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MENA'S NEWSLETTER CONTRIBUTION TO AAHCI'S CROSS-REGIONAL THEME OF MENTAL HEALTH DURING COVID-19

EDITORIAL NOTE

COVID-19 and Changes in Health-care Delivery and Training: Some are here to stay

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The COVID-19 pandemic caused significant changes in the healthcare system to a point that it would be difficult to imagine what the world of healthcare will look like post-pandemic. Now is the time to reflect on these changes and plan for the future. As such, this newsletter issue is dedicated to how COVID-19 has impacted healthcare delivery and training.

In an article on health workers' wellbeing, the authors discuss initiatives launched at the American University of Beirut to support frontline workers during the pandemic response. In another article, a comprehensive response within the SEHA system in the UAE is highlighted—an initiative guided by the mantra "Let us care for you while you care for others".

Challenges and opportunities of training in mental health are also discussed in this issue. Here, the authors focus on how the pandemic shaped the experience of clinical psychology trainees and psychiatry residents. Online education and its impact on families are also discussed by specialists from the learning center at AUBMC.

Two articles are dedicated to clinical issues. In the first one, the authors discuss how services were adapted to meet the clinical needs of patients with COVID-19, whether in the hospital or ambulatory care. In the second one, telehealth is presented as a tool that was introduced to continue to provide care to existing and new psychiatric patients as an opportunity to make psychiatry more available globally.

I invite you to read these diverse articles and reflect on which changes are here to stay.

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ARTICLE 1

Healthcare workers' Wellbeing during the Pandemic: Psychological Support Initiative

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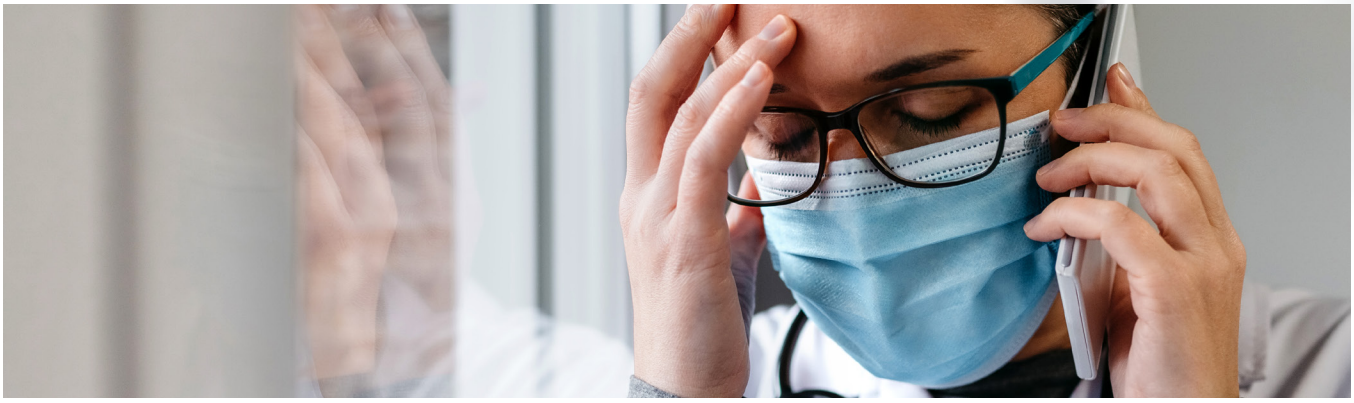

The emergence of the coronavirus (COVID-19) as a pandemic in 2020 wreaked havoc on the world in ways we may not understand in years, if not decades, to come. Primarily, a public health crisis—the most immediate focus of health authorities, media, and the public during the pandemic—revolved around the biological and physical repercussions of the outbreak. Nonetheless, the significant mental health impact of strict precautions and social distancing measures on the general population and the service sectors became salient. The increasing number of infected cases and deaths brought along huge burdens, not only on patients and their families but also on institutions and frontline staff involved in the immediate response to the pandemic, as well as those ensuring the continuation of essential patient care (e.g., for chronic conditions).

The psychological burden of service during pandemics is insurmountable. The level of risk incurred by healthcare workers (HCWs) in fulfilling their duties during infectious disease outbreaks is augmented with fear of getting infected themselves as well as anxiety over spreading the infection to family and friends. Often, for safety reasons, HCWs spend time in isolation from their support systems when they need this support the most[2]. Consequently, mental resources are likely depleted and pre-existing previously controlled mental health conditions are exacerbated. Previous research has revealed a profound and broad spectrum of psychological impact that outbreaks can inflict on people. Outbreaks can precipitate new psychiatric symptoms in individuals without mental illness, aggravate the conditions of those with pre-existing mental illness, and cause distress to the caregivers of affected individuals.

