Mental Health Services during the COVID-19 pandemic in Abu Dhabi, UAE

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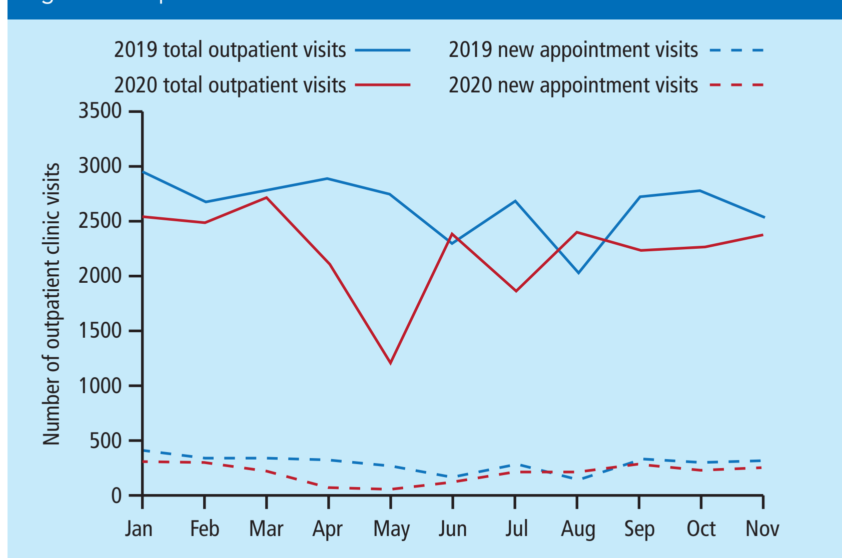
United Arab Emirates is demonstrating a model to the world in its response to the crisis and dealing with a pandemic that has provoked unprecedented health care delivery changes. Here, the authors describe how services were remodeled to safely manage patients with mental disorders in the largest admitting psychiatric facility in the capital city Abu Dhabi, the Behavioral Science Pavilion in Sheikh Khalifa Medical City. The article illustrates the changes in admission rates, outpatient clinic and emergency room visits, paving the way for a pliable mental health service that copes with unpredictable circumstances.

Figure 1. Outpatient clinic total visits and new case assessments 2019 vs 2020



The World Health Organization (WHO) declared the coronavirus disease outbreak a pandemic in March 2020. The Middle East's first confirmed COVID-19 case was in January 2020, in the United Arab Emirates (UAE). The UAE's COVID-19 caseload reached 211,641 by the end of 2020, with a total of 674 deaths, in a population exceeding 9.8 million.[1,2] The rate of positive cases out of the total number of COVID-19 screening tests remains at a global low of 1%, with the UAE having one of the lowest COVID-19 mortality rates at 0.3%.[1]

UAE is demonstrating a model to the world in its response to the crisis and dealing with a pandemic that has provoked unprecedented health care delivery changes. The aim was to focus on early detection, mass screening, and early containment of COVID-19 cases and contacts. UAE was one of the world's first countries to introduce drive-through screening facilities, which completed 20.5 million tests. Health care resources were utilised efficiently by moving staff fluidly across different sectors and setting up fully equipped field hospitals.[3]

Description of mental health services

In Abu Dhabi, mental health services are provided by two Governmental entities, with exclusive admitting facilities, a total of 159 beds, in an Emirate that hosts around 2.9 million.[4] The service is centralised, lacking outreach community services, stretching mental health care to either inpatient or outpatient, with the private sector only providing outpatient services. The Behavioral Science Pavilion (BSP) has an established outpatient department with an average of 30,000 visits yearly, covering general adult psychiatry, old age psychiatry, substance misuse, child and adolescent psychiatry, in addition to an admitting bed capacity of 126 with an average of 900 admissions yearly. The facility has a home care service for patients with chronic and enduring mental disorders, conducting more than 3500 annual home care visits. It also offers bedside liaison consultation to four tertiary hospitals in the city. The BSP is a training and teaching centre with an established and internationally accredited psychiatry residency program.

Service remodeling during the COVID-19 pandemic.

As the COVID-19 pandemic evolved and progressed, services had to be modified to tackle all the health care system challenges.

