PROJECTION OF COVID–19 PANDEMIC IN UGANDA

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Abstract

COVID–19 (Corona Virus) is caused by Severe Acute Respiratory Syndrome Corona Virus 2 (SARS–COV–2). The virus that was first discovered in China Wuhan Province about 3 months ago (first cases were reported in Wuhan on December 31st 2019) has spread world wide. The six (6) top countries (excluding China) most affected so far include; USA, Italy, Spain, Germany, France and Iran. With Italy showing the highest death toll.

In Uganda where it was discovered on 19/3/2020 with one (01) case has just in nine (9) days, increased to thirty (30) infected individuals. This model is a wake up call over the rate at which COVID–19 is likely to spread throughout the country. Thus it is a guide for policymakers and planners to benchmark on for solutions to this deadly virus.

Keywords: COVID–19, Awareness, Infection rate, Pneumonia

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1   Introduction

COVID–19 is caused by Severe Acute Respiratory Syndrome Corona Virus 2 (SARS–COV–2) [1]. Corona viruses are widely distributed in many different species of animals, including bats, cattle, cats, birds, and camels [4]. The type of pneumonia caused by the 2019 novel corona virus disease (COVID–19) is a highly infectious disease, and the ongoing outbreak was declared by World Health Organization (WHO) as a global public health emergency on 1/2/2020 [2].

An individual may fail to differentiate between symptoms caused by COVID–19 and a common cold, flu, because symptoms are alike. COVID–19 symptoms include; fever and cough that may

From Figure 1 above, the trend of infected individuals is observed to increase exponentially. In 14 days, the number of infected individuals is expected to be 127 if no control measures are taken.

Conclusion

With such increasing infected cases, the susceptible population should follow the Ministry of Health guidelines and the advice given by His Excellency Y.K. Museveni the President of the Republic of Uganda. Awareness campaigns [door to door] should be extended to rural populations that have no access to media [Televisions, Radios, Newspapers e.t.c]

No delay in seeking medical care by infected individuals as COVID–19 has a high transmission rate and there is a likelihood of co–infections with other diseases such as Pneumonia (spread by pneumococcus bacteria and influenza A virus, presenting same symptoms), malaria, Tuberculosis and HIV–AIDS.

Acknowledgment

Data Availability

The data supporting this exponential model is from the daily updates on COVID–19, in the world, and they have been suitably cited as references in this paper in Table 1, Table 2 and Table 3. Parameter values have been estimated using data released on a daily basis from the Ministry of Health Uganda.

Conflicts of Interest

The author declares that she has no conflicts of interest.

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[8] Local transmission: indicates locations where the source of infection is within the reporting location; Imported cases: only indicates locations where all cases have been acquired outside the location of reporting.

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