HCWs come into this pandemic with elevated rates of burnout and distress, leading to a suicide rate that is multiple folds higher than that of the general population[3, 4]. The ever-increasing number of confirmed and suspected cases, overwhelming workload, depletion of personal protection equipment, widespread media coverage, lack of specific drugs, and feelings of being inadequately supported, may all contribute to the mental burden of HCWs in particular. The 2003 SARS outbreak is a documented example of the adverse psychological reactions among HCWs[5, 6]. In the early days of the pandemic, preliminary results from China revealed an increase in depression, anxiety, insomnia, and distress among HCWs operating during the COVID-19 crisis[7]. Moreover, the literature reveals that HCWs who work in emergency departments, intensive care units, and isolation wards have a greater risk of developing adverse psychiatric outcomes than those of other departments, possibly because they are directly exposed to the infected patients, and their work is highly demanding[8]. Unfortunately, there have been multiple reports of death by suicide of physicians and nurses treating patients and contracting COVID-19[9, 10].

In light of this dire reality, hospitals and medical institutions have an ethical duty and a pivotal role to play in ameliorating the adverse psychological effects of the situation on HCWs in order to ensure their wellbeing and ability to continue to function and support others effectively. In Lebanon, the medical community is at an even higher risk because these psychiatric morbidities are combined with the ongoing deterioration of the political and economic situation before the advent of the COVID-19 pandemic.

To address this need, the Department of Psychiatry at the American University of Beirut Medical Center (AUBMC), in collaboration with the Employee Assistance Program (EAP), launched a mental health initiative to support frontline workers during the pandemic response. The project targeted all sectors of the healthcare system including doctors, nurses, residents, students, and administrative and support staff, and integrated three major components:

1. General Awareness and Needs Assessment:

a. Information gathering:

The team held multiple informal meetings with leaders of response teams in the Medical Committee, Infectious Diseases, and Emergency Medicine units to hear about mental health needs, followed by a formal opening session where more information was solicited. Additionally, the initiative was announced both formally (e.g., through official announcements) and informally (e.g. word of mouth and physical presence on the ground).

b. Workshops and online public webinars:

Initially, four online, open-invitation webinars were held and were attended by over 100 faculty and staff. Later, the team accommodated requests from multiple departments to tailor mental health support to the particular needs of their employees. A total of nine in-person workshops and one online workshop were conducted for 4 departments at AUB/AUBMC, and support given to two other departments who held their own workshops with support from our team. In collaboration with the Mental Health Academy, six additional online workshops were provided as a community outreach with three institutions. Topics included coping with ongoing stress, managing uncertainty, life and work in uncertain times, dealing with trauma, a life worth living, and self-care.

c. Developing and disseminating resources:

Brochures and posters were developed with short, bilingual messages and displayed throughout the hospital. Those included quick reminders such as "Did you call your loved ones today?" "Talk to yourself kindly," "Take a moment to De-Stress," and "Breathe." Mental health tips were also made available via email and on the department's Facebook page.

2. General Support:

a. Rest area:

A well-lit, vast room was set aside as a rest area for the medical team that could accommodate three to four individuals with physical distancing measures. The room contained water, drinks, snacks, and comfortable furniture.

b. "Show your face:"

Both by rotation and randomly, members of the mental health support team who felt comfortable enough stopped by the different units to offer in-person support. This was reportedly one of the most valuable gestures because it sent a strong message of solidarity and anti-stigma.

3. Direct Clinical Services:

a. Support groups: Initially, support groups were offered weekly and made open to all, and were not utilized by anyone. The model was then modified to cater to subgroups as needed and five support sessions were held for one department and one group for another department.
b. Consultation/support for dealing with difficult situations: As needed, consultations were offered on ways to handle difficult patient and/or colleague situations.
c.Individual counseling sessions and referral: Confidential and free, 30-minute individual sessions were made available by appointment at internal medicine clinics, and up to three appointments per person. Those who needed further care were referred to psychotherapy. A total of 38 individual sessions were held by six providers.

4. Support for the Mental Health Team:

The psychological response team held regular meetings in order to debrief and support each other, and they sought consultations from outside providers as necessary.

Overall, the initiative was well received and requests for more services continued, especially after the explosion in the Port of Beirut on August 4, 2020, and the deteriorating situation in Lebanon. Specifically, we were surprised by the number of attendees in sessions, the active level of participation, and the requests for further sessions with informal feedback on the helpfulness of those services. We emphasized in each session "lessons learned" and "skills put in practice" from our previous sessions and it was clear that people were able to put the knowledge in action to deal with stress in every day-to-day life event. In particular, and given the protracted nature of stress and conflict in Lebanon, our interventions utilized the approach of "accepting and managing" instead of unrealistic expectations of "solving your problems" that are often set by similar initiatives. We will plan for more formal evaluations in future events.

On a final note, the team would like to acknowledge the unwavering support of the administration and the dedication of all the units and individuals without whom this initiative would not have been a success. We are in this together and we will get through this together.

ARTICLE 2

Evolution of Psychological Support Resources for Healthcare Staff at SEHA

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"Let us care for you while you care for others!" With this mantra in mind, we embarked on a journey of psychological support for the frontline workers assigned to face the pandemic as it surged across the globe in all its fury.

