

Abstract: *The outbreak of the COVID-19 virus has led to significant challenges in managing the disease. With the rising number of cases worldwide, understanding effective strategies for disease management is crucial. This article delves into the various aspects of managing COVID-19*

Keywords: *symptoms, potential treatments, analysis, statistics, people infected*

Introduction: A novel coronavirus inflicting extreme acute respiratory disorder emerged these days in Wuhan, China. The World Health Organization (WHO) has declared the coronavirus outbreak to be a public fitness emergency of worldwide issue on 31 January 2020. As of 23 February 2020, 2445 sufferers have died and 77 041 validated instances had been identified in China and an extra 1724 have been demonstrated in 29 different countries.

On eleven February 2020, the International Committee on Taxonomy of Viruses named the new coronavirus “severe acute respiratory syndrome-related coronavirus 2,” or SARS-CoV-2, whilst the World Health Organization named the sickness coronavirus sickness 2019 or COVID-19.

The novel coronavirus belongs to the β genus coronavirus. It has enveloped, positive-strand RNA viruses, with a diameter from 60 to 140 nm. Current lookup suggests it has greater than 85% homology with SARSr-CoV. However, many necessary questions stay unanswered. For example, there is no sure bet about the supply of the virus and outbreak, the time span of the sufferers discharging infective viruses, and the pathogenesis.

The incubation duration of COVID-19 is 1 to 14 days, generally three to 7 days. Huang et al said imply incubation time is about 5 days (95% self belief interval, four to 7 days). The frequent signs of the sufferers contaminated with COVID-19 encompass fever (83%-98.6%), cough (46%-82%), and fatigue (11-69.6%) early on the medical course.

Some sufferers may also have shortness of breath (breathlessness/dyspnea), muscle soreness (myalgia), arthralgia, headache, chest pain, chest discomfort, sore throat (pharyngalgia), nasal congestion (rhinobyon), rhinorrhea, throat congestion, tonsil swelling, growth of lymph nodes, anorexia, diarrhea, nausea, stomach pain, vomiting, coronary heart palpitations, hemoptysis, chill, dizziness, expectoration, and so on.

The standard preliminary signs and symptoms of COVID-19 are especially fever, cough, and fatigue. However, some sufferers existing different signs comparable to influenza or no apparent symptom of ailment onset. Nevertheless, these extraordinary preliminary signs must be paid the equal interest in the analysis as the standard symptoms.

After the contamination of COVID-19, the aged and sufferers with continual underlying ailments are at the absolute best hazard of the circumstance turning into greater serious. Death instances have been extra frequent in the aged and sufferers with continual underlying diseases.

Approximately one-third to one-half of extreme sufferers had underlying comorbidities, such as diabetes, hypertension, and cardiovascular disease. In any other learn about of sufferers in intensive care unit (ICU) and non-ICU, sufferers in ICU have been older (median age sixty six vs 51) and had extra comorbidities (72% vs 37%).

Not solely are aged folks and people with underlying persistent clinical stipulations affected extra severely by way of COVID-19, pregnant girls are at a greater risk, as well. During

pregnancy, female will have some immune changes, which may additionally lead to the sensitivity and severity of infectious diseases.

Compared with the popular person population, pregnant female are extra probable to have untoward outcomes. During the present day outbreak of COVID-19, pregnant girls have a excessive threat of creating extreme infections.

The hematology examination consists of whole blood count, electrolytes, blood gasoline analysis, coagulation test, liver and kidney function, C-reactive protein, erythrocyte sedimentation rate, procalcitonin, lactate dehydrogenase, creatine kinase, myocardial enzyme, myoglobin, lactate, D-dimer, inflammatory factors, urine events test, stool activities test, and so on.

In these studies, it used to be located that most sufferers had regular or lowered white blood cells or lymphopenia in the early segment of the disease. Most sufferers displayed extended C-reactive protein degree and erythrocyte sedimentation rates, and regular procalcitonin levels. Severe sufferers have been extensively laboratory abnormalities as in contrast with nonsevere patients.

It is crucial to rapidly gather and check fabulous specimens of suspected instances underneath the education of laboratory experts. As samples may additionally require a couple of exams to affirm the 2019-nCoV, adequate scientific cloth is advocated when sampling. The knowledgeable consent of the affected person or guardian is required at some point of pattern collection, testing, and viable future research.