Outpatient clinic department

The impact of COVID-19 was massive in outpatient settings. Basic sanitation and social distancing guidelines were implemented, along with flu-like symptom screening at clinic entrances. The introduction of tele-assessment was the first step after its widespread adoption in mental health facilities worldwide in response to WHO recommendations.[5,6] Conducting assessments face-to-face was restricted to newly referred patients or, if requested. Tele-assessment was conducted through telephone calls, as video calls were not successful due to connectivity problems and cultural restrictions. Medication home delivery was initiated, including long-acting injections administered by mental health professionals at patients' homes.

Figure 1 compares the outpatient clinic's workload before and during the COVID-19 pandemic. Observed clinic activity changes during the first wave of the pandemic were as follows:

• There was a 20–30% drop in the total number of clinic visits early in the pandemic. The decline was more significant in old age psychiatry, substance misuse, child and adolescent psychiatry clinics.

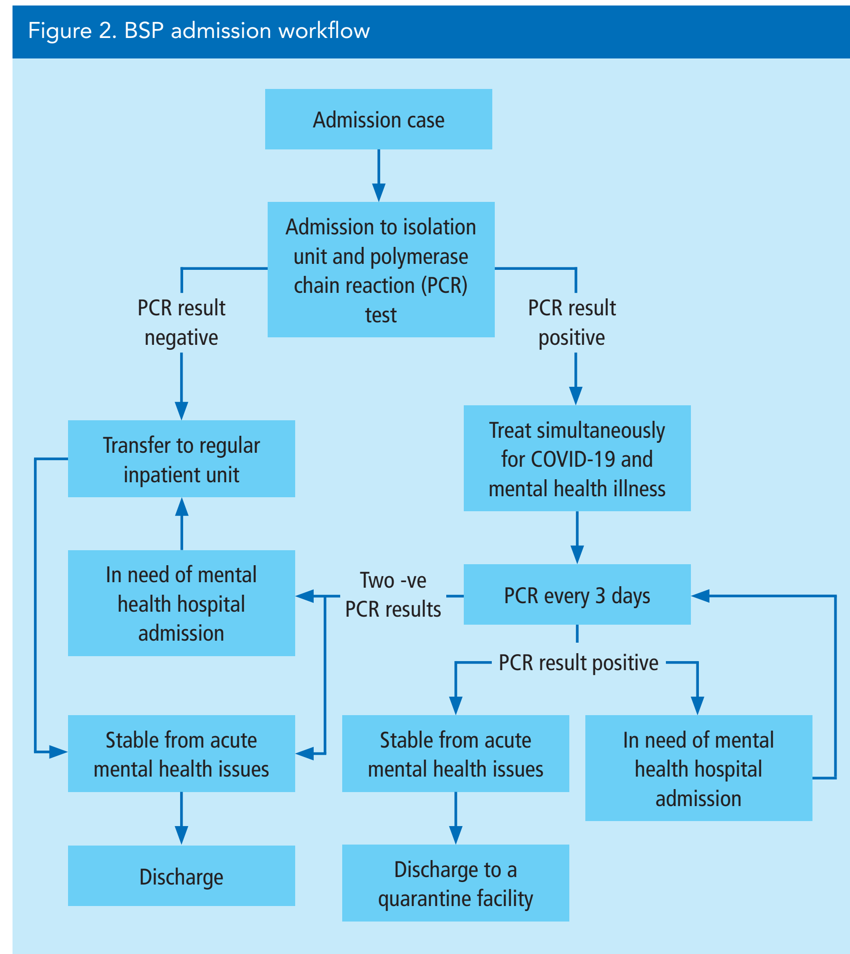
• Tele-assessment was not offered to new appointment visits because it was challenging to do initial full assessment via telephone calls. Hence an initial (April–May 2020) 80% drop in new appointment visits compared with pre-COVID-19 time, followed by a steady rise in new appointment visits.

• Tele-assessment visits comprised 60% of all visits initially (April–May 2020), but the rate dropped gradually to 10–20% as more patients requested a face-to-face assessment.