Soon after the WHO declared the Novel Coronavirus (COVID-19) a pandemic in March 2020, Abu Dhabi Health Services Company (SEHA), UAE›s largest public healthcare network, launched a committee to oversee the psychological support of its approximately twenty thousand employees. The SEHA Employees Psychological Support Committee (SEPSC) is a diverse group with representatives from different sections within healthcare.

We initiated with a launch of an online Webinar Series in late March 2020. There have been weekly webinars ever since, wherein experts from across the world have participated and spoken about a gamut of topics such as resilience building, pandemic hysteria, compassion fatigue, self-care in pandemic, coping skills and stress management, etc. They are held every Thursday online, and, as of May 2021, we have successfully hosted 45 webinars on our platform.

As the onslaught of the pandemic continued there was a surge of mass exhaustion and fear amongst the frontline workers across the globe. The working hours got longer, and the working conditions became more

precarious. Staff were asked to isolate themselves from their loved ones for days at a time; some had to endure the trauma of witnessing peers succumb to this nefarious illness. To give them a safe space to call and grieve, in May 2020, SEPSC launched the SEHA Employees Psychological support helpline called Ma›akum. It is a confidential telephone service dedicated for SEHA employees seeking psychological support, manned by volunteers who are either current psychology students or new graduates looking to earn their internship hours. The group is supervised by mental health professionals (licensed psychiatrists and psychologists staff from SEHA). SEHA staff members call the helpline to seek counselling. Anonymity and confidentiality are ensured at all times. The caller goes through screening for clinical depression and anxiety, risk assessment is done, and the call triaged accordingly. The helpline is supported legally by a binding policy where the breach of confidentiality is attempted only in case of imminent danger. The volunteers are legally bound by confidentiality agreements. Calls are logged on a shared folder, which also houses teaching material and volunteer information.

In June 2020, at the peak of the pandemic, SEPSC offered online support groups for staff members with a weekly series of online Mindfulness Groups. We held in-person support groups at different facilities each week upon invitation from staff members looking for additional support. In October 2020, SEPSC partnered with a digital startup to provide counselling on a digital platform. Besides the psychology volunteers, we also had certified life coaches from within SEHA, who volunteered on this platform to assist staff members to reintegrate and readjust as things began to return to normalcy.

We conducted a research study approved by the Abu Dhabi Department of Health to measure the level of burnout and adverse psychological outcomes in healthcare staff during the pandemic – and "Assessment of Psychological Impact of the Pandemic on Healthcare Employees."1 We closed the survey with over 2184 responses. The data generated from the report helped to advocate for mental health insurance for expatriate staff members and resources for psychological support.

Besides the heightened attention to the psychological impact on healthcare staff, different healthcare facilities under SEHA harboring the isolation wards took proactive steps to address the mental health of the patients as well. Outpatient psychiatry services continued to operate uninterrupted via virtual clinics and drive-through clinics; medications were delivered to the doorsteps and emergencies were handled swiftly and safely with all precautions. As for the psychological support of patients who were being hospitalized with COVID, upon admission to the isolation wards, patients in various centers were provided with a self-help booklet, «Doing What Matters in Times of Stress,»2 with illustrations adapted from WHO›s manual with the same title. These were made available in different languages (English, Arabic, Hindi, Urdu, Tagalog, Bengali, and Malayalam) to our patients in isolation, teaching them coping strategies. A group of community volunteers was assigned to provide telephone counselling to the patients in isolation, these volunteers were supervised by SEHA staff members.

Although things are gradually resuming normalcy, the helpline and webinars continue to be functional. The frontline staff continue to languish with scars from the traumatic experiences and still reach out for help. Healing can be slow and hurtful, but we are honored to be there for our heroes who risked everything to care of others.

ARTICLE 3

Training During COVID-19: Challenges and Opportunities

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The COVID-19 pandemic has led to numerous unparalleled challenges. However, it also offered various opportunities for growth for most clinical psychology training programs and psychiatry residency programs around the world. This came in the wake of an unprecedented year in Lebanon's modern history, marked by an array of crises and adversities.

Soon after the start of the COVID-19 pandemic, response measures were put in place at the American University of Beirut Medical Center, leading to psychiatric clinical services and educational activities being adjusted to match the new reality. Creative responses had to be developed and implemented to ensure the continuity of the training programs as well as the delivery of the services during rapidly changing health emergency restrictions and lockdowns.

The psychiatry inpatient unit (PIU) was rapidly relocated to the main hospital after its prior location was re-purposed to COVID-19 services. The new PIU accommodated a lower number of patients, yet with diverse acute psychiatric presentations. The modification of admission criteria favoring essential safety and infectious precautions allowed adequate clinical exposure for trainees, while ensuring their protection as well as that of patients and staff. However, exposure to psychoeducation groups, family meetings, and other treatment activities had to be reduced to a minimum. Conversely, the workload of the consultation service increased.