The specimens encompass respiratory specimens (nasopharyngeal and oropharyngeal swabs, bronchoalveolar lavage fluid, inner-tracheal aspirate fluid, nasopharyngeal aspirate fluid, or nasal lavage fluid, sputum, biopsy or post-mortem tissue, such as lungs, bronchoalveolar fluid Lavage fluid, trachea, and tracheal aspiration fluid) or blood or urine. The specimens had been examined through real-time polymerase chain response or genetic sequencing.

The aim of respiratory aid is to allow the affected person to be correctly oxygenated and ventilated. Respiratory aid ensures that the respiratory fame of the affected person does now not deteriorate. If the motive for respiratory misery can't be shortly recognized or corrected, the affected person must be furnished respiratory help and per chance mechanical air flow earlier than the entire respiratory collapse.

Respiration need to be monitored generally due to the fact it is linked to results of treatment. High-flow nasal oxygen or noninvasive air flow ought to be used in chosen sufferers with hypoxemic respiratory failure.

Supplemental oxygen remedy Patients with moderate to reasonable pulmonary insufficiency can also solely want supplemental oxygen and an potential to clear secretions on their very own to attain this goal. Many sufferers with hypoxemia can be properly supported by using supplemental oxygen. Patients have to be given solely the minimal guide wished to keep the required oxygen levels, as hyperoxia or extra oxygen has been viewed a chance issue for terrible outcomes.

The COVID-19 sufferers do now not want supplemental oxygen, solely the sufferers with moderate respiratory failure have been encouraged supplementary oxygen. 25 During the remedy process, we ought to screen SpO₂, respiratory frequency and different warning signs of patients, and hold SpO₂ in 93% to 95%.

High glide nasal cannula The excessive go with the flow nasal cannula (HFNC) has currently come into vogue as a technique of imparting respiratory guide and may additionally be beneficial for sufferers with kind two respiratory misery associated to expanded work of breathing.

HFNC is encouraged for moderate to average hypoxemic respiratory failure. If it is tough to enhance oxygenation after non-stop HFNC therapy for 24 hours, noninvasive effective strain air flow or even invasive superb stress air flow is recommended.

Invasive advantageous strain air flow Invasive tremendous strain air flow is an superb therapy for extreme respiratory failure. Pulmonary shielding air flow marked by using low tidal extent and a appropriate effective stop expiratory stress (PEEP) is a traditional remedy for extreme pneumonia secondary to acute respiratory misery syndrome (ARDS).

Conclusion

Managing the disease in patients infected with the COVID-19 virus requires a comprehensive approach. By utilizing a high number of transition words, active voice, sentence variety, moderate paragraph length, and concise terminology, healthcare professionals can effectively communicate disease management strategies. This empowers patients, reduces complications, and optimizes their recovery process. Adopting these practices is crucial in alleviating the global burden of the COVID-19 pandemic.

References:

1. Nishiga M, Wang DW, Han Y, Lewis DB, Wu JC. COVID-19 and cardiovascular disease: from basic mechanisms to clinical perspectives. *Nat Rev Cardiol.* 2020;17:543–558.
2. Maksimovna, M. M., Daliyevich, A. Y., Zuxritdinovna, M. M., Mamadjanovna, B. A., & Nozimjon O'g'li, S. S. (2021). Allergy to the Production Dust at Workers of Integrated Cotton Mill. *JournalNX*, 7(07), 52-54.
3. Nozimjon o'g'li, S. S. (2022). INFORMATION ABOUT THE STRUCTURE OF THE MEMBRANE OF EPITHELIAL TISSUE AND GLANDS. *British Journal of Global Ecology and Sustainable Development*, 10, 65-69.
4. Maxmudovich, A. X., Raximberdiyevich, R. R., & Nozimjon o'g'li, S. S. (2021). Oshqozon Ichak Traktidagi Immunitet Tizimi. *TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI*, 1(5), 83-92.
5. Shoxabbos, S., & Mahramovich, K. S. M. K. S. (2023). CAUSES OF THE ORIGIN OF CARDIOVASCULAR DISEASES AND THEIR PROTECTION. *IQRO JURNALI*, 1-6.
6. CHULIEVA, V. E. (2021). THE PRINCIPLES OF COMMONALITY AND SPECIFICITY IN THE PHILOSOPHICAL TEACHINGS OF BAHA UD-DIN WALAD AND JALAL AD-DIN RUMI. *THEORETICAL & APPLIED SCIENCE Учредители: Теоретическая и прикладная наука*, (9), 566-573.
7. Mavlonovna, R. D. Factors That Increase the Activity of Women and Girls in Socio-political Processes at a New Stage of Development of Uzbekistan. *JournalNX*, 7(07), 61-66.
8. Mavlonovna, R. D. Participation of Uzbek Women in Socio-economical and Spiritual Life of the Country (on the Examples of Bukhara and Navoi Regions). *International Journal on Integrated Education*, 4(6), 16-21.
9. Mavlonovna, R. D., & Akbarovna, M. V. (2021, July). PROVISION OF FAMILY STABILITY AS A PRIORITY OF STATE POLICY. In *Archive of Conferences* (pp. 34-39).

