



Pharmaceutical and Medical Device shortages in Sri Lanka's Economic crisis: could Building Back Better post Covid-19 affected this Outcome?

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Abstract

The COVID-19 Pandemic in the contemporary has led to a global recession through a supply chain crisis and inflation, wherein the flaws of production, transportation and unequal distribution of pharmaceutical and medical devices have become more evident. In such a context, Sri Lanka, since state of emergency on 1st April 2022 imposed in response to large scale protests occurring in the context of a severe politico-economic crisis affecting the country exacerbated by the COVID-19 Pandemic and its aftereffects, have suffered its worst economic performance on record in 2020, with the economy contracting by 3.6%. Sri Lanka's usually robust health system has contracted, leading to widespread shortages in basic preventative and curative medication. As such, this essay seeks to investigate the current crisis in pharmaceutical and medical device procurement in Sri Lanka, as a consequence of the impacts of the COVID-19 pandemic and the shortcomings in recovery and building-back-better processes, by highlighting the challenges Sri Lanka faces, and the merits of the Build-Back-Better as a prescription in addressing the aforementioned challenges.

Keywords: COVID-19 *Pandemic, Pharmaceutical and medical device, economic crisis, Build-Back-Better, Sri Lanka*

1. Introduction

On 1st April 2022, a state of emergency was declared in Sri Lanka in response to large scale protests occurring in the context of a severe politico-economic crisis affecting the country (President of Sri Lanka, 2022). In accordance with the contemporary global recession, Sri Lanka suffered its worst economic performance on record in 2020, with the economy contracting by 3.6% (The World Bank, 2021). Despite attempts to provide and improve rapid social protection and stimulus measures, Sri Lanka's downward trend has worsened, leading to its worst economic crisis since independence (Al Jazeera, 2022). Disruptions to global supply chains has limited access to supplies worldwide, and flaws in production, transportation and unequal distribution of pharmaceuticals have become more evident (Tirivangani et al., 2021). While Sri Lanka has historically performed well in public health measures such as maternal and infant mortality despite the country's economic and development state (Weintraub et al., 2018), its public health system now finds itself under immense pressure. A usually robust pharmaceuticals and medical supplies procurement system has now failed, leading to widespread shortages in basic preventative and curative medication (Thiagarajan, 2022).

This essay will investigate the current crisis in pharmaceutical and medical device procurement in Sri Lanka, as a consequence of the impacts of the COVID-19 pandemic and the shortcomings in recovery and building-back-better processes. It will highlight the various global and local challenges which have contributed to this outcome and evaluate what could have been improved. While this essay will argue that build-back-better methodologies could have been used to address improvements in information-sharing, digitisation, accountability, and private sector/civil society integration, it notes that such measures are necessary but not sufficient in completely preventing a pharmaceutical or medical device shortage in the midst of such a deep economic crisis.

2. COVID-19 and its impacts in Sri Lanka

Sri Lanka faced its first confirmed COVID-19 case on 27th January 2020 after an international traveller arrived in the country around two weeks

before the aforementioned date (Amaratunga et al., 2020). On 17th March 2020, with cumulative cases just below 50, a three-district wide curfew was implemented, with a national lockdown implemented two days later (Arambepola et al., 2021). These measures proved effective at limiting the initial wave of infections in the country, with a cumulative 40,380 cases by the 28th December 2020, ranking it 7th out of the 10 South-East Asian countries for the cumulative cases per unit population (WHO, 2022). By 2021 however, a high burden of delta cases were experienced, with three distinct peaks of infection rates seen in February (~1000 daily cases), May (~3500 daily cases) and August (~6000 daily cases)- its largest peak throughout the pandemic (Epidemiology Unit, 2022). As of 26th April 2022, Sri Lanka has recorded over 660,000 cases, with ~16,500 deaths.

