

# The Impact of the COVID-19 Pandemic on Mental Health Service Delivery in Barbados

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The World Health Organisation (WHO) assessed that “COVID-19 could be characterised as a pandemic” (Ref. 1, p 1) on March 11, 2020. The consequences of this pandemic have reverberated throughout almost every aspect of daily life worldwide with social/physical distancing, frequent hand washing, wearing of face masks, curfew, quarantine, and isolation.

Health care services were forced to adapt by finding innovative ways to continue the assessment and management of patients in a manner that was acceptable, safe, and appropriate to the patient and health care service provider. Several countries<sup>2–5</sup> have described their mitigation efforts, given the reduced access to outpatient services, reduced inpatient beds, restrictions on visiting and interactions with families, and cancellation of elective procedures.

In addition, the impact on the health care system as it relates to financial loss, racial and ethnic disparities, lack of insurance coverage, and the need for legislative reform to adequately address these deficiencies, has been documented.<sup>6</sup> These authors described significant financial losses by hospitals and private clinics in the United States, in part due to less demand for routine services,

while demand for specialized care was very high. In Europe, job loss and subsequent reduction in income and workload were associated with increased feelings of depression and anxiety among workers.<sup>7</sup>

Fears of contracting the virus, concerns about spreading it to others, the imposition of public health measures, and the general disruption of life have all lead to an increase in demand for mental health services. Those affected include not only people with pre-existing mental health conditions and health care workers, but the general population as well.<sup>8</sup> Further, indications are that the psychological impact will likely continue beyond the physical health effects of the pandemic.<sup>8</sup> Gavin *et al.*<sup>8</sup> have opined that there will be an increase in mental illness and suicidality as the pandemic progresses and the new realities of life become more evident.

Of particular interest was the response within secure psychiatric facilities, where there were unique challenges:<sup>9</sup> inability of patients to utilize escorted community leave privileges; difficulty isolating patients with behavioral problems; balancing multiple contacts between patients and staff while needing to physically distance, and closure of allied services leading to difficulty discharging patients safely.

In this editorial, we describe the impact of the COVID-19 pandemic on mental health service delivery on the island of Barbados. With an estimated population of 301,865<sup>10</sup> and a land mass of 166 square miles, Barbados is the most densely populated island of the eastern Caribbean.

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## Background

For many years, mental health services were concentrated within the lone 530-bed Psychiatric Hospital, which offered inpatient and outpatient services, including substance detoxification, forensic services, and community mental health care. In 1993, an 8-bed (now 12-bed) mental health unit was established within the general public hospital offering inpatient, emergency, staff mental health, consultation liaison, and outpatient services.

Further decentralization of mental health services occurred in 2012, when three general psychiatrists were employed within the polyclinic system. There are currently nine polyclinics spread across the island, which offer primary care services, including general practice, well baby/child clinics, weekly mental health clinics, and rehabilitative services.<sup>11</sup>

Six days after the WHO's announcement regarding the COVID-19 pandemic, Barbados recorded its first known case of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection.<sup>12</sup> The Government of Barbados adopted a policy of mandatory, monitored isolation for all persons who test positive for SARS-CoV-2. An old military base was refurbished into a 200-bed isolation center for this purpose. Other facilities (e.g., a current military base and a school) were also used to isolate people who tested positive. Health care was provided free at the point of delivery, as it was throughout the public health care system in Barbados.

With the declaration of a national public health emergency at the end of March 2020, an 8 pm to 6 am curfew was instituted, which was quickly extended to a 24-hour curfew over the subsequent month. All nonessential businesses were closed. Although the airport remained open, there were limited numbers of arriving flights.<sup>13</sup>

Government policy also required that patients testing positive for SARS-CoV-2 were not to be admitted to the lone, 519-bed tertiary care, general hospital because of the likelihood of infection spreading rapidly throughout the entire hospital. Patients presenting to the emergency department were tested for SARS-CoV-2 if there was a high clinical suspicion of infection. Screening prior to admission was based on historical information (e.g., travel history), the presence of symptoms indicative of viral infection, and physical signs such as elevated temperature. Staff members were screened by daily temperature checks on entry into the general hospital. They were

expected to remain at home if there were any signs of a viral illness. There has never been scheduled, ongoing, testing of staff. As expected, these screening measures proved insufficient in keeping all SARS-CoV-2 positive people out of the general hospital.

