

COVID-19: Threat to Humans, Animals and Environment

Hina Afzal Sajid¹, Nayab Arshad², Ahmad Ali^{3*}, Yasir Razzaq Khan³, Kashif Hussain³ Ameer Hamza Rabbani⁴

¹Centre of Excellence in Molecular Biology, University of Punjab, Lahore, Pakistan ²Livestock and Dairy Development Department, Punjab, Pakistan ³Department of Medicine, Cholistan University of Veterinary and Animal Sciences, Bahawalpur, Pakistan ⁴Department of Surgery, Cholistan University of Veterinary and Animal Sciences, Bahawalpur, Pakistan

*Corresponding Author: Ahmad Ali, Department of Medicine, Cholistan University of Veterinary and Animal Sciences, Bahawalpur, Pakistan.

Received: March 23, 2021; Published: April 23, 2021

COVID-19 pandemic is caused by Sever Acute Respiratory Syndrome Coronavirus (SARS-CoV-2) [1]. The virus has instigated a serious threat to global economy and population, with the impact of the pandemic still being researched. The ongoing pandemic has affected almost 219 countries around the globe. Every country is trying to understand the disease pattern and its consequences for man, animals and environment. The main concern of scientists is to find the answer of how human SARS-CoV-2 infection is successful to spread in wildlife and various other animals as well as by what means this could influence COVID-19 dissemination. May possibly human and animals be at risk from one other? Even many scientists already told that SARS-CoV-2 is from animal origin. SARS-CoV-2 is 96% similar to a bat coronavirus.

Zoonotic and reverse zoonosis

SARS-CoV-2 is from animal origin that infected the human beings. Recently cases of wild animals living in captivity and pets animals have been reported that were probably infected from humans and owners of pets. This supposed conduction way could have devastating concerns, and even lacking firm scientific confirmation should be measured a warning, as potential contrary zoonosis may possibly problematic the control of the virus even further [2].

Threat to animals

It has been reported that raccoons, felines, and monkeys that are vulnerable to COVID-19. At the end of February 2020, the first case of geriatric Pomeranian dog, a domestic animal resulted affirmative to the SARS-CoV-2 or COVID-19 infection was reported [3]. Additionally, in US, a Malayan tiger Nadia that was four year-old at the Bronx Zoo was tested positive with medical symptoms of respiratory infection for the subsistence of corona virus [4]. Six big cats in a zoo also reported positive by human SARS-CoV-2 [5]. A potential occurrence could lead to a high mortality and morbidity of animal populations, which could be disastrous since may species of animals are already near to end or at of extinction. On the contrary, wild animals may perhaps develop reservoirs of the contagion virus. To avoid the extent of the occurrence, precautionary dealings such as the eradication of sets of wild animals that might be enforced, likewise to what happened freshly in mink farmhouses [6] and also for birds all through the outburst of avian influenza A (H5N1) [7].

Control of COVID-19 and its impact on ecosystems

The increase in the utilization and manufacturing of medical services associated to plastic items (particularly disposable plastics items) is as of now prompting damaging impacts on biological systems (especially marine life) and at last on human wellbeing. There

are some cases related to the gathering of plastic in the climate; the spreading of contaminants as polyacrylonitrile, polyurethane and polypropylene, the coincidental trap of ocean existence in facemask, and the harmful impacts of sodium hypochlorite and quaternary ammonium utilized for the sanitization of civic territories, comprising sea shores.

Evidently, human COVID-19 possibly will impact the wild animals directly or indirectly, and also a promising spreading of the infection to wildlife can distress the population of humans. Consequently, there is a serious need to take some precautionary measures to reduce the consequences. So, the control measures could comprise of frequency studies built on identifying viral RNA as well as antibodies in vulnerable wildlife species constraints to the connections concerning infected humans and wild animals having great risk, mainly in zoos, countrywide wildlife parks, facilities related to animals holding and definite actions to the dismissal of gloves, masks and further disposables used all through the pandemic or their spare for supportable replacements. The war against this pandemic virus is only possible with an international health approach, deprived of leaving an ineradicable splash on further species and the surroundings, and inhibits the advent of other diseases ascending from zoonotic infections.

Bibliography

- 1. Sajid HA., *et al.* "COVID-19: Recent Trends in the World and Precautionary Measures". *American Journal of Life Sciences* 8.3 (2020): 41-44.
- 2. Moonen P and Schrijver R. "Carriers of foot-and-mouth disease virus: A review". Veterinary Quarterly 22.4 (2000): 193-197.
- 3. AFCD. Detection of low level of COVID-19 virus in pet dog (2020a).
- 4. Islam MA. "COVID-19 and Pet Animals: What we need to know?" Research in Agriculture Livestock and Fisheries 7.1 (2020): 83-86.
- 5. Wang L., *et al.* "Complete genome sequence of SARS-CoV-2 in a tiger from a US zoological collection". *Microbiology Resource Announcements* 9.22 (2020).
- 6. Oreshkova N., et al. "SARS-CoV-2 infection in farmed minks, the Netherlands". Eurosurveillance (2020): 25.
- 7. De Farias Brehmer LC., et al. "Revisão integrativa da literatura sobre a influenza AH1N. Texto e Context". Enferm 20 (2011): 272-277.

Volume 6 Issue 5 May 2021 ©All rights reserved by Ahmad Ali., *et al.* 27