Like many countries across the world, Sri Lanka's economy and health sector has been negatively impacted by the global recession, and the effects of COVID-19 infectious and preventative responses. While early social protection and stimulus packages were rolled out nationally in as early as 10 days following the announcement of national curfew reaching 66% of Sri Lankan households, economic growth significantly decreased in 2020 (M. G. S. Ranasinghe, 2020; UNICEF Sri Lanka, 2020). Decreased production across agriculture, industry, service tax and reductions in income tax were experienced in 2020, with a correlating reduction in investments and exports, and an increasingly high reliance in import spending (The World Bank, 2021). By 2021, an increasing number of shortages in medical equipment and personal protective equipment (PPE) were being experienced, requiring the supply of urgently required equipment from external donors (UNICEF, 2021).

3. Pharmaceutical and medical device supplies in a complex crisis

Sri Lanka locally produces 10-15% of pharmaceuticals locally, with the vast majority of items being imported from foreign producers, of which 80% are based in India (Wijayasiriwardhana, 2020). Despite spending 1.6% of GDP on its healthcare system, Sri Lanka has been able to maintain positive health outcome measures (Rajapaksa et al., 2021). In 2017, a WHO service availability and readiness assessment identified a 70% availability of essential

medications in the public sector, and 74% available privately (WHO, 2019), the highest among the four countries assessed. The use of the singular State Pharmaceutical Company (SPC) for the country's medications has allowed a strong bargaining and purchasing position to facilitate lower cost drugs, although this does present a bottleneck (Guyer, 2021). The public health system obtains required drugs and supplies via the Medical Supplies Division (MSD), which collates and places regional orders with the SPC which are then charged at cost + 10% service charge. The SPC in turn will place orders from international and local suppliers, as per guidelines set by the National Medical Regulatory Agency and National Procurement Agency guidelines, providing supplies to both the public and private systems.

The global and local economic and infectious hazards of the COVID-19 pandemic have exposed the vulnerabilities of the Sri Lankan financial and healthcare system, culminating in a national disaster. Like other regions of the world, this disaster has been one of much complexity: a looming economic foreign exchange shortage within the 2019 pre-disaster context, economic impacts of quarantine measures in 2020, healthcare impacts of infectious outbreak in mid/late 2021, and a political and humanitarian emergency in 2022. Furthermore, these issues have been accompanied by other man-made and environmental disasters, like widespread agricultural failure, floods and a major toxic ocean spill, highlighting physical and environmental vulnerabilities also (UNEP, 2022; Wipulasena & Mujib, 2021). The inability of the Sri Lankan pharmaceutical and medical device supply chain to absorb, adapt to and build-back-better from the COVID-19 crisis in this challenging environment has resulted in a national threat to health, with a widespread shortages of basic lifesaving drugs and devices, and a rapid 40% hike in medication costs (Minister of Health, 2022).

By focusing on specific factors that have played a large role in facilitating this crisis in the pharmaceutical and medical device supply chain, it may be possible to understand what build-back-better processes have or could have played a beneficial role in recovering from COVID-19.

4. Factors affecting outcome

4.1 Investing: right projects, right process, right time

The COVID-19 pandemic has provided systems throughout the world with a pressing requirement to review and re-prioritise investments in programmes. In Sri Lanka, historical challenges with medication and supply ordering and procurement were identified, with the need for digitisation as a key factor to improve communication and efficiency. In 2015, the implementation of the MSMIS IT system allowed for electronic reporting within MSD (Panapitiya et al., 2020). In 2019, this project was listed for an expansion programme which sought to widen the reach of this electronic system across a wide group of provincial hospital and Ministry of Health sites (Medical Supplies Division, 2019). The perspective provided by the pandemic highlighted the importance of this project, allowing for its completion and national rollout of electronic medical supply requesting and monitoring to a wider range of hospitals and health services (NewsDesk, 2022). This process, undertaken system alongside other digitisation projects, will allow more efficient communication and data tracking, facilitating more evidence-based recovery and resilience strategies in the future.

