Covid-19, Ventilators and Respiratory Therapists - The Connection

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Covid-19, also known as the Coronavirus is a pandemic that has taken many lives, while leaving thousands struggling to breathe, resulting in severe acute respiratory distress. On March 2020, the World Health Organization (WHO) declared Covid-19 a pandemic. This viral outbreak is the cause of numerous health concerns as it continues to infect our population. The Covid-19 virus targets the lungs affecting the ability ventilate and oxygenate adequately. As it specifically attacks the lungs, the need for an artificial airway and ventilatory support becomes necessary to sustain life. Advanced Respiratory care intervention by Respiratory Therapists for ventilator management becomes the core for surviving this pandemic.

COVID-19 is an infectious virus that causes severe acute respiratory syndrome. This condition causes inflammation and scarring to the lung tissues, thus damaging the alveoli in the lungs. As a result of this, the ability to ventilate and oxygenate to sustain life becomes futile. Those who decompensate resulting in respiratory failure are then placed on ventilatory support. Numerous modifications to the ventilator settings are needed to stabilize Covid-19 patients. Advanced ventilator strategies by elite Respiratory Therapists are needed to address the needs of Covid-19 patients. Numerous changes to modalities, settings, high to low peep and oxygen strategies known as the Ardsnet Protocol by (NIH NHLBI ARDS Clinical Network), along with proning are attempted to resolve the hypoxemia within. Sadly, many patients have passed due to the severity of symptoms and inability to ventilate. The healthcare team which include Providers, Respiratory Therapists and Nurses struggle to treat and manage Covid-19 symptoms to prevent death. As the virus brings on a wide range of symptoms from asymptomatic to severe. Some symptoms noted so far have been fever, cough, sore throat, shortness of breath, and headache. Presentation is between 2-14 days after exposure to the virus. People who are older or who have comorbidities, such as heart disease, pulmonary disease, diabetes, or who are immunocompromised may be at a higher risk of contracting the virus. The only clear outlet available is to give supportive care to help relieve symptoms. Until a specific regimen of antiviral treatment for COVID-19 is successful, we must continue to manage these symptoms. Unfortunately, we have lost many lives as the severe cases end up in intensive care on a ventilator with respiratory failure, multi-organ failure, and septic shock, thus resulting in cardiac arrest.

Pandemics bring about panic, uncertainty and fear throughout the world, thus bringing on changes in the healthcare world inviting modified treatment plans and hope for a plateau. Remember that all lives are valuable regardless of whether a pandemic exists. The struggle for resolution becomes a frustrating one with decisions as to quality of life. Each person affected deserves the best care possible. Due to the influx of the outbreak, resources, equipment such as ventilators along with Respiratory Therapists become limited. Remember that life is valuable and must be a reminder that we should not modify our clinical resources. We as a nation will persevere as time allows our community to heal. As each day passes, we encounter new results, possibilities, treatments and modalities. Time is needed to allow for more research and testing to finalize a cure to rid the world of this virus known as Covid-19. As we wait for a breakthrough, the healthcare team which includes Providers, Respiratory Therapists and Nurses must collaborate as one. Surviving this virus depends on it. Our nation worldwide has felt the effects of Covid-19 as it knows no boundaries and infects rapidly.

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