Double-edged sword of limiting healthcare provision for children in times of COVID-19: the hidden price we pay

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In the first week of the UK lock-down, a 2-year-old boy was referred to be evaluated for very-early-onset inflammatory bowel disease (IBD) at the Department of Paediatric Gastroenterology at a tertiary care hospital in the UK. At the same time, gearing up for the COVID-19 pandemic, the NHS was in the process of steering towards an '*essential treatments only*' national healthcare provision pathway. To optimise capacity in anticipation of the expected wave of Sars-Cov-2 emergencies, physicians were asked to postpone all non-urgent clinical activities including face-to-face outpatient visits, diagnostic procedures and hospital-based therapies.

This strategy has rapidly become a reality: in the first week of April 2020 alone, two children at our institution have received the clinical/presumptive diagnosis of Crohn's disease and were subsequently started on treatment without the diagnostic certainty of endoscopy or MRI.

The 2-year-old boy was discussed in a virtual multidisciplinary team meeting, where—as an exception—the decision was made to list the child for diagnostic gastrointestinal endoscopy on the only paediatric emergency theatre list. Surprisingly, oesophagogastroduodenoscopy and colonoscopy revealed a single juvenile rectal polyp that was endoscopically removed. The remainder of the procedure was normal, and the boy was discharged without further medical treatment.

What if we had not urged for the boy to be placed on one of the few emergency lists? An erroneous 'clinical diagnosis' of IBD would have entailed significant sequelae including pharmacological immunosuppression with the potential side effects and continued bleeding of the still undiagnosed polyp.

This case represents a crucial aspect that goes missing in the omnipresent public debate around the coronavirus pandemic: COVID-19 also hurts the Sars-CoV-2 negative—not only economically. News outlets and political debates understandably focus on epicentres such as Wuhan, New York or Lombardy. The evocative pictures last in our memories and make no antiviral measures seem too extreme.

Not long after national leaders like French President Emmanuel Macron and US President Donald Trump have declared their countries to be 'at war against the virus', British Prime Minister Boris Johnson had to fight his personal 'war' being admitted to an intensive care unit due to a worsening COVID-19 infection. Simultaneously, some 60 miles away, a major hospital counts more than 450 empty beds and less than 50% surgical theatre activity. The message is unmistakable: we are prepared. But this comes at a price, the blurred number on the other side of the scales. Antenatal care is widely reduced, cancer surgeries are limited and emergency room attendance has decreased to far less than 50% as compared with pre-coronavirus times. Where are all the sick patients that usually keep us busy?

Are we well prepared? Or ill-prepared? Has our ethical compass become deviated, blinded by the bright lights of a new enemy? In line with newspaper headlines, podcast discussions and scientific journals' reporting emphasis, there seems to be almost only one relevant diagnosis these days: *the new virus*. The only solution to the misery? The '*urgent treatments only*' paradigm appears to be unimpeachable.

But the impact of the virus has been very different for various medical specialties. Friends of mine working in the adult ICU are facing long hard shifts treating severely unwell patients. Meanwhile, most paediatric specialties are seeing a drastically decreased workload. We even work from home now—a concept many physicians were not familiar with until just a few weeks ago.

Healthcare allocation, in times of COVID-19 more than ever, is a risk management game. But the '*flatten-the-curve imperative*' inevitably comes at a price, and the bill is yet to come. As one curve is plateauing, others may even rise. How does this translate into the paediatric population? Reports have shown substantially milder courses of Sars-CoV-2 infection in infants, children and adolescents, with death as the rare exception.[1 2] In other words, for children the '*essential healthcare only*' policy may be a bad deal.

The fair allocation of scarce medical resources in the time of COVID-19 has recently been discussed in a well-written comprehensive article.[3] Following core ethical values to guide rationing of scarce healthcare resources, no distinction should be made between patients with COVID-19 and those with other medical conditions. However, the limitations of healthcare provision while medical resources are not (yet) scarce fail to consider a crucial aspect: the disproportionate impact on children. After all, with the global *non*-coronavirus disease burden steadily standing, and clinical activities largely restricted, how long can we continue like this without being overwhelmed by the unmanageable backlog of untreated disease?

As often, the power lies in numbers. Nowadays, daily graphs of confirmed coronavirus cases and deaths, and international comparisons of infection doubling times and case fatality rates are at least as popular as the now long-missed updates on national football league ranking tables once were. In contrast, the burden of un-(or suboptimally) treated *non*-Covid-19 disease is harder to measure and will not make it to newspaper headlines.

While the public debate is focused on social distancing, hand hygiene measures, shortages in testing capacities and personal protective equipment, and the story of face masks in public places, we are already beginning to see fewer common emergency admissions in our hospitals.[4 5] In March 2020, Italy saw a decrease in paediatric ED attendances by 73%–88%, compared with 2019.[6] A report of 12 cases of delayed access to hospital care included six intensive care unit admissions and four deaths.[6] In all cases, parents reported having avoided accessing the hospital because of fear of infection with SARS-CoV-2.

Several weeks into the lock-down, more and more negative public health consequences are beginning to unfold. As lockdown regulations and school closures are making vulnerable children even harder to reach, WHO has recently issued a joint leaders' statement entitled "Violence against children: a hidden crisis of the

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COVID-19 pandemic".[7] Tragically, detrimental social and health effects will hit the socioeconomically disadvantaged communities disproportionally harder. Food insecurity and loss of academic achievement are expected to significantly contribute to the exacerbation of the already existing inequalities.[8] A public health approach to improve child health in these challenging times, to manage domestic violence and to fight under-the-radar child neglect is urgently needed.[9]

But who would dare to shake the earth today in *non*-corona territories when healthcare performance is solely measured with a seismograph calibrated against COVID-19 outcomes? Policy-makers will be judged by their performance according to internationally comparable coronavirus numbers. Therefore, it is our job as physicians to speak up on behalf of our publicly underrepresented patient groups. We need to advocate, to give our patients a voice and to spread the message: in COVID-19 times, there is *not* just one diagnosis that matters.

At 20:00 on Thursday when I join the nation clapping out of their windows once again to show my appreciation for the corona-fighting healthcare professionals and key workers, I worry that another hidden healthcare crisis is developing which will not benefit from such public and political support.

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