Despite the identification of timely and important projects, the undertaking and management of such projects may fail, impacting the ability to build-back-better from the COVID-19 outbreak. An existing 'buy back' arrangement between the SPC and local pharmaceutical manufacturers has been promoted during the pandemic; wherein local drug producers are paid a 20% additional fee in order to incentivise investment into upscaling local pharmaceutical capacities (Guyer, 2021). This project would have reduced the reliance on costly and unreliable imports during the health and economic crisis. Furthermore, the State Pharmaceutical Manufacturing Corporation (SPMC) is the largest pharmaceutical producer in Sri Lanka; its close links to the SPC and a handful of other local private manufacturers, have created controversy about equity of the buy-back policy across the private pharmaceutical sector, ultimately resulting in discontinuation in late 2021 (I. Ranasinghe, 2021). This withdrawal of public funding and its incentives for local pharmaceutical production is especially problematic as businesses may have already made partial investments,

thereby increased importation will worsen the foreign exchange and economic crisis.

Investing has proved challenging due to the economic constraints of the COVID-19 and financial crisis, limiting the scale and thus effectiveness of some interventions. Outside of the pharmaceutical sector, the social protection funding of April 2020, while being made available within 10 days of national curfew, was only for a sum of LKR 5000, repeated once in May. While increases were made in payments to those already registered for state support, an increasing category named the 'new poor' was not covered by state systems, thereby existing social protection payments were unable to effectively stimulate the economy and enable recovery (UNICEF Sri Lanka, 2020). As such, investment in the wrong project, in the wrong way, in the wrong time can be seen as the antithesis to the build-back-better concept, as exemplified in an underfinanced, unprecedented national programme to convert all existing farming to 100% organic farming, which was implemented haphazardly and hastily in the early COVID-19 recovery phase with a receding economy (Wipulasena & Mujib, 2021).

While economic instability and a lack of funds may be considered as reasons for the inability to invest adequately in the build-back-better recovery processes, it remains critical that disaster actors prioritise this intervention. By building-back-better, countries can strengthen their systems, reduce vulnerabilities and limit disaster risks in the future, thereby promoting a sustainable development model (WHO, 2021). This becomes increasingly important when hazards and complex emergencies are becoming increasingly layered, as can be seen in Sri Lanka's recent history. By identifying effective, build-back-better projects, funding them effectively and managing them appropriately, recovery from COVID-19 and other such emergencies, though challenging, will be possible. Over time, these investments will be paid for with the "resilience dividend" gained from sustainable recovery, a stark comparison to a cycle of further borrowing in the context of this debt crisis (Rodin, 2014).

4.2 Transparency, accountability, decision making.

Disaster response and recovery requires timely, evidence-based decision making, involving strong multilateral partnerships between public, private and civil society organisations (WHO, 2021). In recovering from the COVID-19 pandemic,

organisations have the opportunity to evaluate their crisis and emergency risk communication (CERC) by reflecting on trust, engagement, and satisfaction of the public, as well as between organisations involved in response. As highlighted by the six principles of CERC, disaster response organisations should ensure accuracy, transparency and timeliness, with clear lines of communication facilitating accountability (CDC, 2018). Modern Sri Lanka has not boasted widespread transparency and accountability, as controversies surrounding the management of humanitarian disasters like the civil war, or the 2004 tsunami response exist (Centre for Policy Alternatives, 2019; Jayasuriya & Mccawley, 2008). The inability to adequately address these failings has created a culture of political impunity and will exacerbate a hierarchical system which prevents the unpressured discussion and testing of new ideas, within and across the management structures of various groups.

