Covid-19 Impact on Mental Health of Egyptians Patients

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Abbreviations

SUD: Substance Use Disorder

OCD: Obsessive Compulsive Disorder

ANOVA: Analysis of Variance

SAS: Statistical Analysis System

Abstract

The current study is aimed to examine the rates of mental disorders in a sample of Egyptian patients due to environmental factors associated with the COVID-19 pandemic crisis which interacted with the historical and religious background of the Egyptian people. The research was performed in four different districts in Cairo and Giza before and during the outbreak of a pandemic. The Control group consisted of 1600 patients and extended from the first of October till the end of December 2019. The experimental group consisted of 1200 patients during the first four months of 2020.

Mood disorders were the main psychiatric disorders that appeared during this period in the form of depression and anxiety disorders. Also, the cases of substance use disorder (SUD) and obsessive-compulsive disorders (OCD) were presented more in psychiatric clinics.

The percentage of male patients was slightly higher in depressive cases, while it was significantly higher in SUD cases. On the other hand, the percentage of female patients was a little higher in anxiety disorders and OCD cases. The percentage of SUD cases was significantly higher among highly educated patients and also in OCD cases. Medium educated patients presented with depression and anxiety disorders were slightly higher than high educated patients and significantly higher than low educated ones.

1. Introduction

In just a few months, the COVID-19 pandemic has taken the entire world by storm. From the political North to the South, within economically poor and rich countries, the mortality rate from the pandemic has reached a scale hitherto not seen in a generation. Health systems and economies in both developed and developing countries are challenged in ways not imagined. The global efforts to mitigate the effects of the pandemic are moving at a very fast pace. Therefore, it is very essential to focus on psychiatric disorders that appear before and during the crisis. Also in order to deal with these problems and to enhance the individuals' psychological rigidity as well as the community consolidation in facing, accepting, and living with reality [1].

Chronic infectious diseases such as tuberculosis and human immunodeficiency virus (HIV) are associated with higher levels of mental illness as compared with the general population [2].

COVID-19 has rippling effects like stigma, and medical mistrust especially based on current public reactions. Psychiatrists have a great role to help their patients and the greater communities. Stigmatization of affected individuals and health care professionals has been seen in multiple countries including Egypt [3].

Mistrust of medical organizations due to untruthful information comes from untruthful sites and rumors which reinforce the stigma and perceived discrimination and result in lower adherence to health recommendations. Clinicians must maintain a scientific, fact-based, and emphasizing the importance of overall infection control practices in the wake of COVID-19 [4].

Our research was performed on 2800 patients in four different psychiatric private clinics in different areas in Cairo and Giza in EGYPT. The data were collected before and during the outbreak of COVID-19 in the period from October 2019 until April 2020.

2. Patients and Methods

Total sample collected (2800 cases) from four private psychiatric clinics; two in Cairo and two in Giza divided into two groups, the first is control group sample number (1600 patients) attended from the period of Oct., Nov. and Dec. 2019 which represent the period before the appearance of COVID-19.

The second is experimental group sample number (1200 patients) from the same psychiatric clinics during the invasion of COVID-19 attended from the beginning of Jan. till the end of April 2020.

We study the impact of COVID-19 on the mental health map. Data were statistically analyzed by Analysis of Variance (ANOVA) test using a computer software SAS [5].