More patients presenting to the emergency department and admitted to regular floors for different medical problems, including COVID-19 infection, required mental health evaluation and intervention. New or exacerbated symptoms of insomnia, anxiety, depression, post-traumatic stress, headaches, and confusion were commonly reported by patients, particularly those with a COVID-19 infection. Additionally, practitioners encountered rare and unusual neuropsychiatric symptoms, such as psychosis, among patients actively suffering from COVID-19 or after recovering from the infection. Apart from carrying on with regular psychiatric duties and responding to the rising psychological needs precipitated by the COVID-19 infection, residency trainees were redeployed to rotate on the COVID-19 ward due to the increased need. The redeployment prompted mixed emotions of solidarity with colleagues on the frontlines but also fear for their own and their family's safety.

In response to the rising psychological needs of hospitalized patients with COVID-19, faculty members at the department of psychiatry worked on new algorithms and workflows addressing the management of common psychiatric symptoms, while minimizing direct exposure to COVID-19. Those workflows were then disseminated to other departments within the hospital to streamline basic interventions to patients according to

evidence-based protocols. The faculty members also implemented a mixed model of care for consultation and outpatient services based on the use of telehealth and/or in-person assessments depending on the required level of service.

Initially, the training programs and the clinical work were continued while ensuring basic accommodations, such as physical distancing, increasing availability of hand sanitizer, temperature check upon arrival, and making sure providers and patients were wearing their protective gears. The lack of knowledge about the pandemic translated into a significant amount of uncertainty, fear and anxiety for many trainees, faculty, and staff. Psychology interns worried about how they may be affected by program disruptions (e.g., reduction in hours, changes in rotations, graduation). Some experienced concerns about infecting elderly family members or at-risk parents by having to carry on work at the hospital with direct patient contact during a period where physical distancing was emphasized as the most vital measure to help reduce the spread of the new virus.

Afterwards, as governmental responses unfolded and lockdown measures were implemented, trainees were faced with full closures, and services were put on hold. All on-site activities and outpatient face-to-face clinical services were paused. Crisis intervention services and triage services were rapidly designed and implemented. Psychology interns and psychiatry residents volunteered to apply phone screening protocols and triage assessments for people affected by the quarantine and suffering from mental health difficulties due to the virus. Daily individual online therapy sessions and group sessions were offered to patients in quarantine and to their families who often expressed distress and worry over their family members.

Lockdown restrictions and curfews and limited access to quality internet services greatly affected some patients' access to mental health services. Continuity of care had to be maintained at times via phone calls or emails to ensure that those patients' needs were addressed in due time.

Training as novice psychologists during an unprecedented pandemic has resulted in unique challenges and opportunities—from seeing their first patients, getting acquainted with the importance of nonverbal cues and silences in the therapy room, and applying new skills to facing an abrupt move to online therapy. Indeed, trainees were suddenly required to conduct therapy while managing technology and connection failures that disrupted the flow of interventions. Training in a low-fee clinic during a health crisis also brought up numerous new topics to therapy, such as an increase of concentration on losses, grief, adjustment, fear and social problems as well as coping with the shared emotional distress.

Telehealth, online supervision, and distance learning were then quickly introduced and, despite little to no experience, it became the new normal. Multiple webinars and crash courses on telehealth and online services were quickly added to the curriculum. The shift to this new modality allowed the department of psychiatry to host renowned national and international speakers from outside the university and the country to deliver talks remotely in order to share expertise and advance knowledge in the field. Virtual didactic sessions provided extended opportunities for multi-site and international collaboration that enriched the educational curriculum.

The successful move to remote learning may have an impact on the design of training programs that may continue after the resolution of the pandemic. It might encourage the inclusion of telehealth training as core competencies in curricula and widen the scope of didactics lectures and workshops to include experts from around the world discussing their latest research and specialized interests.

The challenges entailed by the pandemic encompassed changes in the shape and mode of education and services' delivery. It stretched trainees' flexibility amidst uncertainties and entailed staying mindful of one's own emotional reactions and fears while managing that of their patients. Although the COVID-19 pandemic imposed incredible challenges and difficulties for training during a time of crisis, it also carried new opportunities for professional, clinical, and individual growth. Trainees have gained essential skills and competencies and the ability to adapt quickly and work under incredible levels of pressure early on in their training/career. Conversely, programs have discovered innovative and creative ways of advancing education and training practices.

ARTICLE 4

Thinking Outside the Box - When the Box is Brimful

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A year prior to the pandemic, the American University of Beirut Medical Center's Psychiatry Department had restructured its Consultation-Liaison (CL) Service to include a full-time psychiatrist, a resident, and medical students and a health psychologist upon request. These healthcare workers covered medical and surgical inpatient wards along with emergency department consults.

The pandemic hit in March 2020 amidst worsening economic inflation and unfolded with worsening numbers. On August 4, 2020, the blast in Beirut compounded the strains on a healthcare system already functioning at capacity. In parallel to the many changes that have occurred hospital-wide, we reorganized our CL service to respond to the COVID-19 pandemic demands.

