

# **“COVID 19 PANDEMIC: LESSONS LEARNT and the new normal as i see it”**

Every cloud has a silver lining- the way we see things is all that matters. A fresh day, nature was the same, with fresh blossom of flowers, birds chirping, in short mother earth had everything beautiful and overwhelming in her bosom as before, but were we the same? As a resident in anaesthesiology, I see an entire different world before and after the covid pandemic. This virus costed many lives, costed many families, their economy leading to lockdown in a massive way. Global economy had a huge downfall making people to lose their jobs, sacrificing their hard earned money, coming on roads to serve for their families. This pandemic has created havoc amongst everyone on earth, changed the lifestyle in a way which no one had imagined a few months prior. But, this lockdown gave the nature its own ME time to heal. It has thoroughly changed the relationships among our family, friends and be it our colleagues in the work places. What seemed unimportant earlier like handwashing, proper sanitization of oneself which most of the common people would not do many of the times, now has become an utmost priority amidst battling against covid. So, sometimes wonder is inevitable whether covid is a boon or a curse. Blissfully confusing!! Yet, hustling amongst this confusion, life moves on.

ARDS, an all time nightmare for an anaesthesiologist, which the” beloved” covid leaves no tables turned to worry about. Of course, once the lungs are damaged, nothing can fix it permanently. Many modalities earlier practiced little in this context like proning the patient, intermittent recruitment manoeuvres, use of high flow oxygenation of the patient through nasal cannula has been put into practice more with the increase in covid cases and found to work wonders in the outcome and survival of the patient. Even with limited resources, preventing the development of ARDS, is always a challenge especially when the specific cure is not known yet.

Looking as a person from medical fraternity, since a long time, all the manpower has been focused on the casualties and covid emergencies, and elective surgeries and procedures have been postponed indefinitely due to which medical system has succumbed to a financial strain. As a new normal, focusing on both academics and covid duties is inevitable. Prioritizing the patients when it comes to elective procedures and having rapid antigen testing for little emergent procedures are bound to be mandatory. Lots of anxiety, bound of questions among the relatives of the attenders regarding the disease per se, heaps of confusion for all the unanswered question within our minds to take

willfull decisions as to what is required in that need of time also is the new normal.

### **The covid 19 patient:**

Major risk for transmission of coronavirus is through respiratory droplets. These are heavy and disperse usually to a radius of a meter or so when an infected person coughs or sneezes. An a resident in anaesthesiology, its very well known to me, that we handle those procedures like tracheal intubation, non invasive ventilation, bronchoscopy, suctioning, which pose more risk for contracting infection. Viral exposure dose and time replicates the severity of viral illness. Also, what bothers more is that the viral load in an asymptomatic patient who was incidentally tested was found to be the same as in a symptomatic patient. This is leading to the bursting of the cases in their number due to quick transmission. Reproducing numbers of a virus ( $R_0$ ) that an average number of secondary infection that a typical patient will infect in an uncontrolled setting where most of the individuals are susceptible. For covid 19, ( $R_0$ ) is estimated to be 2.2 to 3.3 which is said to be higher than recent influenza pandemics and SARS. Early detection, social distancing, wearing masks properly helps to mitigate this pandemic by reducing ( $R_0$ ).

### **As a health care professional:**

Amidst, global recession, need for PPE worldwide has also increased that too within a short period of time as the case load is increasing. Also the cost of sanitation of the hospital beds, linens, creating new beds to treat patients in massive numbers are also to be kept in mind. Childbirth, other crucial emergencies are unavoidable. Luckily, aerosol generation can be minimized with the regional techniques for the same as far as possible. Ultrasound is another technique for nerve blocks, vascular puncture and thus minimize the aerosol spread. But less chance to be explained, contracting infection is of a high possibility, and thus the cycle of health care workers getting quarantined, isolation, leading to the increase in the burden of existing staff making them more vulnerable continues. Personal protection in the form of proper fluid resistant PPE with respirators to be used. Correct donning and doffing to be practiced. Donning to be started with fitting of a respirator mask and doffing should end with removal of the mask. Majority of self contamination has been noticed during doffing.

### **In the operation theater and while tracheal intubation:**

Adequate time to be allocated for proper preparation of the airway equipment and donning of PPE outside the intubating premises. Checklist to be prepared,

assigning roles to the members in OR is beneficial. Intubation should be done by an experienced intubator and there should be the help expected from a skilled assistant. Always strategy to be made to make the first intubation attempt successful. Videolaryngoscope can limit the exposure risk. Bag mask ventilation to be avoided with adequate pre oxygenation with CPAP or HFNO. To avoid coughing, rapid sequence intubation with adequate muscle relaxant to be performed. A dry HME filter between the catheter mount and circuit is mandatory. Awake fiberoptic intubation to be avoided as it can cause more coughing and thus aerosol spread. During extubation, careful closed suctioning when the patient is still deep is advised. Smooth extubation to be sought for when the patient is still deep on anaesthesia.

## **HIGH FLOW NASAL OXYGENATION AND NON INVASIVE VENTILATION:**

HFNO delivers warm and humidified oxygen through nasal cannula at rates upto 60 L/min. Its been observed that HFNO reduces the need for intubation. However patients are to be continuously monitored, and backup intubation strategy has to be confirmed. NIV which involves fixed  $fiO_2$  to be delivered where continuous positive airway pressure can be applied to the patients airway is also beneficial. But however, the aerosol spread in both are troublesome where NIV dispersed more aerosols than HFNO comparatively. Both these procedures require a negative pressure environment, where air turnover is atleast 12 times a day and preferably with an inline suctioning apparatus available.

## **Awareness:**

This pandemic requires adequate skills to be taught to the staff in a short span of time. Telemedicine has come onto help massively in this context. Educational modalities like simulation, online lectures, workshops under supervision has to be strongly emphasized. Many online webinars and online courses are also started as an initiative. This is done to train and educate large number of staff hailing from various places, with less inter individual interaction as per social distancing norms and ofcourse as a quick resort. Topics include personal safety like donning and doffing of PPE, airway management, CPR and position of patients like proning.

## **Psychological stress to health care professionals:**

Less talked issue- depression experienced in such crisis due to fear of contracting infection to self and family members, workload, discomfort due to

longstanding hours of work in PPE. Adequate psychological support, proper implementation of protocols, online discussions, webinars are to be sought for to overcome this crisis as a team with the government and the health care system.

## **Conclusion:**

Every viral outbreak provides an opportunity to learn vital lessons to improve medical care. Since this pandemic is resulting in quick influences on lives, our response in terms of preparedness has to be dynamic indeed. We the health care professionals have to maintain the balance between patient safety and our own safety taking undue precautions to not create a breach in either of them. The new normal is the new routine and lifestyle changes we practice like hand hygiene, social distancing, isolation, rapidity in our actions to treat the patients and yes it continues. Life involves adaptation and evolution as it is witnessed since many years. But how we see life post covid definitely has changed from before, maintaining and improving medical care both professionally and personally. Humanity is not to be forgotten. Animals have no role to play in this pandemic. Yet they are suffering too which is not demanded. Its our rightful duty to support each other in this crisis for the betterment of livelihood. And yes, this pandemic too shall pass. “The new normal, the new us from within”.