3. Results and Discussion

3.1 Main common mental disorders before COVID-19 invasion

(Figure 1) shows the percentage of common mental illnesses in the control group sample before the invasion of COVID-19 where depression represents 23%, anxiety disorders represent 14%, SUD equals 8% and OCD is 5%, while psychotic patients and other mental illnesses represent 50% of the cases. These findings are matching with estimates of preference of the common mental disorders in normal time [6].
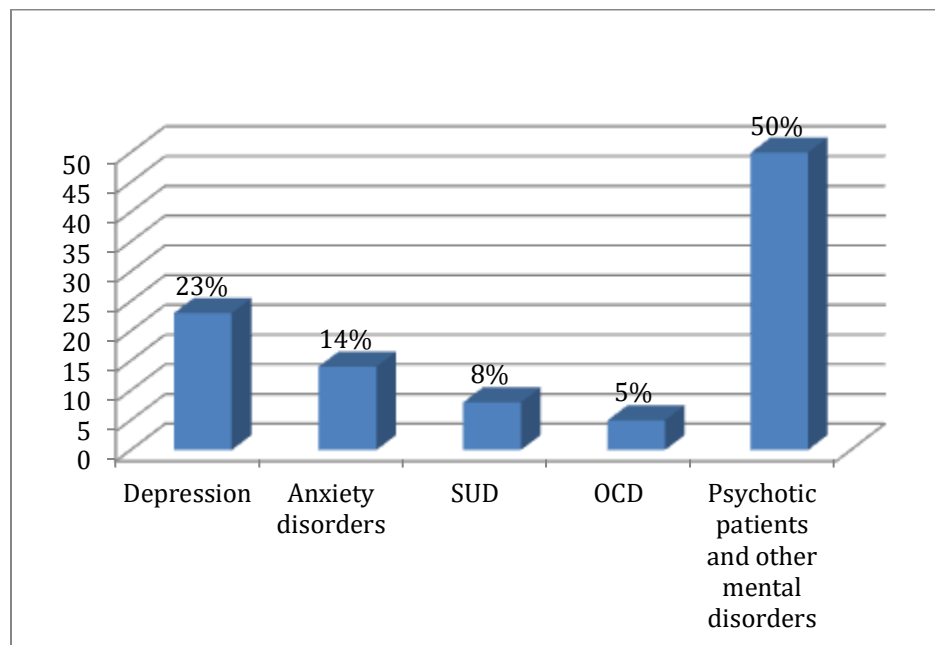

Figure 1: Percentage of common mental disorders in the control group sample.

3.2 Main common mental disorders during COVID-19 invasion

(Figure 2) shows that the percentage of cases presented with depression, anxiety disorders, SUD, and OCD are increasing somehow especially during the first four months of 2020, which represent the era of COVID-19. The percentage of patients with other mental disorders has declined by the start of 2020 up till the end of April 2020 (50.0 and 15.5%, respectively). About one-third of the cases were presented by depressive disorders followed by anxiety disorders (26%) and substance use disorders (SUD) (16%) Obsessive-compulsive disorder (OCD) presented 12% of the cases.

In the current study, the high rate of seeking treatment inpatient diagnosed as SUS may be due to many factors connected with the Egyptian community norms as religious standards leading to fear from death by COVID-19. It could be also associated with the depressive and anxiety symptoms accompanying and leakage of money due to worldwide financial crisis or a maladaptive behavior to stress and anxiety caused by COVID-19 by increasing the consumption of alcohol and substance use disorders then seeking help to treatment. Noticeable decreases in psychotic patients during this time may be attributed to the home as a safe zone for this type of patient; some of them are not orientated by the crisis or lack of fair judgment.
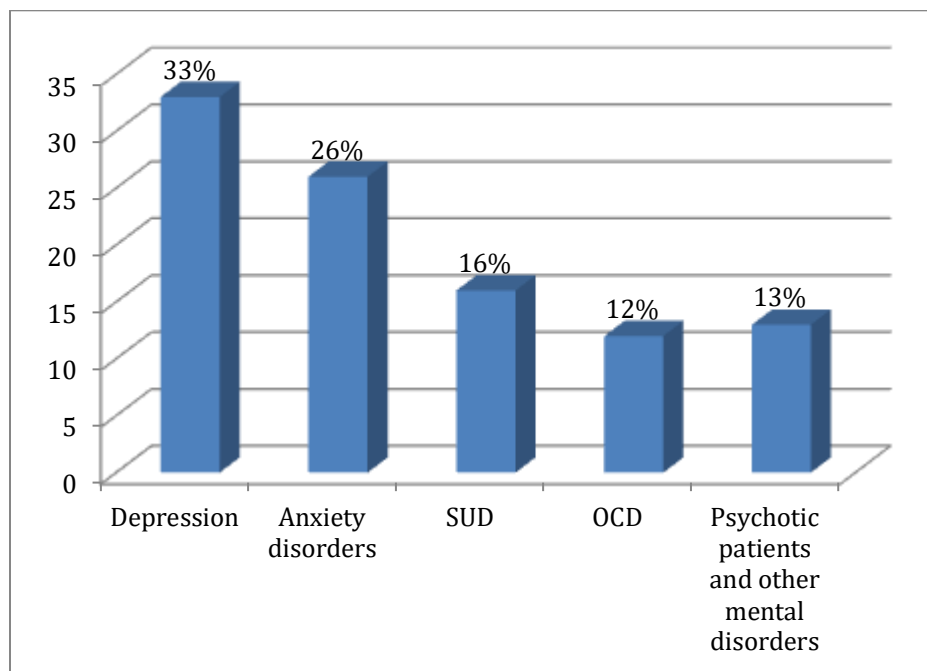

