

## COMMENTARY

# Malaysia's Experience Navigating Colorectal Cancer Screening in the COVID-19 Pandemic and Opportunities to Build Back Better

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## ABSTRACT

The downstream effect of the pandemic on global cancer prevention and control efforts is wide-ranging, especially for lower and middle-income countries (LMICs), including Malaysia. This paper explores the performance of the colorectal cancer screening programme in Malaysia for the years 2019 and 2020. This is followed by evidence-based recommendations for building back a better cancer control programme in Malaysia. Malaysia screened a total of 31,529 eligible candidates in 2019 and 42,554 in 2020. A total of 2,668 (8.46%) and 2767 (6.50%) individuals tested positive for the immunochemical faecal occult blood test (iFOBT) in 2019 and 2020 respectively. Of these numbers, only 1454 (54.49%) of those who tested positive underwent colonoscopy in 2019 and this proportion reduced to 1148 (41.48%) in 2020. This analysis also shows a drop in the number of screenings in the second quarter of 2020. This drop coincides with the announcement of Malaysia's first Movement Control Order. Existing challenges exacerbated by pandemic restrictions have possibly led to a decreased colonoscopy attendance rate in 2020. To build back a better cancer control programme, better governance, and political will, coupled with improved financing, sustainable partnerships, improved service delivery, and a robust monitoring and evaluation mechanism is vital.

**Keywords:** Colorectal Cancer, Malaysia, Cancer screening, COVID-19, Health system

## INTRODUCTION

The COVID-19 pandemic has stressed the healthcare system and left its providers in burnout (1). The downstream effect of the pandemic on global cancer prevention and control efforts is wide-ranging, especially for lower and middle-income countries (LMICs), including Malaysia.

In May 2020, WHO found 75% of the 163 countries surveyed reported major disruption of NCD (including cancer services). The major reasons cited were cancellations of inpatient elective care and population-based screenings, poor access to facilities, and also staff redeployments (2). In another study, 13 of the 17 LMICs studied suspended cancer screening activities for more than 30 days while 9 countries reported suspension of diagnostic services for a similar duration (3). Up to 60% of countries in the South-East Asian and Western Pacific region reported disruption in HPV vaccine delivery, which is crucial in achieving the 90-70-90 cervical cancer elimination strategy (4).

Cancer is estimated to cost Malaysia up to RM1.8 billion in terms of losses due to absenteeism, presenteeism, and deaths. Disability Adjusted Life Year (DALY) losses due to cancer are estimated to be RM30.7 billion. It was estimated that DALY losses due to colorectal cancer alone were estimated at RM3.58 billion annually (5).

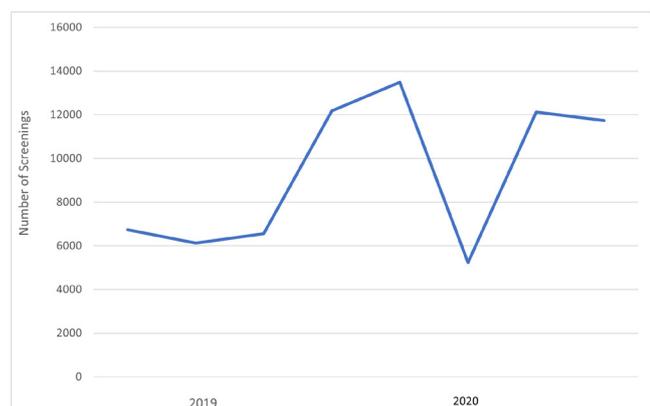
This paper explores the performance of colorectal cancer screening in Malaysia for the years 2019 and 2020. This is followed by evidence-based recommendations for building back a better cancer control programme in Malaysia.

## PERFORMANCE OF COLORECTAL CANCER SCREENING IN MALAYSIA

Colorectal cancer is the second most common cancer among women and the most common cancer among men in Malaysia (6). Malaysia began the national colorectal cancer screening programme in the primary care clinics in 2014 using immunochemical faecal occult blood test (iFOBT) kits. This is an opportunistic screening targeting

adults aged 50-75 years. The organisation, protocols, and rollout of this programme are described elsewhere (7).

Based on routine indicators monitored quarterly by the Disease Control Division, Ministry of Health Malaysia for 2019 and 2020, Malaysia screened a total of 31,529 eligible candidates in 2019 and 42,554 in 2020. Although these figures are suboptimal (7), the number of screenings for colorectal cancer nationwide showed an increasing trend in 2019 and this number dropped in the second quarter of 2020. However, it improved in the third and fourth quarter of 2020 (Figure 1).



**Figure 1: Trend of number of immunochemical faecal occult blood test (iFOBT) screenings conducted, Malaysia, 2019-2020**

A total of 2,668 (8.46%) and 2,767 (6.5%) individuals tested positive for the iFOBT tests in 2019 and 2020 respectively. Of these numbers, 1,454 (54.49%) of those who tested positive underwent colonoscopy in 2019 and this proportion reduced to 1,148 (41.48%) in 2020. The cancer detection rate among those screened was 2.82% and 3.31% for both years respectively (Table I).

This analysis shows a drop in the number of screenings in the second quarter of 2020. This drop coincides with the announcement of Malaysia’s first Movement Control Order (MCO) on March 18<sup>th</sup>, 2020 (8). The opportunistic nature of the programme means that the services are offered to those who attend healthcare facilities for other purposes. There is emerging evidence showing a low healthcare utilization pattern, even among those with NCDs during the MCO period in Malaysia (9).

