Leadership Talk with Dr. K VijayRaghavan

Date: April 8th, 2020

Time: 11:00 AM

Speakers:

• Dr. Abhay Jere, the CIO of MHRD Innovation Cell, Govt. of India

Dr. Krishnaswamy VijayRaghavan, Principal Scientific Adviser, Govt. of India

Brief description of the discussion:

The seventh part of the Leadership Talk Series, which is hosted by Dr. Abhay Jere, the Chief Innovation Officer of Ministry of Human Resource Development (MHRD), Government of India, began with him introducing the speaker for the day, Dr. Krishnaswamy VijayRaghavan. He expressed his gratefulness for him, since he took out time from his extremely busy schedule, which is spent co-ordinating India's fight against the global pandemic COVID-19, along with keeping a tab on it with global agencies like WHO, UNICEF, FTO etc, in the capacity of Principal Scientific Adviser, Government of India.

The session's first question from Dr. Abhay enquired about Dr. VijayRaghavan's perspective on India's fight against COVID-19. To this, he said, India started to see the effects of the pandemic after countries like China had already bore its brunt. At the same time, countries like Italy, Spain, Portugal and United States(primarily New York) had just begun feeling its effects. He acknowledged that the fight the aforementioned countries were engaged in was, in no manner, the blueprint for India. Factors like demography, population density, difference in their and India's health systems and the difference in the magnitude of economic impact, hold key to our struggle. Hence, the need was to adapt, keeping in mind the above factors.

He also informed that the Health Ministry, along with the other ministries, has been working hard from the beginning, to ensure that the steps are "taken on the ground." All these efforts led him to remark that India has done an "incredible" job till now, in fighting this complex and multi-faceted issue.

Dr. Abhay questioned next, according to him, what have been our major successes and what are the aspects we need to improve on, in our fight against COVID-19? Dr. VijayRaghavan felt that the checking of international travellers and their effective tracing has been the biggest positive for him. He accepted that in the beginning, India didn't know how asymptomatic people might come into picture. Along with other things, we took time to learn but, we have "scaled up well" and we need to "continue doing so."

Things like contact tracing and testing continue to be worked upon. He also advised the viewers to install the "Aarogya Setu" application, which is available on all platforms and will be soon available for feature phones too. With its complex algorithm and Q&A, it will determine whether the user needs testing or not. He felt this can be a "very powerful tool" in our struggle.

Dr. Abhay then questioned about the substance behind the reports which suggest that there might be a correlation between BCG vaccination and low rates of COVID-19 illness. Dr. VijayRaghavan stated that there is "no strong evidence" to establish the correlation, since BCG or any other kind of vaccination has not been "mass-deployed." Nevertheless, he remarked that these scientific correlations are interesting to note." Older people are at a greater risk but, if they have been BCG vaccinated, they would be safe", isn't the case necessarily, according to him.

He talked about the thought process behind this argument, how BCG immunisation causes the body to develop a better immune response due to inflammation and the reason behind correlation's prematurity: relative severity isn't calculated, normalised causes of death aren't considered and, correlation between greater number of deaths and higher average income, for a country, despite universal BCG vaccination (like a low average income country), isn't considered as well. He also commented that the immune system doesn't protect against a broad spectrum of ailments when vaccinated for a particular disease, contrary to popular opinion.

Dr. Abhay asked next, about the responses and requests he (Dr. VijayRaghavan) must have received from the ordinary citizens, regarding innovation and ideas, for the fight against the pandemic. He mentioned how a committee headed by him and Dr. Vinod Paul look into these ideas. These are first sent to top scientists around the country, after which they provide their reviews. The reviews are thoroughly read and accordingly, a feedback is given, to classify the ideas into one of the various categories they have made, based on the ease of implementation and the time needed for doing so.

Dr. Abhay enquired about the amount of ideas they receive, to which he replied, "10-20 ideas per day." He further said, regulation and facilitation of complex ideas is required, which is provided by their committee. The easier ones, which are more in number, are quickly dealt with. Ideas which are given a positive feedback generally "embark on to greater things."

When asked about a mechanism for funding of these ideas, Dr. VijayRaghavan replied, there are various sources from which funds are generated: institutions, entrepreneurs and industries being the prime ones. The flexibility that has been afforded in the time of crisis has augured well in this regard too.

Approaching towards the end, Dr. Abhay then enquired, whether he was happy with the way the scientific community of India has responded to the crisis. To this, Dr. VijayRaghavan said, they have received "incredible responses" from city-clusters like Bengaluru (on providing IT-based solutions and vaccines), Pune(repurposing of drugs), Hyderabad and Delhi-NCR region. He appreciated the positive response of IIT Delhi, because of which scientists and engineers have "come together" and have done "great things."

Dr. Abhay went in great detail to explain his last question: how MHRD had organised an Idea Hackathon recently and received 3,500+ ideas (including 350+ ideas from the startup domain), thereby making it successful and how, they were planning to organise a mega-challenge in the near future. Regarding that, what would be his (Dr. VijayRaghavan's) advice for the youngsters?

Answering this, he said, youngsters need to primarily focus on those who are "the most vulnerable." The ideas should be such that they provide maximum return on efforts and value. He cited various examples, viz. social distancing for a family of seven living in a small flat, hygienic use of taps in common wash-basins, washrooms and showers and maintaining the economic growth in such dire circumstances. He regarded these challenges as complex but solvable.

Dr. VijayRaghavan ended his answer with positive words: how this "horrible crisis", which has come like "a bolt from the blue", has given each one of us opportunities: to reassess our priorities, check the strength of bonds between communities and, reviewing our health systems.

Dr. Abhay thanked Dr. VijayRaghavan again, for taking time out for this session, from his "enormously busy schedule."



Promotional poster of the discussion released by Dr. Abhay Jere



The discussion in progress, with Dr. VijayRaghavan on left and Dr. Abhay Jere on right