

Coronavirus: A Lesson to be Learned

Sushil Panta, PhD¹

¹School of Health and Allied Sciences, Faculty of Health Sciences, Pokhara University

Coronaviruses like SARS and MERS have been in existence from the past. It is due to the widespread use of media and specially the social media that this outbreak has got much attention. WHO has declared this outbreak a pandemic. Multiple waves of this pandemic are expected because the antibodies developed in the body against this virus is not long lived.¹ The coronavirus that was recently encountered from Wuhan, China is an enveloped RNA virus. WHO has named the virus a severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The disease caused by the virus has been named coronavirus disease (COVID-19). According to the WHO, as of May 6, 2020, the worldwide cases of coronavirus has reached 3,557,235 with 245,150 deaths. The good news is that there are 1,258,030 cases of recovery from the disease. While this being written, there are 75 cases of laboratory confirmed COVID-19 in Nepal and 16 has recovered. The decision of the governments all over the world to imply a lock down and practice precautions against the infection has considerably controlled the spread of the virus.

The scientific community has been working on coronavirus since decades ago and in present also the quest for the development of a vaccine is going on. The entry of a virus into the host cell is an important event for viral transmission. Previous knowledge on SARS and MERS has led the scientists to speculate the S protein on the surface of the virus as the ideal target for a vaccine. In case of SARS-CoV-2 this protein interacts with the ACE 2 receptor, an event important for the viral entry into the host cell. Antibody targeting the S protein could restrain the virus from entering into the host cell, thus neutralizing the virus.¹

The biggest issue in tackling this virus in Nepal is that it is being untraceable. The authorities do not seem to be able to track down the source of the virus detected. This problem is followed by the inadequate testing. While the scientific community has insisted on contact tracing, the tracing and testing methods followed worldwide still seems to be experimental. All the diagnostic methods we have till now are not 100% accurate. This has raised a serious question on the amount of effort put by the world on health research. The most important reason seems to be the poor funding on health research. Another issue to be considered seriously is the transmission of this virus in animals. These incidents have been reported in a tiger in a zoo in New York. Animals are usually much stronger than humans but if the virus keeps jumping from one species to another, it will result into a serious disaster. There are predictions being made about the number of infected person could rise to millions. Similar predictions were made with Ebola virus and Zika virus but the diseases were controlled. There are different rumors regarding the treatment of this viral infection including the use of garlic. According to WHO there are no scientific evidence of garlic as a medicine against this virus. However it is advised to use herbs or

spices that helps strengthening the immune system.

As health professionals, we need to look keenly into the activities of the virus. The virus infection in China manifested like pneumonia. Until it spread to Europe, the experts reported that it included diarrhea and vomiting. It appears that these signs depend on person to person which raises concern about invasion of different tissue parts of the body by the virus. However in Nepal, most of the patients has mild symptoms and the patients are stable. At this point, while the world is in panic situation we need to council everyone, including the authorities, about two major points namely 1) the positive side of the pandemic and 2) the need for the change in our lifestyle.

The pandemic has taught us that we need serious expenditure in health research and the social as well as the economic activity. We all know that research career is still not impressive from financial point of view. Just like sports or entertainment industry, we need to spend funds to lure much more number of intelligent people into health research and keep the research going without leaving it deprive of necessary fund. The pandemic has taught us that we need to follow certain behavioral rules about coming in contact directly or indirectly with other people. We have learned the importance of empathy and sharing. A very important thing to be noted is that unlike in the past, the scientists did identified the virus very soon and started to work on it.

What we encountered this time has shaken us to reconsider our lifestyle especially about what we eat. We are still not clear which part of our diet invented this pandemic. One thing is sure that non vegetarian diet is the source of this pandemic. It has been in the past too. Every group of people in the world has their own lifestyle. They have their own history of famine or surplus availability of food which led their current lifestyle but if we want to keep these kinds of problems off the bay, we need to figure out where and what went wrong. We need to build stronger immunity by adopting proper lifestyle rather than following a treatment system that has short term benefit but result into decline of our immunity. Even if we have no treatment, it is only the matter of time that the virus will be gone. We must learn from our mistakes and learn to live healthy life with paying respect to the Mother Nature.

REFERENCES

1. Amanat F, Krammer F. SARS-CoV-2 Vaccines: Status Report. *Immunity*. 2020;52(4):583-9.

Correspondence: Sushil Panta, PhD, School of Health and Allied Sciences, Faculty of Health Sciences, Pokhara University, Nepal, E-mail: sushilmax@hotmail.com