie par rapport à la même période en 2019. Les implications des résultats actuels pour la prestation des services psychiatriques en Algérie ont été brièvement discutées. **Méthode.** Nous avons mené une étude rétrospective quantitative en collectant les données des patients à partir d'un registre informatisé contenant les statistiques de tous les individus qui se sont rendus au centre pour une consultation psychiatrique, et des copies de toutes les prescriptions effectuées en octobre, novembre, décembre des années 2019 et 2020. **Résultats.** L'analyse préliminaire des données des patients a révélé une augmentation significative de la fréquentation du centre, avec une augmentation importante du nombre de consultants (765) au cours de la période étudiée de 2020 contre (494) de 2019. Nous avons constaté une augmentation de 54,85% du nombre total de consultations et une élévation de 60% des médicaments prescrits en 2020 par rapport à 2019 de la même période. **Conclusion.** Nos résultats concordent avec ceux d'autres études faisant état d'une augmentation de la demande de soins en santé mentale et du taux de prescriptions de psychotropes. Il est nécessaire de s'adapter à cette énorme demande ainsi qu'à la surveillance et à la gestion des effets secondaires des médicaments, en prêtant attention à ceux qui sont vulnérables. D'autres travaux sont nécessaires pour établir l'impact à long terme sur la santé mentale publique et prévenir les complications.

Mots-clés : Covid-19, Coronavirus, Psychiatrie, Algérie, Santé mentale.

INTRODUCTION

COVID-19 pandemic made a lot of changes in our lives with a considerable physical, psychological impact on the general population and a significant decrease in psychological well-being compared to before covid-19, as for patients with preexistent mental health problems (1), that needed appropriate coping capacities and good adaptive strategies to be able to surpass it. It has been reported that apart from being a stressor, it can cause a large variety of neuropsychiatric manifestations in health care workers and survivors of covid-19 attributed to the direct infection from the virus (1, 2).

Several studies reported an increase in symptoms of anxiety, depression, and other psychopathologies during covid-19 (3). In England, there was an elevated consumption of antidepressants throughout the pandemic compared to the consumption in similar months during 2019 (4).

Psychological crisis interventions were initiated in China and guidelines for psychological adjustment were issued for the new coronavirus pneumonia epidemic (5). Other methods of psychological and psychiatric care delivery through telemedicine were being adopted (6).

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The pandemic has resulted in greater psychological distress in psychiatric patients from lockdown restrictions. Patients with severe mental illness are at a major risk of morbidity and mortality from COVID-19 considering their cognitive alteration, poor awareness of risk, lack of insight and decision-making capacity resulting in difficulty to comply with infection control measures, and an increased risk of contracting the virus (6).

Some researchers recommend that individuals with major psychiatric problems should be prioritized for COVID-19 vaccination (7).

MATERIALS AND METHODS

We conducted a quantitative retrospective study, comparing the number of psychiatric consultations and prescriptions in three months (October, November, December) of 2019 with 2020. Collecting the patient's data was done without their involvement so their consent was not required. It was analyzed by comparing the pre-pandemic period and seven months after the declaration of the pandemic in Algeria (8), using the following variables: number of consultations, number of prescriptions.

Data description

- **The population of study**

It concerns all patients who attended the center for a psychiatric consultation during October, November, December of the years 2019 and 2020.

- **Location of the study**

The study was conducted in the CISM (Centre Intermediaire de Soins en Santé Mentale) of Tissemsilt. The center provides a psychiatric outpatient consultation plus urgent psychiatric consultation, located in the province of Tissemsilt in the west of Algeria with a population that was estimated 294,476 in 2008(9). It is the only public center providing specialized psychiatric consultations in the capital of the province.

- **The course of the study**

The Data was collected from a computerized register containing the statistics of consultations and their details, patient's medical records, plus hard copies of all prescriptions done during that period.

The objective of the study is to evaluate the impact of the COVID-19 pandemic on psychiatric services, with any major changes in patient's flow.

RESULTS

We carried out 494 consultations in three months period of 2019, 316 males and 178 were females. In comparison with 2020 consultations, we found a major increase in the number of consultants 765: 464 males and 301 females (figure 1).

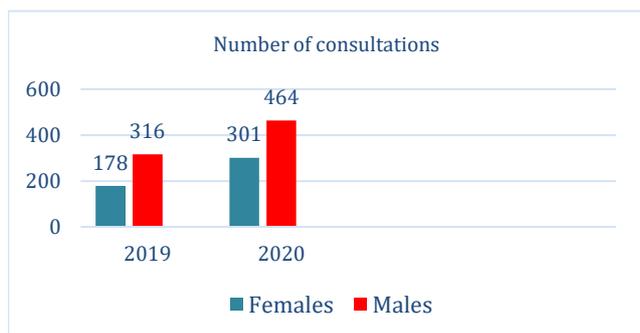


Figure 1. Comparison between males and females.

As a result, we noticed an increase in male consultations in 2020 by 46,83% compared with 2019. Similarly, there was an increase in women consultations by 40,86% in 2020 compared with 2019 and a 54,85% increase in total consultations in 2020.

As shown in (table 1) the number of females attending the center was lower than males during the same period of the two years.

Table 1. Number of outpatient consultations (October, November, December).

Gender	Females	Males	Total
2019	178	316	494
2020	301	464	765
Percentage increase	40,86%	46,83%	54,85%

Concerning the prescription of psychotropic medication, the antipsychotics (AP) are the most prescribed psychotropics in Algeria (10), as shown in (table 2).