Inpatient service

Modified admission and management protocols to protect patients were a priority. Acute inpatient services are at increased risk of exposure to COVID-19 because of the general resource constraints, such as the limited availability of negative pressure spaces, and several patient considerations. Contributing factors include patients freely wandering, sharing activities and rooms. Additionally, patients suffering from mental illnesses might have impaired judgment, deeming it challenging to educate them on infection control measures.[7] Hospitalised patients with severe mental disorders are at increased risk for chest infections.[8,9] Mental health staff were equipped and trained to use PPEs to care for suspected and confirmed COVID-19 patients. Figure 2 shows the admission process workflow. All admissions were screened with a polymerase chain reaction (PCR) test.[10,11] Early in the pandemic, restricted areas within the inpatient units accommodated admitted patients; however, as cases escalated, the drug and alcohol rehabilitation unit was converted into an isolation ward for suspected and confirmed COVID-19 cases. Integrated teams that involved psychiatry, internal medicine and infection control personnel managed those cases. Patients were discharged or transferred to other hospital units based on their mental health evaluations and COVID-19 status.

Figure 2. BSP admission workflow

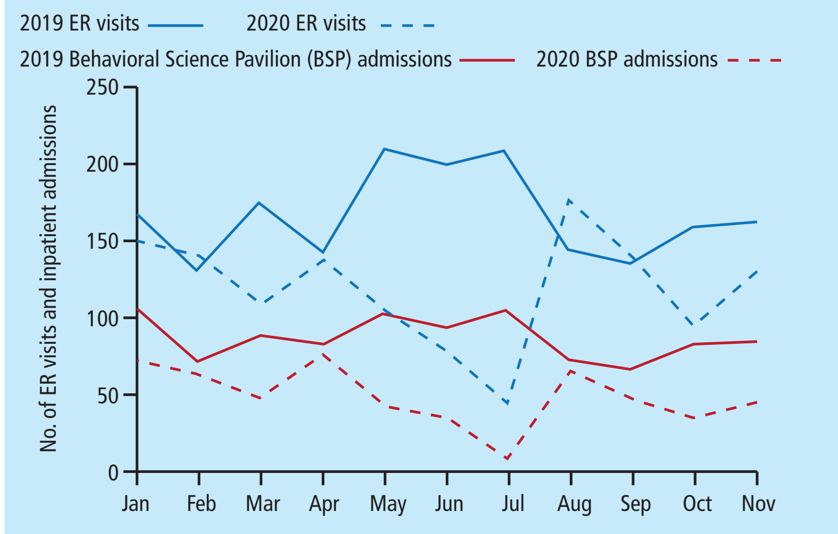


From March to June 2020, overall admissions were 168, of which 19% (n=33) were COVID-19 patients being treated simultaneously for acute mental health conditions. Out of those, 48% (n=16) were new to our facility. The most common diagnoses for patients with no previous psychiatric history according to the DSM-5 (The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition) were

brief psychotic disorder 36% (n=11), followed by acute stress disorder 16% (n=5). On the other hand, for patients with a known history of mental illness, the most common diagnosis was bipolar 1 disorder, current episode manic 42% (n=13).

Comparing this period with March to June 2019, pre-COVID-19, there was a drop in numbers of inpatient admissions to psychiatric units, and emergency room psychiatric visits (Figure 3). Other changes in inpatient settings included a shift of all physical visits to audiovisual virtual visits. Electroconvulsive therapy was initially put on hold then reinitiated with precautions from June 2020, including a PCR screening test less than 48 hours before the treatment and limited to severely ill cases.

Figure 3. Emergency room (ER) visits and psychiatric admission trend



Liaison consultation service

Expansion of medical services during the COVID-19 pandemic and the added emergence of several quarantine centers and field hospitals dedicated to COVID-19 patients led to a 52% increase in psychiatry consultation cases in the first two months (March and April 2020) of the pandemic. Patients were triaged over the phone and assigned to different categories based on the urgency. Triage and tele-assessment facilitated managing the exponential increase in consultations and utilising the limited workforce and resources given the geographic distance between the various medical facilities.