Following the SARS epidemic, the world became more aware of the dangers of bureaucracy, suppression and socio-political priorities in the face of dangerous infectious threats, and it seems clear that China tried to build on this experience (Huang, 2004). Sri Lanka does not seem to have adopted such measures, as concerns of militarisation and politicisation of radiate from the COVID-19 response, alongside police decrees to arrest anyone found criticising the government's COVID-19 response in April 2020 (Human Rights Watch, 2021). As the country has attempted to recover post- COVID, the need for open and safe discussion of concerns, and a depoliticization of response could have been addressed, but such an exercise has not come to fruit for a myriad of factors. As such, the level of public trust and engagement with CERC and disaster activities of the future may be impacted. The effects of this inability to build-back-better on an open discourse, collaboration and CERC are already being seen in the current pharmaceutical and medical device crisis, with contradictory statements between government and whistle blowers, and delays to declare shortages (NewsWire, 2022).

4.3 Digitisation and speed

While some components of the medical supply and procurement chain have been upgraded, others are still in a lag. In his 2021 paper, Prasad Koggalage of the Ministry of Health, Sri Lanka,

describes the paper-based procurement system within the SPC which is in need of updating (Koggalage, 2021). As the major supplier to the country, the SPC's bottleneck has a significant impact on its ability to adapt and react to changing local needs and global supply chains. As of 2020, the average time from order placement by the MSD and arrival in the country is 11-14 months, rendering this cumbersome process unable to effectively scale and flex with major healthcare events (Wijayasiriwardhana, 2020). This issue becomes even more concerning when considering the long-term effects to medicine and device supplies, such as in April 2022 where a critical shortage might actually reflect purchasing in early 2021: how bad will the following years be? While emergency tendering allows for some flex within the system, issues with overuse of this have been identified, preventing long-term resilience planning in medication supply and limiting effective emergency responses (Guyer, 2021).

Digitisation is not the only factor predisposing slow and inadequate procurement of pharmaceuticals and medical devices. Transport delays, lack of robust auditing systems, inaccuracies in medicine use estimations and overprescribing can further adversely affect an effective and timely supply service (Wijegunasekara, 2021). The repeated identification of these issues across the years since COVID-19 show that, despite progress being made to improve a usually well-performing system, the medical procurement system as a whole has been unable to adequately build back its organisational and operational processes in a better way (Guyer, 2021; Wijayasiriwardhana, 2020). This agility, accuracy, speed, and efficiency will become increasingly important in this new protracted and wide-reaching complex disaster. In an age of decolonialisation, it may be important to review the role and expedite the integration of local private sector and civil societies, to holistically harness the merits of digitisation, technological innovation and speed (WHO, 2021)

3. Conclusion

The unprecedented economic crisis in Sri Lanka has precipitated catastrophic national shortages in

pharmaceutical and medical device supplies. These issues have been compounded by sector's inability to reliably build-back-better during post-COVID recovery. While the country's pre-disaster context demonstrated positive outcomes in public health, disaster planning and healthcare informatic development, these have not been sufficient to withstand the shocks of the pandemic, amplified by concurrent disasters affecting physical, environmental, social, and economic infrastructure. Examples of positive investment in sustainable recovery that is linked to resilience can be seen in the MSD's extended rollout of a national IT system, but such an efficiency has not been seen within the SPC; inefficiency at this crucial position within the procurement and supply ecosystem will prolong the crisis by exacerbating wastage, delays, and inflexibility. While reliable transparency, accountability and evidence-based, multilateral decision making may not be commonplace, the COVID and post-COVID crises may present an opportunity to learn and adapt.

Sri Lanka's recurrent inability to build back better in financial, health and governance structures will lead to an ever-increasing trend of complex disasters. Opportunities for progress exist: focusing on well planned development efforts which are appropriately designed, managed and timed; making lasting improvements in transparency and accountability; focus to digitise interlinking systems as a whole, not just in parts; collaborating with private sectors and civil society where appropriate to build innovation, engagement and timeliness; working with foreign donors and creditors to invest in local solutions and sustainability, with holistic and multilateral transition agreements (Bharali et al., 2020). Real investment into these improvements must be made at the local level, and advocated for by regional and international partners, especially those providing emergency assistance at this time: the failures of governance and humanitarian aid following the 2004 Tsunami disaster cannot be forgotten (Fernando & Hilhorst, 2006).

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