A proposed surgical facility, near to the general hospital, for patients needing emergency surgery and who tested positive for SARS-CoV-2, was met with strong opposition from the consultants in the surgical department. They posited that the surgical department was not adequately consulted about the plans to use the facility although they were the end-users. In addition, they stated that any facility being proposed should have access to adequate staff, cross-sectional imaging, critical care, and appropriate ventilation. The surgeons recommended the use of a dedicated theater within the hospital but the administrators were reluctant.

One surgeon who complained publicly about this situation was suspended. Members of the public expressed alarm about the lack of a clear plan for emergency surgery. An impasse ensued which was eventually resolved but this situation underscored how conflict between administrative and clinical priorities could affect the delivery of health care.

## General Hospital Services

Early during the pandemic there were concerns that the psychiatric services within the general hospital would quickly become overwhelmed by the demand for services. There was a noticeable increase in the number of health care providers who accessed mental health services, particularly frontline workers who were exposed to the first SARS-CoV-2 positive patients. As expected, there were concerns among health care workers about infecting children and older adults at home while awaiting COVID-19 test results. The mental health service providers completed training in psychological first aid (and assisted staff members in individual and group therapy sessions via various telepsychiatry platforms).

Face-to-face outpatient services were scaled back and telepsychiatry appointments were offered to all patients. Only patients who were identified as needing face-to-face assessment (for example, required depot medication, were unfamiliar with online platforms, or described symptoms of relapse) were given appointments to be seen.

The inpatient unit was closed as the ward was repurposed in anticipation of a surge of SARS-CoV-2

positive patients. Patients requiring admission were re-directed to the Psychiatric Hospital. Medical students were also displaced with the ward closure. Teaching was restricted to online only as students were not allowed on the wards.

Contingency plans were also made to re-deploy medical and nursing staff from the unit to other areas within the general hospital. Staff were anxious about being expected to work in specialty areas outside of their expertise coupled with the potential risk of infection due to their lack of experience. Further anxiety surrounded the availability of personal protective equipment (PPE) and the appropriate use of PPE for the required task. Training in the use of PPE, donning/doffing and swabbing techniques was instrumental in addressing some of these concerns.

Consultant psychiatrists from the general hospital assessed people in isolation who required psychological support. For the majority of patients, telepsychiatry sufficed but there were occasions (as previously stated) during which face to face assessments were required.

### **Psychiatric Hospital Services**

At the Psychiatric Hospital, admissions were limited to people who posed an immediate danger to themselves or others. Elective admissions (e.g., for substance detoxification) were suspended.

A section of the forensic ward was re-purposed to quarantine all male patients admitted to the hospital. Approximately 24 patients were in quarantine at any given time. Because testing was not being done on site, quarantine lasted 14 days. With an average of three admissions per day, there was soon an acute shortage of beds. To decrease the quarantine period, patients were then given a rapid antigen test on day 10 but this did not adequately address the bed shortage. Patients who were assessed as having a low risk of suicide or violence were discharged home or transferred to open wards. In addition, a step-down unit was established for patients assessed as not requiring the high security measures of the forensic ward.

With the onset of the 24-hour curfew, escorted leave and unescorted weekend leave were suspended. The sheltered workshop, which provided paid work opportunities for patients, was closed. One opportunity presented by the closure of outpatient occupational therapy services was the increased capacity of occupational therapists to focus on inpatients.

Magistrate courts remained closed except for one court which operated daily. Patient referrals from these courts account for a significant proportion of admissions. Court closure meant that those already admitted to the forensic ward experienced delays in returning to court. People who would typically be remanded to the Psychiatric Hospital directly from court (for assessment, treatment, or drug rehabilitation) were diverted to prison or granted bail. Remand numbers moved from three persons to one person per week on average.

Inpatients who tested positive for COVID-19 were transferred to the main isolation center. The isolation center was not designed or equipped to manage agitated patients. No beds were reserved for patients with mental health conditions and no specific mental health staff were recruited. In those instances, 1:1 nurses were provided by the Psychiatric Hospital, which further depleted an already short complement of nursing staff. In recent months, there was a cluster of infections among patients and staff (55 persons) that necessitated the establishment of an isolation unit at the Psychiatric Hospital to contain the outbreak.<sup>14</sup>

Although outpatient clinics continued daily, most patients opted not to attend them and later reported fears of becoming infected and unavailability of reliable public transport during lockdown as the main reasons for nonattendance. Once lockdown restrictions were lifted there was a significant demand for mental health services that persists up to the time of writing (August 2021).