In order to streamline the mental health needs of admitted COVID-19 patients, our department created rapidly a COVID-19 Mental Health Taskforce. In the early days of the pandemic, a proactive workflow was implemented, whereby all COVID-19 patients would be screened for psychological distress, using validated tools, upon presentation. They would have available free-of-charge mental health services whether admitted or quarantined at home. This included daily check-ins on all agreeable patients admitted to the Pandemic Evaluation Clinic and Center (PECC). The success of this implementation lay truly in a collaborative intradepartmental and interdepartmental effort.

As the first wave of the pandemic seemed to wane, the second bigger wave undoubtedly stretched our medical center with a bigger load. As such, in light of limited human resources, we had to switch gears to a more responsive consultation model, with a similar mantra of both being readily available to our frontline colleagues for any psychiatric questions and providing optimal patient care. Our department put forth protocols circulated among department heads for the medical management of common psychiatric conditions arising with COVID19 patients. These included a quick-tip-sheet on the medical management of substance withdrawal and different forms of anxiety: anxiety with or without insomnia, anxiety with depressive symptoms and insomnia, anxiety with suspected delirium. They also included guidelines for the medical management of delirium and agitation in a noncritical care setting, adapting them to published international best practices. Importantly, these took into account the evolving polypharmacy of COVID patients. The overarching goal was to continue to provide rapid and efficient consultations while supporting our frontliners in the best way we could.

In parallel, looking at best practices internationally, several institutions had instated an eConsult process for COVID-positive patients—a chart review consultative process—to protect patients and healthcare providers while ensuring proper stewardship of resources.1Taking into account the limited number of trainees, physicians, and telepsychiatry resources, we modified our workflow to include deployment of virtual consultations to minimize unnecessary exposure of C-L providers to COVID- 19. The modality of the evaluation was always agreed upon with the primary team. Most telepsychiatry consults were done via the patient's personal phone. In-person consultations were reserved for capacity consults—especially those that were controversial—for behavioral agitation and for psychiatric emergencies, such as suicidal or self-harm attempts, suspected neuroleptic malignant syndrome, serotonin syndrome, and catatonia.

Clinically, we have noted emerging themes in our COVID and post-COVID patients. The bread-and-butter CL cases—ranging from delirium, anxiety, and adjustment—have been naturally prevalent. We have particularly noted a few underdiagnosed cases of serotonin syndrome, often misdiagnosed as delirium or agitation, or benzodiazepine withdrawal. This could be the result of the changing sedation and antibiotic protocols and pharmacology around COVID-19 comorbidities, or of the pathophysiology of the illness itself.2 The interdisciplinarity between the teams has shown to be an essential element for better patient care.

Heightened levels of anxiety were a frequent reason for a consult in our post-COVID unit.3 As one resident put it, "it's as if these patients forgot how to breathe," describing the patients who experienced anticipatory anxiety before each breath. Low-dose antipsychotics were used to treat these symptoms and to avoid benzodiazepines. Perhaps more importantly, psychological support was provided to patients. The latter focused on breathing exercises based on Johns Hopkins University physical therapists' recommendations.4

These unprecedented times have certainly led to exceptional approaches to managing patient care. It shed light on the importance of widening one's perspective, seeking out different resources, and relying on the interconnection between clinical judgment and present-day evidence-based research.

ARTICLE 5

COVID-19 and Telemental Health

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The COVID pandemic changed society and healthcare systems. Social distancing and remote medical technologies are being deployed in all areas of medicine. Telepsychiatry (video conference) is in the vanguard.

Telepsychiatry (TP) will have long-lasting effects in the arena of mental health. Psychiatric organizations and individual clinicians have been rapidly adopting TP. Rapid adoption has shown that clinicians and patients adapt to telepsychiatry. Previous barriers, including legal limitations and resistance to TP, have greatly been reduced.

The main challenges now are:
-Liability and dealing with emergencies
-Payment systems (online payments)
-Equity (limited internet and electronic devices in some communities)
-Prescribing online and delivering prescriptions
-Running a hybrid clinic (live and virtual patients)
-Integrating TP with EMR
-Transnational/International consultation (issues of licensure and legality)

Our experience, over 1½ years, with TP has been quite successful. We did encounter most of the above challenges; but, in general, they were manageable with a combination of trial and error, creativity, and a dedicated staff. Some factors, such as the quality of the internet connection in the country, were beyond our scope to address. Eventually, after a steep learning curve for us and our patients, the process became more efficient and streamlined. For many patients, TP has become the preferred modality of seeing a psychiatrist or psychologist.

Going forward, psychiatry must balance personal and virtual interactions. Outcomes need to be measured to determine if live visits are superior to virtual visits, or are the results similar? Or perhaps outcomes are superior for virtual visits?

We are in the golden age of mental health and psychiatry. TP, which developed from the tragedy of COVID, is an opportunity to make psychiatry more available globally to all segments of society—and to make it more equitable and efficient.

