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Opinion

The real face of COVID-19 in Honduras: a fight limited by low resources

La verdadera cara del COVID-19 en Honduras: una lucha limitada por bajos recursos

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Developing countries are undoubtedly confronting a major challenge with the COVID-19 outbreak, as their debilitated health care systems are facing the dichotomy of allocating resources on either semi-structured units of care or trying to amplify the already struck facilities. Moreover, many were already depleted of medical equipment prior to the outbreak. The rationale behind, was to describe the factors that conditioned an unfavorable environment to face the pandemic.

On March 10th 2020, Honduras reported the first case of COVID 19. After 181 days, authorities confirmed 64,764 cases. The fatality rate at the beginning of the pandemic was alarmingly high fluctuating between 2% and as high as 17%. Moreover, frontline healthcare workers were among the first to die, reflecting a remarkably initial scarcity of personal protective equipment (Guan et al., 2019; SINAGER, s.f). Unsurprisingly, data surfacing amidst the outbreak is showing a variability in terms of fatality rates and severity factors across different regions. Large-scale testing has been identified as an effective strategy leading to early detection and consequently rapid isolation.

Developing countries, such as Honduras, have incorporated an essential strategy, where testing is dedicated to people in whom an epidemiological link has been confirmed. The statistical effect of these two strategies differ, such as, large-scale testing may impose a lower mortality rate, whereas a high fatality rate may be observed in essential testing. In Honduras, this strategy is driven by the limited financial capacity. In addition, scarce public health care workers and limited number of ventilators and other equipment for support breathing systems for instance, will play a key role for maintaining such a high mortality rate (Pfefferle et al., 2020).

In Honduras, physicians to population ratio is 6 per 10,000 inhabitants. Regardless of the overall death population of physicians, the personnel with specialized background training for such pandemic is further limited, 27 pediatric and 19 adult critical care specialists. Emergency physician ratio 1 for a population of over 9 million people, whereas this ratio is approximately 4.1 for every 1,000 in developed countries and yet it demonstrated to be insufficient in those countries (Matamoros et al., 2019; Carmenate-Milián et al, 2016).

The increasing challenges may be further ascertained by dissecting Honduras' health care system. It may be roughly subdivided into a public, a complex social security and a private sector. The public sector provides services for over 60% of the population. The boundaries to attend a public facility are not completely demarcated, primarily because registries in the public system consist of paper archives, as electronic registries or databases are inexistent, in order to facilitate administrative personnel to discern who is registered into the public system.

Therefore, the only guidance for the population is to self-

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navigate through a hospital or clinic labeled as public. This speaks to challenge this fragmented system, as patients may self-refer to either the public, private or a social security facility (Matamoros et al., 2019).

Honduras' public health system, which may serve for assessment of COVID-19 related symptomatology, is further subdivided into 30 hospitals, of which 14 provide exclusively general practice services, exclusively general practice, 7 offer basic specialized clinics and 9 provides to some extent subspecialized assessment.

Furthermore, there is an arbitrary subdivision involving the social security system, where services are subrogated to some private hospitals in order to provide health care in some underserved areas. This alternative is limited to hospitalization capacity, narrowed down to two hospitals. Further increasing an otherwise chaotic pathway to ascertain the population where to seek medical evaluation (Carmenate-Milián et al, 2016).

The estimated inpatient capacity encompasses 4,093 beds within the public system and 1,578 in the social security system. This represents a ratio of 0.4 hospitals per 100,000 inhabitants and 9.5 hospital beds per every 100,000 inhabitants. With regards to pediatric and adult critical care units, it is limited to 125 beds, falling dramatically below the international standards, recommended as a 5% to 8% of the overall inpatient capacity (Carmenate-Milián et al., 2016).

While restrictive mobilization and physical distancing has been highlighted as paramount measures to limit the spread of the disease, it imposes an additional burden in resource limited settings. Rural areas in Honduras are largely underserved in terms of access to healthcare. There are no permanent structured air nor ground medical modalities of transportation.

Hence, any given patient requires to use privately owned or personal vehicles; in consequence breaking the confinement measures. The economy is fundamentally cycled through informal employment, such as economic interactions in local markets. It is, therefore, that physical distancing will be unsustainable for prolonged periods in Honduras as a consequence of this short-life luddite model of economy.

The public health care system in Honduras has been hampered by insufficient funding. Facilities have been overcrowded and depleted of basic protective equipment even prior to the COVID-19 outbreak. A number of inquiries may rise on how to overcome a pandemic with added socio-economical limitations. Reliable measures are urgent, such as installment of other COVID-19 testing sites, increasing the number of ventilators and assuring economic stability to the population. Long term measures should focus on improving the social security system, construction of new facilities and training of personnel. Reactive measures in an already neglected healthcare system can be adopted in non-infectious diseases outbreak, whereas proactive measures strengthening emergency areas and critical care units are necessary in such pandemic.

Conflict of Interest

All authors report no conflict of interest relevant to the manuscript.

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