In the lead, we have the first-generation antipsychotics (FGA) by 228 in 2019 and 442 in 2020. We found an increase of 86,29% in AP prescriptions. We also registered a sharp increase in both FGA and (SGA) second-generation antipsychotic rates (93,85% and 67,72%) respectively.

Regarding the antidepressants (AD), 303 ADs were prescribed in 2020 resulting in an increase of 50,74% which was consistent with the findings of previous studies (4).

It is worth mentioning here that other types of antidepressants such as serotonin-norepinephrine reuptake inhibitors (SNRIs) were not prescribed much if we refer to the numbers, but it was higher in terms of percentage with 333.33% as clearly shown in table 2.

We also noticed an increase in the prescription of other classes of medications such as mood stabilizers 51,28%, antiparkinsonians 3,61%, anxiolytics 45,12%.

Finally, there were 60% more prescribed medications in 2020.

DISCUSSION

The results of the current study are consistent with previous studies reporting an increase in mental health problems among different populations, who were exposed to psychosocial stressors during the covid-19(1). Then the affected person probably engages in a search for help, heading to mental health services.

The center had to face higher demand for psychiatric consultations, ensuring the continuity of the activities, the care, and support to the patients as demonstrated by the greater number of consultations (765) in 2020 increasing by 54,85%. This can be explained in a way that the stress generated by the pandemic provoked distress in the general population or individuals with preexisting mental health problems, needing the intervention of a specialist to manage relapses, closer follow-ups, or therapeutic readjustments.

Additionally, there was no significant difference between the two genders in terms of percentage increase during 2020 consultations, which was surprising. Even though there were reports that females are at greater risk for psychological problems, scoring higher in stresses and anxiety than males

Table 2. Comparison in numbers between 2019 and 2020 of psychotropics prescription.

Medication type	October-November-December 2019	October-November-December 2020	Percentage increase
1- Antipsychotics	321	598	86,29%
-1st-generation antipsychotics	228	442	93,85%
-2nd-generation antipsychotics	93	156	67,74%
2- Antidepressants	201	303	50,74%
-TCAs	141	218	54,60%
-SSRIs	51	72	41,17%
-SNRIs	03	13	333,33%
3- Mood stabilizers	78	118	51,28%
4- Antiparkinsonians	83	86	3,61%
5- Anxiolytics	82	119	45,12%
-Benzodiazepines	48	66	37,5%
-Others	34	53	55,88%
6- Total prescribed medications	765	1224	60%
7- Total of prescriptions	426	546	28,16%

TCAs: tricyclic antidepressants, *SSRIs*: selective serotonin reuptake inhibitors, *SNRIs*: serotonin and norepinephrine reuptake inhibitors.

who showed better resilience to stress from females who were being the most affected by the pandemic (11). Clinicians reported significantly higher adjustment of medications for females who were followed in psychiatric clinics (6).

The study shows an increase in rates of prescriptions by 28,16% in 2020 as compared with 2019 in the same period of time, which seems to be natural due to the augmentation in the numbers of consultations. The rates of prescription do not seem to be high enough compared with the number of consultations carried out in the center. It could be related to the possibility that some patients did not need a prescription since psychological interventions and reassurance were sufficient to respond adequately to their mental health needs.

It is well known that psychological intervention can be useful in some stages of the pandemic when anticipatory anxiety and worry are likely to be displayed, especially when people are exposed to traumatic events, such as witnessing the death of friends and loved ones, so psychological interventions can be useful even after the pandemic has passed (12).

Furthermore, antipsychotics were prescribed in 86,29% of cases more in 2020. It is consistent with the findings of other studies suggesting a higher usage of antipsychotics during the covid-19 outbreak for patients with dementia in the United Kingdom (13).

As mentioned before antidepressants were heavily prescribed in England matching our findings, speculating an increase of depressive symptoms in our population.

The SNRIs were probably prescribed in cases of non-response or resistant depression. The exacerbation of symptoms like insomnia, anxiety, mood swings can explain the increase in the prescription of anxiolytics and mood stabilizers as shown in table 2.

As a result, the pandemic could pose a serious threat to public mental health in the acute phase or even for the long term, and the management of medical care, particularly the use of

psychotropics and the concern of the potential increase in life-threatening side effects considering the 60% more prescriptions in 2020 (table2).

highlighting these concerns, adding the lack of resources compared to big cities, an urgent need for mental health interventions and assistance with more resources are most required, particularly the support and protection of these individuals and paying more attention to treatment side effects.

Vaccination is still a very important option due to its protection from the virus. One of the latest studies found a decrease in the mental distress after vaccination (14).

This study has several limitations: firstly, the pandemic affected different cities at different times, and reaction to stressors and COVID-19 may be different across regions, nevertheless, it still a unique study considering such data is lacking on a national level.

secondly, we did not include the profile and motive of the consultants, absence of data from other previous years. In addition, the data collected correspond to seven months after the declaration of the outbreak in Algeria, making it not possible to explore the acute impact on mental health services. Finally, it was not possible to ascertain if the medications were taking or not.

CONCLUSION

The covid-19 pandemic had a tremendous effect on our lives and all health systems around the world. No one can disregard the enormous impact that had on mental health and the initiations done by all governments to reduce psychological distress. All studies suggest that there is an urgent need for interventions to manage and prevent long term complications. Despite all challenges, the current study generated data with a strong basis that may help for future psychiatric research.

Conflict of interest

The authors declare that they have no conflict of interests.

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