LIFE OF A GENERAL SURGERY RESIDENT IN THE PANDEMIC ERA OF COVID-19: PERSPECTIVE FROM AN APEX INSTITUTE IN INDIA

Surgery

Uday Shamrao Kumbhar*	Professor, Department of Surgery, Jawaharlal Institute Of Postgraduate Medical Education And Research, Puducherry, India. *Corresponding Author
Oseen Hajilal Shaikh	Department of Surgery, Jawaharlal Institute Of Postgraduate Medical Education And Research, Puducherry, India.
Muhammed Tajudeen	Department of Surgery, Jawaharlal Institute Of Postgraduate Medical Education And Research, Puducherry, India.
Gopal Balasubramanian	Department of Surgery, Jawaharlal Institute Of Postgraduate Medical Education And Research, Puducherry, India.

ABSTRACT

The entire globe is taken aback by the recent pandemic of CoViD-19 caused by SARS-CoV2 virus. Reportedly there are cases in 216 across the globe with the numbers soaring up to 8 million as of date. India is one of the top 5 countries worst hit so far. Currently, there are over 413,000 confirmed cases and over 13,000 deaths. With no cure or vaccine in sight for the near future, the pandemic is set to stay with us for a while. The major work force in any health care institutional set up is by the interns, junior residents, senior residents and fellows. And is by no means different during the pandemic, they who remain the front-line shield in this crucial crisis. The training, educational process and health care (in terms of both physical and mental) of any resident should also be valued which is often disregarded in such difficult times of pandemic. Here we discuss the impact of the pandemic on the budding surgical community, especially in a volume over loaded apex institute in India.

KEYWORDS

Surgery residency, Covid-19, Pandemic

INTRODUCTION:

The impact of CoViD 19 on the world has been enormous, more so with the medical fraternity. The two things that are hit by the pandemic are economy and health care. Although every other specialty has its own cases in emergency the volume of patient in the surgical department is significant. The casualty visits include the patients with intestinal obstruction, gut gangrene, trauma related, limb ischemia and perforation peritonitis is still on the same trend. So, the risk of exposure is still high in the group of residents who provide care in the Emergency Room (ER) and hence strict adherence to universal precautionary measures of hand hygiene and mask is advisable. Exposure can be in anyway of suspected or positive patients requiring surgical and perioperative care directly or from their caregivers or from managing patients in a ward with a suspect/confirmed case. In accordance with the guidelines issued by the competent authority all the patients entering the hospital are routinely screened. And when required they are subjected to testing as well. Considering the false-negative rate of RTPCR for SARS Cov2, no patient can be labelled safe.³ Hence personal protective measure to be taken seriously when managing these patients. Evolution holds the key, as the surgical community tries to adapt to protect themselves from the virus and care the patients as well. Surgeons have to adapt quickly, to operate wearing personal protective equipment (PPE). N95 masks and face shields have been shown to reduce oxygen saturation resulting in symptoms like headaches, respiratory discomfort and fatigue. Performing a surgery with limited range of movements because of PPE and with limited vision because of fogging of the goggles with their evolving amateur surgical skills is a surmountable task for any resident.

DISCUSSION:

IN-HOSPITAL LIFE:

Surgical residency is known for its dire exhaustive curriculum and is the toughest residency program in any part of the country. In view of the covid pandemic, hospitals across the country follow the same policy of splitting the teams- active team, reserve team, covid team. There is a shortage on the workforce of the department owing to the attempt in balancing the management of covid and non-covid patients. And a few fellow residents get quarantined because of their exposure to the virus. This shortage of manpower along with the country's own attempt to resume the normalcy adds to the burden on the work life the residents. In-hospital activities include providing care to the patients in ward, attending emergency consults and surgeries, telemedicine consultation, appointment based regular OPD visits and prioritized elective surgeries. The number of patients have been increasing of

recent and their presentation is also late and severe than the usual adding to the increase in morbidity and mortality. The burn-outs are quite an expected outcome of the perplexing duties.

CLINICAL TEACHING AND ACADEMICS:

The face to face teaching during ward rounds and clinicals has taken a back step in this era as the rounds are skeletonized and limited to a bare minimum individual. This educational lag can be overcome by virtual clinical meeting after the ward rounds thereby ensuring the steady clinical acumen to the residents. It will be a challenge for the residents to overcome this lag in their early and prime period of their training career which lays back the foundation for the years to come. This will take more time and efforts from the residents to overcome, when the world recovers from the pandemic. Measures are taken to ensure the educational standards as in webinars and online discussions taking care of the community exposure. Conferences and Continuing Medical Education (CME) programs have also come to a stand still limiting the knowledge of presentations in huge platforms and decreasing the contact resources as well. But there are several CME programs held online as well which provides an opportunity to attend to various CME's which doesn't require virtual presence. However, this pandemic also opens the door to channelize the academic progress by focusing on priming the scientific research works on good paper writing and publications of the clinical research projects.