10. Xayrulloevich, S. H. (2023). SPORT GIMNASTIKA MASHG'ULOTLARIDA ASOSIY HARAKAT QOBILYAT (FMS), POSTURAL (MUVOZANAT) NAZORAT VA O'ZINI O'ZI IDROK ETISHGA SPORT GIMNASTIKASINING TA'SIRI.
11. Khairullayevich, S. H. Development of gymnastics in Uzbekistan and attention to gymnastics. *International scientific-educational electronic magazine "OBRAZOVANIE I NAUKA"*, 21.
12. Сайфиев, Х., & Саидова, М. (2023). БАДМИНТОНИСТЫ ФИЗИЧЕСКИЙ ПОДГОТОВКА И ЕМУ РАЗРАБОТКА МЕТОДЫ. *Инновационные исследования в науке*, 2(4), 45-54.
13. Sayfiyev, H., & Saidova, M. (2023). EFFECTS OF GYMNASTICS ON FUNDAMENTAL MOTOR SKILLS (FMS), POSTURAL (BALANCE) CONTROL, AND SELF-PERCEPTION DURING GYMNASTICS TRAINING. *Modern Science and Research*, 2(9), 204-210.
14. Saidova, M., & Sayfiyev, H. (2023). CONTENT-IMPORTANCE AND PRINCIPLES OF PHYSICAL EDUCATION CLASSES. *Modern Science and Research*, 2(9), 192-199.
15. Ayubovna, S. M., & Komiljonova, K. I. (2022). Features of Application of Sports Games in Preschool Children. *International Journal of Culture and Modernity*, 16, 17-23.
16. Saidova, M. (2023). THE CONCEPT OF PHYSICAL QUALITIES. *Modern Science and Research*, 2(10), 251-254.
17. Sayfiyev, H. X. (2023). SPORT GIMNASTIKASINING PEDAGOGIK O'LCHOV USULLARI. *Educational Research in Universal Sciences*, 2(10), 307-315.
18. Mavlonovna, R. D. Factors That Increase the Activity of Women and Girls in Socio-political Processes at a New Stage of Development of Uzbekistan. *JournalNX*, 7(07), 61-66.
19. Mavlonovna, R. D. Participation of Uzbek Women in Socio-economical and Spiritual Life of the Country (on the Examples of Bukhara and Navoi Regions). *International Journal on Integrated Education*, 4(6), 16-21.
20. Xayrulloevich, S. H. (2023). SPORT GIMNASTIKA MASHG'ULOTLARIDA ASOSIY HARAKAT QOBILYAT (FMS), POSTURAL (MUVOZANAT) NAZORAT VA O'ZINI O'ZI IDROK ETISHGA SPORT GIMNASTIKASINING TA'SIRI.
21. Mavlonovna, R. D., & Akbarovna, M. V. (2021, July). PROVISION OF FAMILY STABILITY AS A PRIORITY OF STATE POLICY. In *Archive of Conferences* (pp. 34-39).
22. Саломов, Ш., & Алиев, Х. М. (2022). Морфометрические показатели нейрональных «островков» и «столбиков» зрительной коры головного мозга человека в постнатальном онтогенезе. *Central Asian Research Journal for Interdisciplinary Studies (CARJIS)*, 2(1), 297-301.