

Impact of the COVID-19 Pandemic on Anesthesiology Resident Training

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Abstract:- The covid 19 pandemic had a major impact on the different training components of the anesthesia and intensive care residents. To evaluate this impact, we conducted a survey among the anesthesia residents in the different Moroccan university hospitals. 103 residents participated in this survey, and the different components of training were discussed. We concluded that the COVID-19 pandemic had a negative impact of varying degrees on the training of anesthesia and intensive care residents.

Keywords:- Pandemic, COVID 19, Training, Anesthesia and Intensive Care Residents.

I. INTRODUCTION

The COVID-19 pandemic had a major impact on the global health system. Hospitals had to adapt to this crisis, with the main objective of increasing the capacity and staffing of intensive care units in order to respond to a massive influx of serious patients. Resident anesthesiologists have played a crucial role in managing this crisis. But with still unknown implications on their learning and psychological state.

II. MATERIALS AND METHODS

We conducted at the anesthesia and the intensive care Unit of the Military training hospital Mohamed V, a survey on the impact of the covid 19 pandemic on the training of anesthesia and intensive care residents in different university hospitals in Morocco. The participants answered a questionnaire of 35 items, put online on the google Forms platform, about the impact of COVID 19 pandemic on different aspects of their training.

III. RESULTS

The results of our survey were as follows:

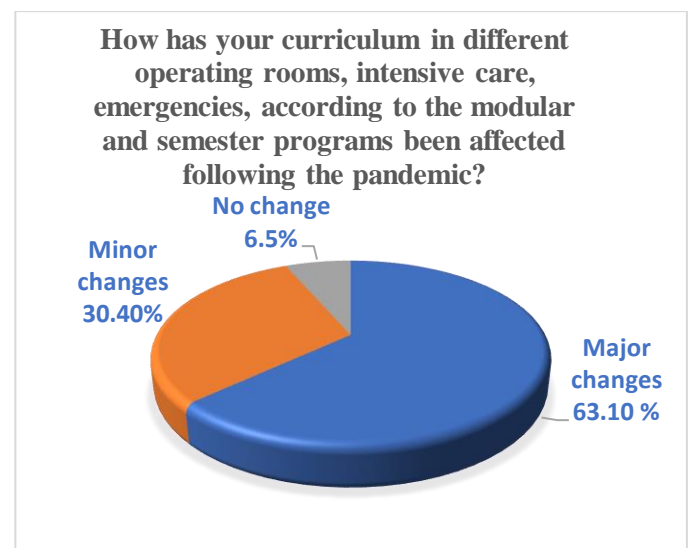
103 anesthesia residents responded to the questionnaire, of which 96 were directly involved in the management of severe covid patients. Mostly at the level of the intensive care unit, and the emergency room in their training hospital, but also at the different hospitals deployed for the management of the crisis.

All of the participants think that the pandemic has had a negative impact on the quality of their training, 64% think that this impact is Major.

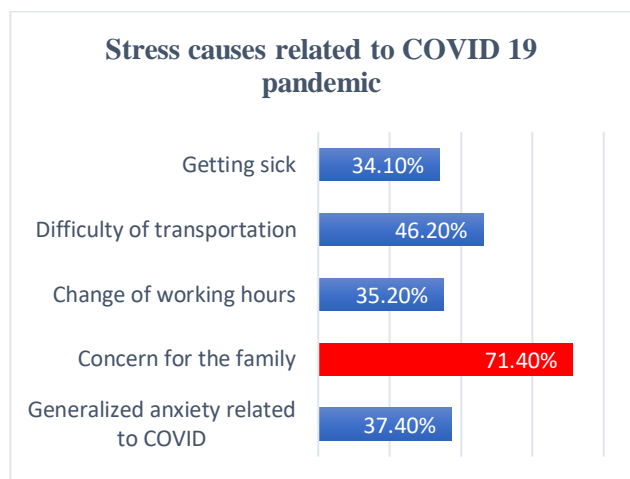
The impact factors were according to the survey:

- Decrease in activity in the operating room.
- Decrease in the quality and quantity of the academic training program.
- Major changes in the curricula and rotations in the different operating rooms, intensive care units and emergency rooms.
- Psychological and moral stress related to the pandemic.

Indeed, 90% of residents have noted a decrease in the quality and quantity of the academic training program following the pandemic. and 92% believe that the decrease in OR activity has impacted their theoretical and especially practical training. The pandemic caused a major disruption of the residents' usual curricula in the different services for 63% of the participants, only 7% had no change in their curricula.



Psychologically 82% of residents said they were morally distressed by the pandemic. The main cause of stress was the worry of infecting a family member in case of infection by the virus.



One of the most important training methods that has been developed during this pandemic is distance learning. Online platforms such as Zoom/Google Meet/Skype, etc., were used to teach 71% of participants, BUT 88% believe that distance learning does not replace traditional face-to-face courses.

Another training medium that has developed during the pandemic is medical simulation training, but unfortunately only 18% of participants were able to take advantage of it.

Another aspect of the training that was impacted was the examinations and evaluations. Examinations were postponed for 63% of the residents, for an average of 6 months. Also 96% of the participants felt that their exam preparation was compromised by the pandemic, mainly due to increased workload and stress related to the pandemic. All of these factors mean that many residents will have their training time extended due to the pandemic for an average of 5-9 months.

IV. DISCUSSION

A study conducted by Jhon Sneyd on anaesthesia trainees and trainers across six continents, objectified that all aspects of training programmes have been affected. Trainees report that reduced caseload, sub-specialty experience, and supervised procedures are impairing learning. Cancelled educational activities, postponed examinations, and altered rotations threaten progression through training. Work-related anxieties about provision of personal protective equipment, and risks to self and to colleagues are superimposed on concerns for family and friends and domestic disruption. In response, anaesthetists have developed innovations in teaching and trainee support. New technologies support trainer–trainee interactions, with a focus on e-learning (1).

Another study conducted by Gauri Raman Gangakhedkar and Sohan Lal Solanki in India, concluded that COVID-19 has had grave impact on anesthesiologists, on the professional and personal front, and will possibly cause near-permanent changes in the work culture. Restarting elective surgical procedures, will require meticulous planning. In spite of their self-perceived under-preparedness to combat COVID-19, an overwhelming majority of

participating anesthesiologists were prepared to contribute to the management of COVID-19 (2).

At the level of the anesthesia and intensive care unit of the HMIMV. Preventive measures aiming to limit this impact as much as possible were taken early on. They are based on an organization and rotation in covid and non-covid teams, with a maximum respect of the different courses and internships that the resident must perform. Promotion of online teaching and the organization of courses using the different platforms available. And finally, the organization of face-to-face courses, respecting the barrier measures related to the pandemic COVID19.

V. CONCLUSION

The COVID-19 pandemic had a negative impact of varying degrees on the training of anesthesia residents. It is imperative that the university hospitals establish an action plan to mitigate this impact. in order to find the right balance between the continuity of cross training of residents and ensure the management of the health crisis related to the pandemic COVID 19.

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