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Urologic Services in Public Hospitals Suffered a Greater Detriment Than Private Hospitals During the Battle of COVID-19



Dear editor:

The coronavirus disease-19 (COVID-19) has been regarded as the most challenging global health crisis since its declaration as pandemic on March 11, 2020 by the World Health Organization (WHO).¹ As COVID-19 swept through continents, health care services across all specialties, including urology were disrupted.²

Recently, a global survey on the impact of COVID-19 on urologic services was conducted, with a total of 1004 responses from urology health care professionals reviewed.³ Results showed that COVID-19 had a profound negative impact on the delivery of urologic care globally. The level of setbacks corresponded to the degree of COVID-19 outbreak. The severity of this impact, however, may not be representative of the various urologic establishments. We thus performed a post hoc analysis to compare the severity of COVID-19 effects on urology services between the public and private institutions.

After excluding participants who had mixed public and private practices, 891 participants remained for the analysis. About 71.8% were from public hospitals and 16.9% were from private hospitals. Majority of respondents were 30-49 years old and were predominantly consultant urologists. About 57.4% of them have been in practice up to 10 years. The demographic characteristics of survey respondents are shown in [Supplementary Table 1](#).

There were more public than private hospital-based respondents working in COVID-19 centers (85.8% vs 50.8%, $P < .001$). About 45.9% from public and 25.4%

from private hospitals reported staffs diagnosed with COVID-19 infection ($P < .001$). About 30.2% from public and 9% from private hospitals were deployed to manage COVID-19 patients ($P < .001$), with manpower shortage posing more concerns in the public hospitals (45.9% vs 25.4%, $P < .001$). Although most hospitals were equipped with personal protective equipment (PPE) (surgical mask, N95, bodysuits, splash guard or face shield, goggles, and others), only 33.1% of public and 36.9% of private respondents confirmed the sufficiency of PPE in their centers ($P = .025$). About 36.5% of public and 20.5% of private respondents were adequately trained to use PPE. Concerningly, more public than private (24.5% vs 7.4%, $P < .001$) administrative authorities prohibited health care workers from sharing their experience on conventional and social media ([Table 1](#)).

Finally, 52.5% from public and 39.8% from private believed that postponement of clinical services would affect their patients' treatment and survival outcomes ($P = .025$). Only 42.6% from the public hospitals (vs 61.9% from the private hospitals, $P = .001$) had the confidence to deal with accumulated workload in a timely manner after the pandemic. In terms of income, however, private urology professionals (88.5%) suffered significant salary cutbacks compared to their colleagues in public (49.7%; $P < .001$). Urologic patients screened negative for COVID-19 could be referred to non-COVID-19 private hospitals to avoid delay in intervention. Private institutions may also cope better to deal with the backlog once COVID-19 has settled. It may help alleviate the potential financial problems that private practice providers may be facing, given the significant salary reduction during this critical period. Implementation of public-private partnership strategies in tackling this matter appears imperative.⁴

In summary, public hospitals suffered greater losses of manpower, inadequacy of PPE and restriction of media contact while health care professionals in the private

Table 1. Key findings of the global survey comparing public and private hospitals

Questions	Public Hospital (%)	Private Hospital (%)	P Value
Has your hospital been managing patients with COVID-19?	85.8	50.8	<.001
Has any of your hospital staff been diagnosed with COVID-19?	45.9	25.4	<.001
Is your department facing any internal manpower problem?	28.0	24.6	.001
Have you been deployed to take care of patients with confirmed COVID-19?	30.2	9.0	<.001
Do you feel that the personal protective equipment you are provided with is sufficient?	33.1	36.9	.025
Have you received formal training in decontamination protocols?	36.5	20.5	<.001
Do you think the postponement of clinical service will affect the treatment/ survival outcomes of your patients?	52.5	39.8	.025
Do you think the accumulated workload can be dealt with in a timely manner after the COVID-19 outbreak?	42.6	61.9	.001
Has your institution instructed you not to share your experience on conventional media or social media?	24.5	7.4	<.001
Has COVID-19 affected your income or do you expect a reduction in salary?	49.7	88.5	<.001

hospitals suffered greater loss financially. Profound repercussions are to be anticipated and necessitate reallocation of resources by financing bodies to halt the foreseen exhaustion.

SUPPLEMENTARY MATERIALS

Supplementary material associated with this article can be found in the online version at <https://doi.org/10.1016/j.urology.2020.07.010>.

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A Tale of Two Eras: The Effect of the COVID-19 Pandemic on Stone Disease Presentations



The novel coronavirus disease-19 (COVID-19) pandemic triggered a national emergency declaration in the United States on March 13, 2020. The resultant diversion of healthcare and public attention toward disease exposure avoidance, propagated a concerning reduction in emergency department (ED) presentations for many serious medical conditions.¹ Urinary stone disease (USD) is a frequent cause of ED visits and can be life or organ threatening if not treated in a timely manner.² One small Italian study showed that the pandemic had no effect on USD emergency presentation rates³ but its effect in a larger US cohort remains unknown.

Following Institutional Board Review approval, we analyzed all primary USD presentations to the

Cleveland Clinic ED of 4 large hospital campuses (Main Campus, Fairview, Avon, Hillcrest) serving the wider Cleveland Area during the current “COVID-era” (March 16–April 30, 2020) and compared this with an equivalent “Pre-COVID era” from exactly a year ago (March 16–April 30, 2019). We analyzed baseline clinical characteristics at ED presentation and subsequent stone management.

During the COVID-era, there was a 36% reduction in emergent USD presentations compared to an equivalent pre-COVID era. Interestingly, there was no difference in baseline characteristics or clinical severity at presentation (measured by systemic inflammatory response syndrome criteria, serum creatinine, urinary tract infection or need for emergent intervention; Table 1). However, a higher proportion of COVID-era patients did have evidence of acute kidney injury (AKI) based on RIFLE classification⁴ (4.7% vs 2.6%) potentially suggestive of a delay in presentation.

The COVID-era resulted in a measurable shift in subsequent patient management. There were significant delays having a Urology clinic visit (mean 15 days vs 7 days pre-COVID, $P < .0001$) and a seismic shift toward these being virtual or telephone visits (from 0% to 94%) despite availability of this technology during both periods. Given most stone cases require prompt management to avoid a sequelae of complications, this delay did not affect the time to receive definitive management which is in part due to the structured Cleveland Clinic Operative Tier system created to stratify urology cases based on emergent need during the pandemic.⁵ For those undergoing ureteroscopy or percutaneous nephrolithotomy, where postprocedure ureteral stent placement is common, we found a considerable practice shift toward not leaving stents (12%–66%) and also more stents left with a string (7%–16%), both removing a further patient encounter for stent removal, in addition to eliminating potential COVID exposure risk. Of note, none of these patients had a subsequent ED visit or resultant complication suggestive of this being a suitable future management change consideration for appropriate patients.

To our knowledge, this represents the first US-based analysis of the effect of the pandemic on USD presentations and highlighted a measurable reduction in ED presentations with higher rates of AKI and also interesting changes in Urology practice management patterns. With the pandemic still raging on with no clear end in sight, the true impact this will have on our stone clinical practice remains to be fully determined.

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