"Primum non nocere" – first do no harm – in the time of SARS-CoV-2/COVID-19 Pandemic

Majid Bassuni[a], Ahmed-Hazem I. Helmy[b]

[a]Department of General Laparoscopic and Colorectal Surgery, Sheffield University, Board of the Royal College of Surgeons, Sandgate, Kent, UK, [b]Department of General Surgery, Theodor Bilhrz Research Institute, Giza, Egypt

Correspondence to Ahmed-Hazem I. Helmy, MBBCh, MSc, MD, FRCSEd, Department of General Surgery, Theodor Bilhrz Research Institute, P.O. Box 30 Imbaba, 12411 Giza, Egypt. Tel: 00201223130949; e-mail: a.h.i.helmy@tbri.gov.eg

Received: 18 May 2020
Revised: 18 May 2020
Accepted: 18 May 2020
Published: 28 August 2020

The Egyptian Journal of Surgery 2020, 39:513–514

Egyptian J Surgery 39:513–514
© 2020 The Egyptian Journal of Surgery
1110-1121

More than 2400 years ago, Hippocrates declared the first principle of practicing medicine: do no harm [1]. Today's physicians interpret 'primum non nocere' in a more amicable, light hearted way, that is, 'may the benefits outweigh the risks.' With every procedure we carry out, as surgeons, there is a risk to the patient, and we are used to re-writing the law by 'accepting' doing some form of 'harm'. From December 2019 till now, the world has changed, as it has been held in the grip of an unprecedented, 120–160-nm organism called SARS-CoV-2, the virus that has caused the COVID-19 global pandemic, with no evidence-based medicine treatment protocols and vaccines [2].

Now, we find that both patients and surgeons are exposed to previously unknown 'harm'. This harm is demonstrated by the health care heroes who fell ill to the disease or, unfortunately lost their live to it around the world. Some ethnic groups, among health care workers, especially surgeons, were found to be more at risk of succumbing to the severe form of this vira infection, with 3.5 times increased risk of mortality [3]. Observation showed that people of Middle Eastern origin, including Egypt, are among these high-risk groups (*https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/coronavirusrelateddeathsbyethnicgroupenglandandwales/2march2020to10april2020https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/coronavirusrelateddeathsbyethnicgroupenglandandwales/2march2020to10april2020*).

SARS-CoV-2, the virus that has caused the COVID-19 global pandemic, will be around for the foreseeable future, and infection rates may fluctuate as public health measures relax. To consider resuming normal surgical activities after easing the restrictions of lockdown at the current time and in the foreseeable future, certain principles need to be seriously addressed and considered. These principles should apply to public and private health care facilities alike, which can prove very difficult in countries where there is heavy reliance on the private sector to provide most of the surgical service to its population. This is to ensure non-resurgence of the pandemic with devastating effects on any country and the world as a whole. Decision to resume elective service again should be regulated, by new emergency legislation and measures, enforced by a central authority. In Egypt, this should be the highest executive authority, using all available legislative powers. Timing will depend on sustained reduction of new cases, wide availability of testing, adequate personal protecting equipment, surgical supplies, and the availability of interdependent services, like diagnostic imaging, anesthesia, critical care, and sterilization services.

The need and development of cohesive leadership, in the form of 'Central Recovery Management Team' is of paramount importance for successful transition to

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

normal service provision. It is of utmost importance to have and maintain a strong collaboration between all healthcare facilities in the public and private sectors, to raise awareness and implement the national and international guidelines to assign and separate SARS-CoV-2/COVID-19-positive and –negative patients, with creation of 'clean' sites, where SARS-CoV-2/COVID-19 negative patients can undergo elective surgery. This is of particular importance in a country like Egypt where the private sector provides 16% of health care facilities, but 70% of financial resources are allocated in that sector (*https://pharmaphorum.com/articles/egypt-moving-toward-integrated-healthcare-systemhttps://pharmaphorum.com/articles/egypt-moving-toward-integrated-healthcare-system*). Decisions such as reduction of outpatient clinic visits and the expectation of re-exposure to other wave of SARS-CoV-2/COVID-19 pandemic should be seriously considered and coordinated. The use of, what is now widely available, communication technology and virtual clinics, should be encourage where appropriate. Appointment-only clinics with reduction of 'walk-in' access should be the normal practice. The practical changes in surgical procedures, both open and laparoscopic, cannot be overemphasized. For example, safe laparoscopic surgery will now mean protecting the surgeons, nurses, and supporting staff in the operating theater. New measures will include additional instruments and accessories for safe evacuation of pneumoperitoneum, to reduce the risk of aerosol-generating procedures, operating under lower intra-abdominal pressure, reduction of energy devices usage and above all provision of suitable personal protection equipment to all staff present. The number of staff present should be the minimum required only (*https://www.rcseng.ac.uk/coronavirus/joint-guidance-for-surgeons-v2https://www.rcseng.ac.uk/coronavirus/joint-guidance-for-surgeons-v2*).

Last but not the least, a robust surgical training plan should be in place to support the next generation of surgeons by providing additional opportunities for training, including training on new ways of providing and delivering health care service, like virtual clinics, starting by implementing artificial intelligence.

This is the first of a series of letters outlining the framework of recovery plan from the SARS-CoV-2/COVID-19 pandemic in the surgical field.

Financial support and sponsorship
Nil.

Conflicts of interest
There are no conflicts of interest.

References

1 Hippocrates is a Greek Philosopher and physician who introduced his famous oath in his book *Of the Epidemics*, in the year 400 BC.

2 Jin Y, Yang H, Ji W, Wu W, Chen S, Zhang W, Duan G. Virology, epidemiology, pathogenesis, and control of COVID-19. Viruses 2020; 12: E372.

3 Kirby T. Evidence is mounting on disproportionate effect of COVID19 on ethnic minorities. Lancet Respir Med 2020; 8:S2213-2600(20)30228-9.