ARTICLE 6

The Impact of Online Learning on Students : A Reality Check

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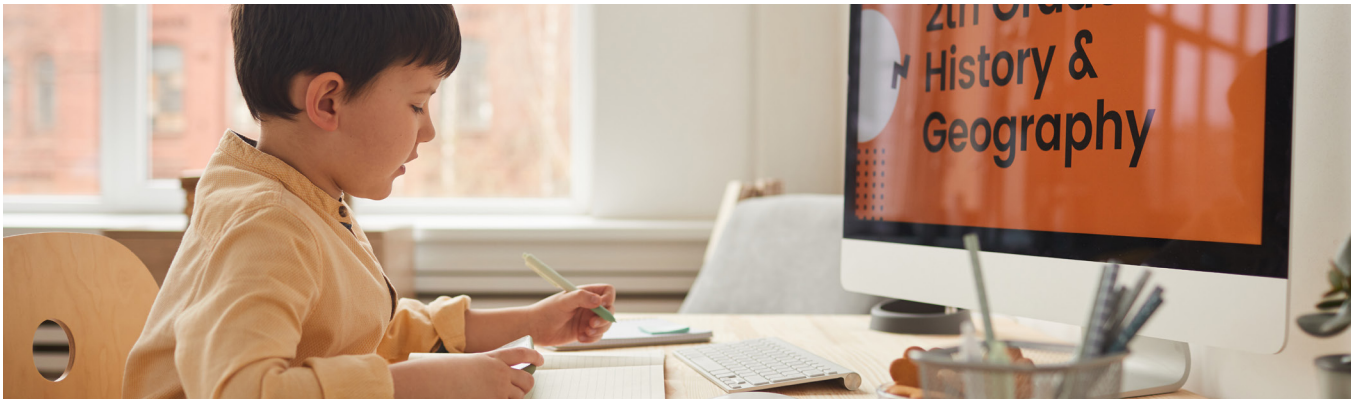

COVID-19 has invaded all countries—slowing their industries and economy, overloading the medical field, disturbing the education sector and social life, and bringing to a halt some businesses. Lebanon has not been an exception. In addition to the pandemic, the country witnessed a financial crash, unprecedented inflation, the highest number of refugees per capita in the region (UNHCR, 2021), political and security instability, and the catastrophic Beirut explosion.

Within this complex situation, the education system, already laden with challenges before the pandemic, was even more shaken. Some of the challenges related to the closing of universities and schools (Mouchantaf, 2020), the significant disparities in access to online learning, the difficulty of ensuring an inclusive online education, and the lack of preparedness and shift to online learning. Nonetheless, this shift represented a vector of much-needed change in the education sector, and it set a firm trajectory to the future: the digitalization era.

In Lebanon, several factors have hindered the provision of services to students on digital platforms. The psychological effects and emotional distress caused by the pandemic were accentuated by the explosion at the Beirut port and the severe continuously worsening economic crisis. Students struggled to access digital devices, some had to share the same device with parents working from home or siblings, and others had none to continue with their learning. Add to this a costly and non-reliable internet access (UNESCO, 2020) and frequent power outages (Khaddaj et al, 2020).

Online learning was provided in public and private Lebanese education through various modalities, such as

learning through online platforms, a hybrid model including traditional learning with some content sent to students via phone messages or hard copies, learning through the national television channel, and traditional learning. This resulted in curricular content inequalities and the lack of learning support needed by those with disabilities. It also caused a lack of social and class participation and overwhelmed teachers with lengthy preparation and teaching (Khaddaj et al, 2020). Students obliged to access online learning at home were also subjected to an entirely new learning experience, adapted home learning environment, and learning self-organizational skills (Wazzan, 2020) and study skills, which are sometimes difficult to master under stressful circumstances.

Clinically, we have seen in our Center a rise in the number of patient consults to obtain support regarding literacy and numeracy skills, attention, concentration, study skills, and emotional and behavioral dysregulations. Many students at home, short of the structure and routine that traditional face-to-face learning provides, saw their productivity diminished by environmental distractions (Wazzan, 2020) resulting from constant screen time and social media exposure, texting, television, and other family members sharing spaces. Some also displayed a dearth of motivation, a tendency to drop out from schooling regularly, and resistance to change toward invasive and loaded e-learning (Tan, 2020). The psychological and emotional distress were accentuated by social isolation and the lack of contact and bonding with peers, teachers, and extended family, not minimizing the chronicity of the situation. The lack of parental guidance for young learners presents another challenge, as both parents are busy working or burnt out from the long-lasting complex Lebanese situation.

Teachers had to swiftly transition to teaching through e-platforms and transform their curricular content while learning to master effective online teaching tools (Yuhanna, Alexander, & Kachik, 2020). Besides the workload and the time needed to prepare (Wazan, 2020) and deliver online learning, teachers needed to have technological literacy and to handle a technological medium (Levy, 2018), sometimes without any technical assistance (Pokhrel & Chhetri, 2020). Online learning was not suitable for all topics in specific grade levels. For example, science and mathematics teachers struggled to explain some concepts for younger children or older ones without hands-on experiments. Similarly, e-learning cannot replace the knowledge and skills that stem from sensory and hands-on experiences in nursery and preschool years.