SURGICAL EXPERIENCE:

The apprehension that lies among the residents is the reduced surgical experience. Although the emergencies are pacing at the same rate, cancellation of minor electives and the reduction in the load of major electives pushes the residents to this point of vulnerable feeling. This loss of hands on training exposure may be countered by exposing them to virtual reality as in simulation techniques, laparoscopic models' exposure and cadaveric studies.⁵ Furthermore, a clear-cut discussion on each case on the pre-operative days regarding the work up, techniques and post-operative management for individualized cases paves the way for accentuating the knowledge on perioperative management which is the most expected out of the residents.

SOCIETAL RELATIONSHIPS:

Most of the residents owing to their risk of exposure in the hospital are forced to make a decision of isolating themselves from the families as in staying in the temporary accommodations provided to them or arranged by them. Their emotional hardships of not being able to be with their families and share family time has a real stance on their

psychological impact of carrying their duties. Although the familial relationships face a tough time it also gives the chance to promote team ethics, togetherness and emphasizes on the importance of communication and coordination among the fellow residents from the other departments who are actively engaged in the covid pandemic.

THE 'STRESS' FACTOR:

The residents with an exposure to such kind of environments are vulnerable to stress and its consequences. The factors that contribute include the physical stress of work life, mental hardships of unable to share family time, backlog in their academic progress both in clinical curriculum and research. Adequate measures to ensure psychiatric counselling in the difficult times is much needed. By the end of the residency program the bench marks are going to be the same no matter what. Years later, the impact of SARS Cov-2 will always be in history books but not in the resume of the trainees. There is a saying that what doesn't break you, will make you strong. Down the lane, that is the truth upheld.

PATIENT CARE:

Although the covid related direct mortalities are on the surge, there is also a rise in the morbidity and mortality which are indirectly because of the pandemic. This impact will be on the sands of time for a few years even when the globe recovers from the pandemic. A diabetic foot wound which could have been healed with a simple debridement is now set to amputate. A malignancy which could have been operated upfront is now either locally advanced or metastatic because of the global efforts to contain the pandemic.

Necessity is the mother of wisdom. So far, surgical consultancy is known to be a tactile, where there is a need to touch and feel the abdomen. A new dimension to the medical care has also been opened up by the face of telemedicine which brings the treating physician and the patient closer despite the 'social distancing'. It offers the chance to stay in touch and follow up your old patients while avoiding the in-hospital rush. Although the initial primary visit of direct consultation is preferred to telemedicine, telemedicine can be tool to stratify patients requiring direct consultation.⁷

CONCLUSION:

The pandemic has disrupted the balance of life of the residents from various departments all over the world. And its impact shall be positive in a few residents and in a few perspectives of medical care opening up the new spectrum of vision in patient management in the health care sectors which is set to become the new normalcy for the globe once the world is pandemic free. Adaptation has been the key for evolution of the mankind and the nature is all set for this.

REFERENCES:

1. Coronavirus [Internet]. [cited 2020 Jun 23]. Available from: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>
2. FAQ.pdf [Internet]. [cited 2020 Jun 21]. Available from: <https://www.mohfw.gov.in/pdf/FAQ.pdf>
3. Li Y, Yao L, Li J, Chen L, Song Y, Cai Z, et al. Stability issues of RT-PCR testing of SARS-CoV-2 for hospitalized patients clinically diagnosed with COVID-19. *Journal of Medical Virology*. 2020;92:903–8.
4. Roberge RJ, Coca A, Williams WJ, Powell JB, Palmiero AJ. Physiological impact of the N95 filtering facepiece respirator on healthcare workers. *Respir Care*. 2010;55:569–77.
5. Ambrosio L, Vadalà G, Russo F, Papalia R, Denaro V. The role of the orthopaedic surgeon in the COVID-19 era: cautions and perspectives. *Journal of Experimental Orthopaedics* [Internet]. 2020 [cited 2020 Jun 19];7. Available from: <https://jeo-esska.springeropen.com/articles/10.1186/s40634-020-00255-5>
6. Ruparelia J, Gosal JS, Garg M, Bhaskar S, Jha DK. Letter to the Editor: Challenges to Neurosurgical Residency Training During COVID-19 Pandemic: An Indian Perspective. *World Neurosurgery*. 2020;S1878875020311499.
7. Telemedicine for Surgical Consultations.pdf [Internet]. [cited 2020 Jun 21]. Available from: <https://journals.lww.com/annals-of-surgery/Documents/Telemedicine%20for%20Surgical%20Consultations.pdf>