Figure 2: Percentage of common mental disorders in the experimental group sample.

3.3 Gender differences and mental disorders in the pandemic

(Figure 3) illustrates that the male cases presented by depressive symptoms were slightly higher than female cases (19 and 14% for male and female cases, respectively). This difference could be attributed to staying home as a stressor for depression in males as well as the financial problems in contrast with normal timing where the rate of depression is almost equal between males and females. The same finding was found to regard SUD, where male cases were significantly higher (14%) than the female ones (2%) as it is almost the same ratio in normal situations. The reverse was found regarding anxiety disorders where the female cases were 15% while the male cases were 11%. A highly significant increase of the female cases presented by OCD (9%) than the male cases (3%) was recorded. Despite the ratio of OCD is almost the same between males and females in normal timing but during the COVID-19 era three folds in females due to higher emotion in females and fear about children, family, and relatives.
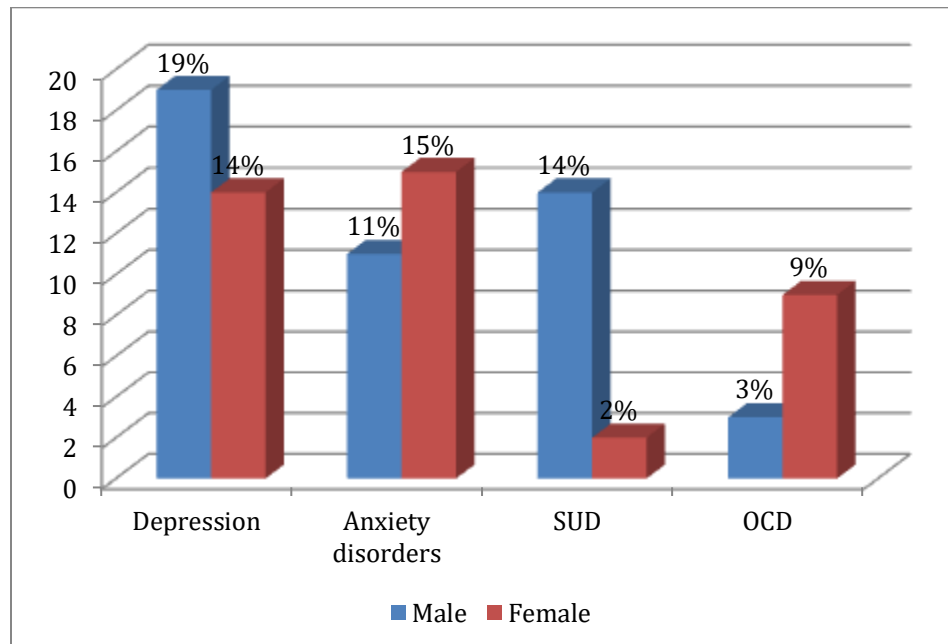

Figure 3: Comparison between male and female mental disorders in the experimental group sample.