Academic assessments were found to be influenced by the presence and help of parents, thus biasing the results (Guangul et al, 2020) and preventing the screening of potential learning difficulties and addressing them promptly, as well as leaving those with more significant impairments under the radar. In some cases, those with the diagnosis were not provided with school-based, individualized support in an online environment, and parents did not have the adequate support and guidance to support their children.

Despite the challenges, online learning has allowed students to study from their home or any other location (Clover, 2017). The mobility of families leaving Lebanon or those moving locally was not affected, and students could continue their schooling, university, or rehabilitation interventions without interruptions. Other logistical considerations (e.g., dress code, commuting, increased sleeping hours, free time, course recording) were appreciated by many students (Ni, 2013), which improved their motivation and guaranteed a continuum in learning.

We observed in our clinical setting that with the appropriate support given, some of the students with anxiety, social difficulties, shyness, or learning disorders dared to participate more during online classes. Others, with ADHD or with a slower learning rhythm studying online, showed better comprehension and focus without being distracted by the usual classroom stimuli.

With time, students, parents, teachers, and therapists have all developed or acquired technological skills (Mekdessi, Makdissi, & Moucachar, 2021) using innovative teaching, learning, and therapeutic methods—making our practices meet the digital era.

The digitalization of education allowed for saving all educational materials, breaking the traditional time and space limitations and regulations. Students are not bound to be at schools to learn, they can now access educational materials anytime and anywhere. Parents were exposed "live" to their children's learning and some even took an active educational role (Pokhrel & Chhetri, 2021). Indeed, they supported their children, including those with learning or behavioral disorders. The latter was also given support in specialized clinical settings, where teams continued working through tele-practice or face-to-face interventions. Improvements in literacy and language development were noted in standardized assessments of individuals with mild intellectual disabilities or mild to moderate specific learning disorders in reading and mathematics. This was possible through a systemic approach whereby a coordination mechanism was maintained between the therapists, the schools, and parents. The latter were regularly provided with guidance and training to support them in implementing their children's individualized educational plans at home.

How to invest the lessons learned from the abrupt shift to online learning due to COVID? The digitalization of education has secured a leap to the future by upscaling the skills of all stakeholders, bringing them to share a common language and vision. National policies to regulate online education, training and support of stakeholders and allocation of resources are paramount to guarantee equal access and opportunities and secure the rights to all to education.

ARTICLE REFERENCES

References for Article 1

1. World Health Organization. News Room, accessed on April 28, 2020: https://www.who.int/news-room/detail/27-04-2020-who-timeline---covid-19
2. Greenberg, N., Docherty, M., Gnanapragasam, S., & Wessely, S. (2020). Managing mental health challenges faced by healthcare workers during the covid-19 pandemic. BMJ 2020;368:m1211 .
3. Schernhammer, E.S., & Colditz G.A (2004). Suicide rates among physicians: a quantitative and gender assessment (meta-analysis). Am J Psychiatry, 161(12), 2295-302.
4. Gold, K., Sen, A., & Schwenk, T. (2013). Details on suicide among US physicians: data from the National Violent Death Reporting System. General Hospital Psychiatry, 35, 45-49.
5. Maunder R, Hunter J, Vincent L, et al. (2003). The immediate psychological and occupational impact of the 2003 SARS outbreak in a teaching hospital. CMAJ, 168(10), 1245-1251.
6. Chua SE, Cheung V, Cheung C, et al. (2004). Psychological effects of the SARS outbreak in Hong Kong on high-risk health care workers. Can J Psychiatry, 49(6), 391-393. doi:10.1177/070674370404900609
7. Lai, J., Ma, S., Wang, Y., Xhongxiang, C., Hu, J., Wei, N., Wu, J.Du, H., Chen, T., et al. (2020). Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019. JAMA Network Open, 3(3):e203976. doi:10.1001/jamanetworkopen.
2020.3976
8. Naushad, VA, Bierens, J, Nishan, KP, Firjeeth, CP, Mohammad, OH, Maliyakkal, AM, ChaliHadan, S, & Schreiber, MD. (2019). A systematic review of the impact of disaster on the mental health of medical responders. Prehospital and Disaster Medicine, 34(6), 632-643.
9. NYC Emergency Room Doctor Dies from Suicide After Treating COVID-19 Patients: https://www.nbcnewyork.com/news/coronavirus/nyc-emergency-room-doctor-dies-from-suicide-after-treating-covid-19-patients/2391978/
10. Coronavirus-infected Italian nurse commits suicide from fear of spreading COVID-19 to patients: https://www.dailysabah.com/world/europe/coronavirus-infected-italian-nurse-commits-suicide-from-fear-of-spreading-covid-19-to-patients
11. The State Council of China. A notification to set up nationwide psychological assistance hotlines against the 2019-nCoV outbreak. Published February 2, 2020. Accessed March 3, 2020. http://www.gov.cn/xinwen/2020-02/02/content_5473937.htm
12. Liu, S., Yang, L. L., Zhang, C. X., Xiang, Y. T., Liu, Z., Hu, S., & Zhang, B. (2020). 2019 novel coronavirus: online mental health services. Lancet Psychiatry, In press. doi:10.1016/S2215-0366(20)30046-8

