

The toll of cascading crises on Lebanon's health workforce



The Lebanese health system is at the brink of collapse. On Aug 14, 2021, the American University of Beirut publicly called upon the international community to urgently arrange for fuel to avert a forced shutdown of all its services. The fuel shortages follow growing strain on the health-care system, resulting from economic deceleration, widespread erosion in public trust, protracted refugee crises, and a steady attrition of the workforce. Health-care workers who had been attracted to the stability and quality of life in Lebanon at the turn of the century have once again started leaving in alarming numbers.¹

After decades of civil war in Lebanon, economic reforms led to a hybrid health-care system in which half of the population had some form of insurance coverage. A supportive academic environment and good quality of life attracted the Lebanese diaspora to return, resulting in a large and well trained health-care workforce, albeit clustered in the urban centres. The strain on rural primary health care gradually worsened with the growing refugee influx. With international support, the health-care system was, however, initially able to accommodate the 1.5 million refugees fleeing Syria, until the compounding crises in 2020 and 2021 reversed the gains of the past two decades.

The currency devaluation in October, 2019, shrunk the value of existing wages. As the economy unravelled, cash flows were interrupted and jobs were cut. Health-care workers were asked to work longer hours for reduced pay, fuelling a greater exodus of workers as work and life became untenable.² When the COVID-19 pandemic reached Lebanon, the burden of caring for the majority of patients with COVID-19 fell to the public sector. The Rafik Hariri University Hospital, the hub of COVID-19 care services, initially compensated staff with hazard pay, but by early-2021, this option was no longer viable. The chemical explosion of Aug 4, 2020, at the Beirut port destroyed three hospitals and damaged three others, resulting in a loss of 500 hospital beds, and 17 containers of medical supplies and personal protective equipment.

Pandemic-related closures resulted in cancellations of elective procedures, causing a gradual attrition of highly skilled specialists. The loss of nurses and midwives impeded health-care operations. Resident physician training has suffered due to faculty attrition and the

depreciating value of their salaries. Lebanon, which had one of the largest per capita pharmacist workforces globally, is now witnessing hundreds of pharmacy closures nationwide.³ By August, 2021, fuel shortages and power outages affected large health systems, including the American University of Beirut, risking the lives of hundreds of patients already in hospitals. Ventilators, dialysis machines, and infusion pumps risked being imminently shut down as a result of power outages. Essential medicines are also in short supply. Those health-care workers who remain have nearly no tools to work with.

By early-2021, the contractions of the health workforce resulted in increased demand and concentration of services in relatively better resourced urban centres and private institutions. This situation further exacerbated shortages in semi-urban and rural areas, and in publicly funded health-care facilities. The health system is unlikely to withstand these successive shocks without strategic and immediate transformation, which leverages task-shifting and technology to improve work conditions, clinical outcomes, and equitable access. We have four specific recommendations involving funding, task-shifting, and leveraging technology and the resources of the health workforce in the diaspora.

Firstly, regarding funding, given the devaluation of the Lebanese Lira, the growing social unrest, and entrenched corruption, stabilising the health system and retaining a skilled health-care workforce will need a colossal injection of financial resources by the international community. This financial support is essential to guarantee salaries for nurses, doctors, and allied health professionals, in addition to providing funds for utilities and supplies. At this time, these funds are best disbursed through in-country international agencies and direct transfers.

In terms of task-shifting, professional orders and syndicates need to consider the urgent expansion of the scope of practice of various health professionals to optimise available resources. Nurse practitioners and physician assistants in the USA, for example, have vastly improved the efficiency of clinical care delivery, administrative flow, and even operation theatres, while freeing up physician time for other tasks or decisions. The role of the community pharmacist can be upskilled, using mobile technology and remote learning, to serve

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as community advocates and pharmaceutical advisers.³ Such task-shifting and upskilling approaches have been successful in the Balkans, the Gaza Strip, Iraq, Somalia, Syria, and Yemen.^{4,5}

The health ministry and professional medical societies should consider recognising and training mid-level providers. More urgently, they would need to provide provisional pathways and licensure to allow such task-shifting. If allowed to, international aid organisations, professional societies, and academic institutions can offer essential resources and pathways to achieving this aim.

Thirdly, by leveraging technology, health-care providers and systems could creatively redesign medical training, patient outreach, consultations, and care delivery with use of everyday digital tools like mobile phones and cloud-based platforms. For example, health-care providers responding to public health emergencies including the Syrian conflict and the COVID-19 pandemic extended remote learning, provided peer to peer decision support, and supplied telemedicine services to patients. Strategic mainstreaming of digital and telemedicine adjuncts can help scale task-shifting. Once again, regulatory barriers need to be removed expeditiously, as they were elsewhere during the pandemic.⁶

Finally, we recommend leveraging the resources of the health workforce in the diaspora, which includes influential physicians and scientists around the world. These individuals are well positioned to lobby aid organisations, professional societies, and governments to accelerate the distribution of funding, expand training capacity, and even provide remote decision support.

At the time of writing of this Comment, the health system in Lebanon is at the brink of complete collapse,

with little internal capacity to change the tide. Given the cascading crises in the world today, the plight of Lebanon's health-care providers risks going unnoticed until it is too late. We fear it might already be so.

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