## Urology practice in the time of COVID-19

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OVID-19 has been suggested to behave like a "once-in-a-century pathogen we've been worried about". (1) It has led to profound negative consequences in healthcare systems especially in countries with rapid spread of disease including Iran. According to World Bank data, Iran had 1.5 hospital beds per 1000 population in 2014. This is much lower than Italy (3.4 as of 2012) and China 4.2 (4.2 as of 2012), which both are experiencing major infection rates of COVID-19, alongside Iran. (2) This shortage of hospital resources will cause excess burden on Iranian health care providers and is expected to result in even higher infection and mortality rates over time. Healthcare workers are especially prone to burnout due to overstress as the Hospitals are overwhelmed by patients.

In addition to complete closure of schools and universities the government cancelled several political, social and religious events to tackle the rapid spread of the disease. Despite all measures, rapid escalation of COVID-19 happened partly due to delay in disease prevention and control. Therefore, almost all Hospitals were dedicated to these patients and modified their activities to ensure adequate number of beds for COVID-19 patients. Many surgical departments including urology departments suspended surgeries to accommodate COVID-19 patients. This has the potential to postpone many time-sensitive surgeries. Currently Surgeries are limited to urological emergencies and almost all high volume centers have suspended timesensitive surgeries including TURBT or radical cystectomy for high risk bladder cancer, RPLND and nephroureterectomy as well as radical prostatectomy/radiation therapy for poorly differentiated prostate cancer. Moreover, fear and anxiety of COVID-19 can cause patients to avoid presenting in outpatient clinics and this may result in inappropriate follow up after treatment and poor outcomes in certain patients with urological malignancies.

It is crucial that government take steps to slow the disease spread as further escalation results in shortage in available staff and Hospital beds. Delay in disease control not only limits resources available and increases COVID-19 mortality rate but also causes further delay in treating patients with malignant disorders including urological malignancies. The potential of communication technologies and cancer helplines should also be used for counselling these patients.

Healthcare workers including physicians irrespective of specialty have voluntarily participated in disease control and treatment and this commitment and solidarity is tremendous; however, COVID-19 medical frontliners should be protected as they are the most vulnerable populations.

It also should be considered that measures to control this pandemic impose a significant financial burden on health-care and many low- and middle-income countries need economic support. Sanctions have further complicated the situation in Iran, and a joint effort from the global community is required to lift the extra burden from Iranian healthcare providers.<sup>(3)</sup>

## REFERENCES

- 1. Gates B. Responding to Covid-19 A Once-in-a-Century Pandemic? The New England journal of medicine, 2020.
- **2.** https://data.worldbank.org/indicator/SH.MED.BEDS.ZS.
- 3. Takian A, Raoofi A, Kazempour-Ardebili S. COVID-19 battle during the toughest sanctions against Iran. Lancet (London, England). 2020.