3.4 Educational levels and mental disorders in the pandemic

(Figure 4) illustrates that the numbers of substance use disorders (SUD) cases were significantly higher between highly educated patients than medium and low education (9, 5, and 2%, respectively). The same figure could be noticed as regard OCD cases (7, 4, and 1% for high, medium, and low education, respectively). On the other hand, medium education patients who were presented with depression and anxiety disorders in the psychiatric clinics were slightly higher than high education cases and significantly higher than low education cases. The higher educational level seems to have a protective effect against anxiety and depression, which accumulates throughout life [7]. Low educational level had the lowest rate of depression and GAD that could be attributed to insufficient awareness and

perhaps they may still in the denial phase of crisis. High incidence of OCD in higher education level might be because of increasing awareness and the insight. Increasing the seeking for treatment for patients of SUD in high education level could be due to higher awareness and the insight about dangerous of COVID-19 and its subsequent mortality.
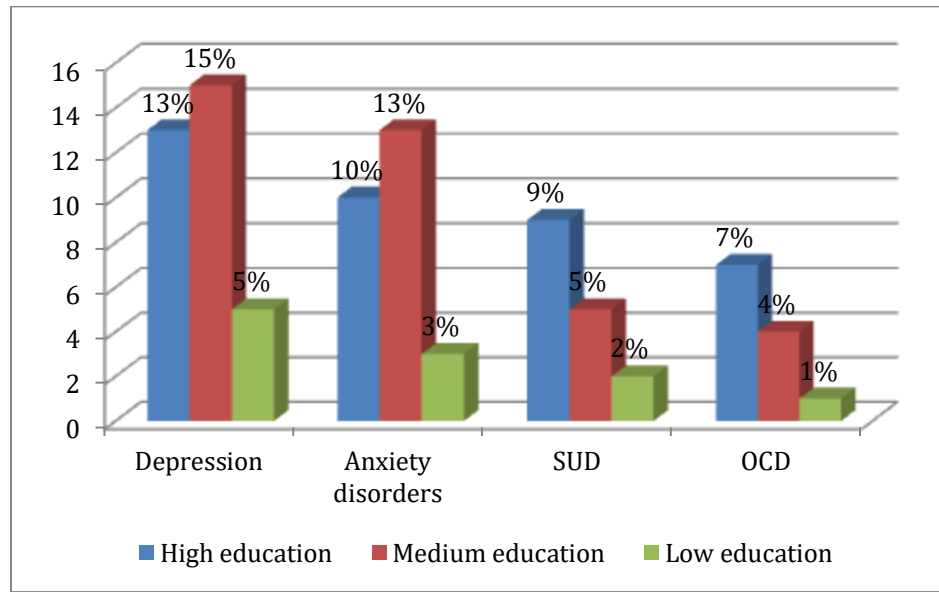

Figure 4: Comparison between different educational levels of mental disorders in the experimental group sample.

4. Summary and Recommendations

The main mental disorders that appeared in pandemic COVID-19 are depression and anxiety disorders and also SUD and OCD cases. The number of psychotic patients declined during the pandemic period. Males are subjected to depressive disorders slightly more than females, while females are more easily to suffer from anxiety disorders and OCD so due to its biopsychosocial origins we must focus on the different types of Psychotherapy as Cognitive Therapy, Behavioral Therapy, Cognitive-Behavioral Therapy, Dialectical Behavior Therapy, Psychodynamic Therapy, Interpersonal Therapy, and Educational Therapy.

Male patients with SUD seeking treatment are much higher than female ones during the crisis so It is important to focus on addiction treatment in crisis due to increasing the rate of seeking treatment and this is ideal the time to use of the addicts' motivation and enthusiasm to reach a successful addiction management plan and programs either in-home or in addictions treatment hospitals and centers.

Medium educated patients presented with depression and anxiety disorders were slightly higher than high educated cases and significantly higher than low educated ones so we must focus on medical awareness and health promotion programs that match and reached all educational levels.

We also need to focus on training and psychological support programs and open the door to volunteers and community stars for training in this area for all patients suspected of being infected or who have been diagnosed with COVID-19 and their relatives, and psychological support for other medical services providers.

We also advise the presence of recommended written guidelines for psychological treatment criteria for patients of this epidemic who suffer from mental illnesses and to determine the treatment plans and medications allowed so we avoiding the drug-drug interactions with other medical treatments which reflected negatively on the prognosis of the disease.

Finally, studies and research must continue during this epidemic, as well as after it is over to know all the psychological effects that can be overcome in order to protect and the well-being of humanity.

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