Staff from the Psychiatric Hospital managed the psychiatric clinic at the sole prison. This clinic was suspended for many months during the first and second waves of COVID-19. Patient care matters were managed by the psychiatrist offering advice to nursing staff based at the prison via telephone. If this proved insufficient, the patient was taken to the Psychiatric Hospital for assessment. An outbreak of COVID-19 infection in the prison accounted for the largest cluster to date (363 officers, inmates, and civilian staff members) recorded in Barbados.<sup>15</sup> This outbreak was managed by converting sections of the prison into quarantine and isolation units (with airway ventilation capacity), ensuring that infected persons could be treated within the prison environment. Since this outbreak, all patients are tested prior to admission and then retested on day five. Patients in quarantine are no longer allowed to mix with each

other but must remain in individual rooms. Once out of quarantine, patients are allowed to socialize in common areas within predetermined groups.

The psychological impact of the outbreak extended beyond the inmates and staff who were directly affected, as relatives reported much distress because of fears of widespread infection, suspension of visits and delayed court hearings.

### Community Mental Health Services

Outpatient clinics based at two of the polyclinics were relocated to the Psychiatric Hospital. All of the other clinics remained on site, but were reoriented toward relapse prevention only. Psychotherapy via telemedicine occurred, and only patients requiring medication administration were accommodated in person. As the general practice services were greatly curtailed, a reduced number of referrals were made by general practitioners. The subsequent relaxation of restrictions led to a rebound in the numbers of referrals.

Anecdotal evidence indicated that patients originally managed at the two clinics that were closed did not want to follow up at the Psychiatric Hospital because of the associated stigma and so defaulted from follow up. Patients then presented for hospital admission, further contributing to the high number of patients needing inpatient care in a facility already over its bed capacity.

Some patients who defaulted required community team management at home. The availability of community nurses to serve rural areas was invaluable as the clinics in some of these areas were closed early on during the pandemic and remained so for several months. The community teams completed more assessments in an effort to reduce admissions.

Community psychiatrists were tasked with the assessment and management of persons in the quarantine centers across the island. They were joined by a number of social workers and psychologists who volunteered to do these assessments. In addition, the Ministry of Health set up a 24-hour hotline so that the general public could be directed to the appropriate health care service needed. This hotline was instrumental as a source of patient referral for the community psychiatrists.

At the time of the first lockdown, based on the available knowledge regarding COVID-19, persons could not be discharged until they had received two consecutive negative COVID-19 tests. This made

the isolation experience unbearable for some, as they shed virus for more than seven weeks, remained in isolation, sometimes while asymptomatic, and were not allowed to go home. Once back in the community, they faced stigmatization from their neighbors and the public at large. Community based psychiatrists offered follow-up care to all following discharge and provided public education about the psychological impact of the pandemic.

### Needed Planning

Most evident was the need for a coordinated, mental health plan in response to the pandemic. To date there has not been a cohesive mental health plan. A central advisory committee comprising stakeholders representing the general hospital, Psychiatric Hospital, and private and community services should have been established. Such a committee would then liaise with the wider national health plan coordinators. Instead, an informal group of consultant psychiatrists was formed on their own initiative. This group coordinated individual efforts and functioned as a source of support for each other.

A national mental health plan would set the priorities required in meeting the needs of persons with mental health conditions, health care workers specifically, and the general population as a whole. Such a plan would provide for the adaptation of current services, implementation of novel approaches, determination of high priority and vulnerable populations, and a focus on unique needs like suicide risk reduction, as has been done elsewhere.<sup>16</sup>

Services were agile in responding to needs, but at times did not work in tandem, creating unnecessary hurdles for patients and staff, as they navigated new ways of accessing and delivering care. An overarching mental health plan would have managed the admissions process by determining the wards and hospitals to be used and setting inclusion and exclusion criteria. Given that substance use is known to increase during periods of crisis,<sup>17</sup> such a plan that would include management of emerging and chronic substance use disorders was indicated.