Psychology and social workers

Psychosocial service was initially limited to cases at imminent psychiatric risk in BSP inpatient and outpatient departments. Psychosocial staff focused on COVID-19-related support programs, including a public awareness and education service to the community via a toll-free number, in addition to novel supportive services for COVID-19 admitted cases in the general hospital and health care workers during the pandemic. The psychosocial program was an emergent approach to serve all COVID-19 inpatients in Abu Dhabi. Patients were contacted on admission by social workers and psychologists for a detailed psychosocial assessment. The program helped reduce patient anxiety and cope with isolation by providing them with electronic devices to stay in touch with their loved ones and support their mental wellbeing, with their needs met efficiently. The program reached over 2000 COVID-19 patients in medical and quarantined facilities by April 2020. The program gradually started to decline in June, as admission rates of COVID-19 cases dropped in the general hospital. A plan to resume the services when needed is in place, preparing for any changes in COVID-19 admissions in the city. The staff support system was via a confidential helpline in the main hospital, group therapy sessions, and virtual yoga and mindfulness classes conducted by certified professionals.

Teaching and training

Initially, academic activities were placed on hold as residents were deployed to cover various COVID-19 services at field hospitals, quarantine centers, and emergency rooms. The minimisation of non-essential staff contacts prevented medical students and medical interns from attending their clinical psychiatry rotations.

Challenges, recommendations and future considerations

In the context of pre-existing difficulties in psychiatry, concerns were raised for patients with mental disorders in the time of crisis, which were further propagated by the lack of readiness to face COVID-19 globally.[12] An approach was presented for the practical implementation of COVID-19 screening, assessment, isolation and care in a psychiatric facility. It was a rapid organisational response with many challenges and difficulties. The changes and challenges in service delivery were not unique to mental health services in Abu Dhabi; a survey study in the UK reported that not all rapid adaptation responses to the crisis were successful. Staff had several concerns, including patients unfit to engage with remote care, domestic abuse and categories of patients unable to understand and follow social distancing requirements.[13]

Drop-in clinic visits and number of admissions

Despite all efforts to safely enhance care access, there was an observed decline in psychiatric outpatient clinic visits, accompanied by decreased ER visits and admission numbers. The reduced number of clinic visits was more observed at the beginning of the pandemic, especially in old age, child and adolescent clinics. The increased threshold to seek mental health care could explain the drop in patient numbers; patients and family members may have become more tolerant during the pandemic, avoiding hospitals and the risk of contamination.[14]

By the end of 2020 new appointment visits had significantly increased in number and the number of total clinic visits returned to the expected baseline. The changes could be explained by the parallel wave of fear and anxiety, both directly due to the COVID-19 infection rates and lockdown stressors, and indirectly due to the worldwide intensified financial constraints and travel restrictions.

Compared with the previous year, admission rates declined and remained low. The continuously restricted admission criteria and fears of a hospital being an infection source could account for this decline. Moreover, the BSP is a referral centre accepting cases from all over the UAE. The curfew and the massive quarantine between the country's major cities have affected access to the facility. The noted 19% rate of COVID-19-admitted patients during the first wave was much higher than the UAE national 1% COVID-19 rate, highlighting the vulnerability of patients with mental illness.

A study in the United Kingdom reported that COVID-19 was linked to a decrease in the use of mental health services, with a consequent increase in activity. Many services have transitioned from face-to-face interactions to online interactions.[15]

Tele-assessment use during pandemics

Tele-assessment helped to maintain the service in the outpatient clinic to some extent. It helped reach the vulnerable extremes of age in psychiatry, assisting patients, and limiting fears of exposure to the infection. However, as the community was becoming used to the new normal, patients opted to choose in-person evaluation over tele-assessment. By the end of 2020, there was an apparent increase in clinic visits compared with last year and a drop in the tele-assessment rate. Despite expectations to improve care access, the question arises regarding patients' views of tele-assessment and its effectiveness in managing psychiatric patients.[6]

Staff shortage

Staff availability was affected as teams were being infected. The shortage was propagated by nurses and physicians covering other COVID-19 services, leading to a significantly increased work burden on all mental health workers. The global shift of focus to patients diagnosed with COVID-19 brings on the ethical dilemma of whether the needs of patients diagnosed with psychiatric disorders were being overlooked.

Conclusion

As the world faces the third wave of the pandemic, the key to dealing with the various phases is preparing for endless versatility and flexibility in shifting services and efficiently utilising health care workers. Distant assessment, or tele-assessment, can be of help in times of crisis.

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Declaration of interests

No conflicts of interest were declared.

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