COVID 19 or the novel corona virus has hit the human race in a way which has never been documented before. Flu epidemics and pandemics have happened in the past, but few have had devastating global impact as the COVID pandemic. The pandemic has shown us how unprepared we are to something novel, something as tiny as a RNA strand which has caused havoc in the life and resources of most countries. The economic and social implication of the pandemic has been immense but the most concerning aspect of the epidemic is the vulnerability of the treating community to the disease, which raises very important questions on introspection. Flattening the curve is the strategy to prevent the overwhelming of the healthcare system during any epidemic and not a way to curb the infection itself(1). As the pandemic has progressed, the mortality and morbidity of healthcare workers has been increasingly documented and the implication of this on an already compromised system with infected, isolated or quarantined care providers(2) raises questions on the preparedness of systems for future epidemics. An elusive vaccine is not the answer to the problem of epidemics as most epidemics are novel and the next epidemic seems not far away, as history serves as the best
early warning system. Epidemics will happen, but our response to the same needs to be better than the present standards of care which leaves critical care workers at risk. Many innovative ideas ranging from indigenous PPEs to telemedicine have been used as ways around the system, which can only be considered as desperate measures during desperate times. Understanding epidemics with the help of innovative technology opens up doors to novel ways to tackle novel problems. The use of Artificial Intelligence as the first response to epidemics addresses the problem of protecting the most critical and finite resource of Health Care Workers HCW and utilizing them ergonomically in domains where they are irreplaceable(3). Using the Natural Language Processing NLP as the first line of defense against epidemics(4) needs a paradigm shift in the current thinking process as the potential for this simple yet immense resource available at the fingertips of the common man needs to be tapped with caution. The use of NLP in Machine Learning ML, their use in other diseases and the possibility of using it as the first response to an epidemic thereby optimizing care and protecting critical resources will be discussed in this article.

References

8. Daniels N. Resource allocation and priority setting. In: Public health ethics: cases
spanning the globe. Springer, Cham; 2016. p. 61–94.


35. Macaulay T. Researchers want your voice to train coronavirus-detecting AI [Internet]. The Next Web. 2020 [cited 2020 Apr 22]. Available from:
Machine Learning Systems in Epidemics: In the AI of the Storm


Index Terms

Computer Science  |  Artificial Intelligence

Keywords