Even before the pandemic, there were multiple challenges in the colorectal cancer screening programme. A major

**Table I: Selected performance indicators of the colorectal cancer screening programme in Malaysia**

	2019 Total Screened = 31,529	2020 Total Screened= 42,554
<b>Tested positive iFOBT</b>	2,668 (8.46%)	2,767 (6.50%)
<b>Underwent colonoscopy</b>	1,454 (54.49%)	1,148 (41.48%)
<b>Cancer Detection rate</b>	41 (2.82%)	38 (3.31%)

issue is poor colonoscopy attendance after testing positive for iFOBT. Deterring factors include fear of the procedure, logistical challenges, social influences, and other competing priorities (10,11). These factors coupled with the challenges during the pandemic have possibly led to a decreased colonoscopy attendance rate in 2020.

Despite these setbacks, the overall number of screenings conducted nationally in 2020 was higher than 2019. This could be attributed to the higher number of iFOBT kits procured and distributed to all states in Malaysia as part of the current national plan to progressively expand screening coverage. MOH also issued an interim guideline to all primary clinics encouraging healthcare providers to continue the provision of opportunistic screenings in green zone areas where COVID-19 cases were low.

**BUILD BACK BETTER**

There is an urgent need to move forward with smarter and more effective long-term solutions for cancer control programmes. Evidence shows that the nations with the strongest health system and governance have the lowest mortality rates for cancer (12).

**Governance and political will**

While there are low-cost interventions to reduce the burden of cancer, effective cancer control programmes require initial investments and strong political will.

The political will that was seen for COVID-19 has been extraordinary. Overnight, there was a whole-of-government and whole-of-society response in solving the public health crisis because it was seen as a threat to lives and livelihoods. For example, COVID-19 was declared a public health emergency and became a notifiable disease by law in Malaysia. The use of the emergency ordinance for COVID-19 even enabled governments to take over assets for pandemic response (13). In contrast, in many LMICs, including Malaysia, cancer notification is yet to be mandated by law.

Future preparedness strategies must consider NCDs as an essential foundation for human security and consider the collateral damage to cancer prevention and control efforts. Countries will also need to address the full continuum of cancer care, emphasising prevention and early detection, and not focused entirely on clinical management.

**Financing and sustainable partnerships**

The pandemic has also diverted resources from cancer control. In a post-pandemic world, we must continue to press the government and international funding bodies to explore all avenues to mitigate this impact. To build back better, we need to address the underinvestment in cancers and demonstrate the economic consequences

of cancers are devastating for the individual, their families, community, and the country, and illustrate the benefits of investing in cancers. Simultaneously, it is important to build sustainable partnerships, beyond financing. The pandemic has catalysed large-scale collaborations to assess impact, foster management, and improve outcomes for COVID-19 rapidly, highlighting the interest from communities outside of health in times of crisis that can be sustained for cancer control programmes (14).

### **Innovative Digital Solutions**

Moving forward, the implementation of alternative and new care pathways for cancer is vital. COVID-19 has shown that the use of digital platforms can be safely and effectively be implemented when access to face-to-face care becomes challenging. In Malaysia, like many LMICs, an absent regulatory environment hindered previous efforts of digital health interventions. During the pandemic, the issuance of interim guidelines such as the special advisory for telemedicine accelerated efforts for teleconsultations (15). In our effort to build back better, it so important that we leverage on innovative digital solutions for cancer care in a regulated environment.

A systematic approach to technologies must take into consideration existing infrastructure, regulations and legislation, standards, and interoperability with existing systems. For example, we must move away from standalone disease registries with poor interoperability. New digital solutions must align with national and regional digital strategies.

Digital solutions must also be implemented without further exacerbating the digital divide, taking into account the needs of the underserved and vulnerable. While we build back better, we should not leave anyone behind.

### **Decentralise prevention and early detection programmes**

Most prevention and early detection programmes in Malaysia are traditionally based in healthcare facilities and implemented by healthcare workers. Moving forward, community-based engagements and the use of community health workers or volunteers will decongest health facilities and in times of crisis, continue with minimal interruptions. Current peer-based and community-based programmes in LMICs can be scaled to deliver preventive and early detection services for cancer (16).

The pandemic has also allowed us to lobby to improve overall programme organisation for screening, from opportunistic to organised screenings. Lessons learnt from countries implementing population-based screening can also effectively be applied to Malaysia. For example, we can use this opportunity to lobby for funding and implementation of population-based

colorectal cancer screening with self-test kits that have been used effectively elsewhere. However, this must be done together with scaling of appropriate infrastructure and capacity.

### **Scale patient navigation for cancers and monitor the continuity of essential services for cancer**

Even before COVID-19, barriers in access stood in the way of achieving optimal cancer care. Patient navigation programmes that seek to address these structural and systemic barriers are in an optimal position to address these issues post-pandemic and should be scaled (17). There is emerging evidence from high-income countries that this could potentially be successful even when implemented virtually (18).

Interventions need to be developed and implemented with a robust monitoring and evaluation mechanism as well as capacity-building components. Furthermore, this pandemic has taught us that monitoring the continuity of essential services for cancer is vital. A robust monitoring mechanism will enable policymakers and programme managers to identify changes in service utilisation and re-strategise in times of crisis. It will enable us to continue to provide and communicate service continuity to the community to avoid delays in seeking care.

### **CONCLUSION**

The nations with the stronger health systems perform better in cancer prevention and control. In our build-back better agenda, we must remember to break in-silo approaches and catalyse on partnerships built during this time to learn from the past and take a holistic approach to build a health system that is accessible to all.

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