Patient access to services could have been improved by the more widespread use of information and communication technologies (ICT) for those who were familiar with their use. ICT was utilized primarily by the staff of the general hospital unit but less so at the psychiatric hospital. Training for those who were less familiar with the technologies may

have assisted in reducing the high demand for clinic services and default once lockdown measures were lifted.

Staff expressed their appreciation for the existence of specific mental health services to address their needs. The most common reasons for presentation were anxiety, depression, and feelings of stress. Services were also made available for patients in quarantine and isolation using ICTs. The continued provision of mental health services specifically for health care workers and patients directly affected by SARS-CoV-2 infection is critical.

As the pandemic progressed, clinicians reported seeing more teenagers presenting with anxiety, self-harm, suicidal ideation, and feelings of isolation as they were not allowed back in school. Lack of access to online learning (because of lack of internet services or devices) further compounded the problem. These observations underscore the importance of data collection in determining population service needs, especially with respect to suicide data. Barbados has a low suicide rate (0.6/100,000).<sup>18</sup> Suicide rates were generally expected to rise worldwide as a result of COVID-19.<sup>19</sup> This expected rise in suicide rates has not materialized,<sup>20</sup> but Barbados needs its own empirical evidence of the trends.

Adults reported being more affected by the consequences of unemployment and restricted movements. One clinician commented that for patients the pandemic was “the straw that broke the camel’s back,” as people were already reeling from the prevailing economic conditions in Barbados before the pandemic. The Caribbean Development Bank<sup>21</sup> reported a significant reduction in tourists in Barbados, in early 2020, which has not augured well for economic recovery to date, because tourism is the single largest contributor to gross domestic product (GDP).<sup>22</sup>

The construction of the isolation unit without consideration for the likely need to manage civil and forensic patients with mental health conditions was a glaring oversight. It suggests that mental health care was not seen as a priority by the decision-makers. The inclusion of mental health professionals to consider the specific needs of this patient population was critical. After several months of operation, a full-time psychologist has been added to the staff of the isolation center.

### **Ethics Challenges**

The onset of the COVID-19 pandemic has raised ethics questions with respect to the delivery of mental

health care. Among these is whether we are acting in our patients’ best interests by assessing them over a telephone or via videoconferencing platforms. Patients are required to discuss personal, stigmatizing information that has the potential to be shared or monitored by others, including the service providers. Clinicians have an ethics responsibility to ensure the use of tools that are compliant with the Health Insurance Portability and Accountability Act,<sup>23</sup> and government has the wider responsibility to ensure that laws exist that determine if and when patient information can be used.

Clinicians reported concerns about some patients who did not have a private, quiet room in which they could have their consultation. Family members could be seen and heard mulling around in the background and potentially listening to the discussion. In one instance, an author (M.E.) was speaking with a survivor of domestic violence and had to switch over from a video call to write in the chat when her alleged perpetrator entered the room. There were other reports of participants’ discomfort with having the insides of their homes shown during video calls.

Some patients could not be contacted because they did not have access to landlines or mobile devices. These experiences raise concerns about how fair and equitable access to care can be ensured with the use of telepsychiatry. This has the potential to place an already vulnerable population at further risk of decompensation and poorer outcomes. As the use of ICT becomes the more prevalent mode of care delivery, revised mental health plans must incorporate training in the use of these technologies while providing alternatives to care if the tools are not available.

The need for viable alternatives was also evident with respect to the continuation of clinical training of medical students while doing so in a safe environment. Whereas it is possible to deliver many aspects of a medical curriculum online, clinical skills training is more difficult to impart in a virtual platform.

### **Conclusion**

The introduction of vaccines has engendered both hope and fear in the population; hope on the one hand as it has presented a possible way back from the isolation and despair associated with lockdowns, but fear on the other, as many see the vaccines as unknowns and are worried about mandatory vaccination and testing conferring disadvantage on those who do not wish to go that route. With the

emergence of the delta variant of SARS-CoV-2, known to be more transmissible than the original virus, it is imperative that systematic collection of data to determine changing service needs is used to inform future mental health service development.

This pandemic has raised many challenges and has affected the provision of mental health care on the island of Barbados. Services adapted quickly to rise above these challenges but there are further opportunities to improve on what has already been put in place. The response needs to be coordinated, inclusive, and fair to all stakeholders.

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