References for Article 2

1. Nn, Ahmed & Aljasmi, Shaima & Ra, Alkaabi & Sh, Al-Marzooqi & Stip, Emmanuel. (2020). Psychological Impact of the COVID19 Pandemic on Healthcare Employees in Abu Dhabi Health Services Company (SEHA) Psychological Impact of the COVID19 Pandemic on Healthcare Employees in Abu Dhabi Health Services Company (SEHA). 10.23880/eij-16000172.
2. https://www.who.int/publications/i/item/9789240003927

References for Article 4

1. Shenouda, R. and Desan, P., 2020. Psychiatric consultation service: special guidelines for patients with definite or possible highly contagious infectious disease. [ebook] New haven, CT: Yale School of Medicine. Available at: https://www.clpsychiatry.org/covid-19/member-submitted-resources/ [Accessed 12 March 2021].
2. Zaid, Y., Guessous, F., Puhm, F., Elhamdani, W., Chentoufi, L., Morris, A. C., Cheikh, A., Jalali, F., Boilard, E., & Flamand, L. (2021). Platelet reactivity to thrombin differs between patients with COVID-19 and those with ARDS unrelated to COVID-19. Blood advances, 5(3), 635–639.PMCID: PMC7846461 DOI: 10.1182/bloodadvances.2020003513
3. Uzunova, G., Pallanti, S., & Hollander, E. (2021). Presentation and management of anxiety in individuals with acute symptomatic or asymptomatic COVID-19 infection, and in the post-COVID-19 recovery phase. International journal of psychiatry in clinical practice, 1–17. Advance online publication. DOI: 10.1080/13651501.2021.1887264
4. Zanni, J., Lien, P., Johnson, K., Anderson, T. and Almeyda, D., (2020) Bouncing Back From COVID-19: Your guide to restoring movement. [ebook] Baltimore, MD. Available at: https://www.hopkinsmedicine.org/physical_medicine_rehabilitation/coronavirus-rehabilitation/_files/impact-of-covid-patient-recovery.pdf [Accessed 12 March 2021].

References for Article 6

1. Clover, I. (2017). Advantages and disadvantages of eLearning. September 23º From e-Learning Industry Sitio web: https://elearningindustry.com/advantages-and-disadvantages-of-e-learning
2. Guangul, F.M., Suhail, A.H., Khalit, M.I., Khidir B. A. (2020). Challenges of remote assessment in higher education in the context of COVID-19: a case study of Middle East College. Educ Asse Eval Acc 32, 519–535. https://doi.org/10.1007/s11092-020-09340-w
3. Khaddage, F., Fayad, R., & Moussallem, I. (2020). Online Learning and the Role of Technologies During COVID19 Pandemic "Higher Education Lebanon Case. In EdMedia+ Innovate Learning (pp. 623-630). Association for the Advancement of Computing in Education (AACE). Retrieved May 25, 2021, from https://www.learntechlib.org/primary/p/217361/
4. Levy, L. A. (2018). 11 Digital Literacy Myths, Debunked, USC Rossier Blog, https://rossieronline.usc.edu/blog/digital-literacy-myths/
5. Mekdessi, S., Makdissi, R., & Moucachar, M. (2021). Challenges and Perspectives of Online Teaching: A Lebanese Empirical Study.IOSR Journal of Business and Management (IOSR-JBM)e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 23, Issue 4.
6. Mouchantaf, M. (2020). The COVID-19 Pandemic: Challenges Faced and Lessons Learned Regarding Distance Learning in Lebanese Higher Education Institutions. Theory and Practice in Language Studies, 10(10), 1259-1266. DOI: http://dx.doi.org/10.17507/tpls.1010.11
7. Ni, A. Y. (2013). Comparing the effectiveness of classroom and online learning: Teaching research methods. Journal of Public Affairs Education, 19(2), 199-215.
8. Pokhrel, S., & Chhetri, R. (2021). A literature review on the impact of COVID-19 pandemic on teaching and learning. Higher Education for the Future, 8(1), 133-141. DOI: 10.1177/2347631120983481
9. Tan, C. (2021), The impact of COVID-19 on student motivation, community of inquiry and learning performance, Asian Education and Development Studies, 10(2), 308-321. https://doi.org/10.1108/AEDS-05-2020-0084
10. UNESCO, (2020). Online Teaching and Learning. The Lebanese Internet Governance Forum. https://en.unesco.org/news/unesco-explores-online-teaching-and-learning-during-lebanese-internet-governance-forum
11. United Nation United Nations High Commissioner for Refugees, Lebanon Global Focus, https://reporting.unhcr.org/node/2520?y=2021#year
12. Wazzan, M. (2020). Learning Remotely as the Only Resort: How is Lebanon Doing? https://www.al-fanarmedia.org/2020/04/learning-remotely-as-the-only-resort-how-is-lebanon-doing/.
13. Yuhanna, I., Alexander, A., & Kachik, A. (2020). Advantages and disadvantages of Online Learning. Journal Educational