Shahid Akhter, editor, ETHealthworld, spoke to Dr. Rajesh Jain, Vice President, Indian Pharmaceutical Alliance & Managing Director, Panacea Biotec, to know more about the need for collaboration and partnerships in vaccine development.

What is your take on Vaccination and how has collaboration helped in accelerating the vaccine manufacturing process especially in Covid 19? The Indian pharma companies along with the government are continuously working to pace up the production of Covid-19 vaccines. Since the beginning of the pandemic, collaboration has proven to be an important pillar in this fight.

In the New India, the government’s work to get this ecosystem to work together while also leveraging Public Sector is incredible – today, we see Academics contributing technologies and working with Private sector to bring affordable technologies to life and the Government enabling Public enterprises do further scale-up. The Department of Biotechnology and BIRAC have over the last few years given hundreds of crores of grants that are bearing fruit today – we have Indian Council of Medical Research (ICMR) doing pre-clinical trials and human clinical trials while following International Standards at lower costs than the private sector. Such investments and long-term entrepreneurial attitude of our Government and Public servants will enable us to not only fight this pandemic but also prepare us for a healthier, brighter future with equal opportunities for all – rich
or poor, small or big.

**How is Indian industry contributing towards vaccine production and distribution, particularly for Covid 19?**

India accounts for 60 percent of global vaccine production and contributes up to 40 to 70 percent of the WHO demand for Diphtheria, Tetanus, and Pertussis (DPT) and Bacillus Calmette–Guérin (BCG) vaccines, 90 percent of the WHO demand for the measles and whole-cell based Pertussis pentavalent vaccines.

On one-hand, we have Public sectors like National Institute of Virology Pune (NIV) collaborating with Bharat Biotech while on the other we have Dr. Reddy’s Laboratories with RDIF and Gamaleya National Research Centre, Serum Institute with AstraZeneca and Novavax, and Biological E with Johnson & Johnson. Such voluntary licensing arrangements between global and domestic pharma companies and other collaborative mechanisms have boosted vaccine production and distribution process. In a nutshell, collaboration and working in an integrated manner is critical & is proving to be beneficial for the availability and accessibility of vaccines. We even hear about Cipla and Moderna – the Government of India has been a key enabler of such collaborations by “walking the talk” on lowering trade barriers and easing regulatory climate, thereby, accelerating access to vaccines.

**How can we ensure that such collaborations are sustained?**

We continue to witness extraordinary collaborative efforts between stakeholders to ensure a continuous supply of Covid-19 drugs and vaccines across the world. We must maintain the impetus of such collaborations to strengthen the public healthcare system in India, the Government must continue to empower and fund organisations like BIRAC to create Emergency Counter-Measures Response Fund to create scientific and manufacturing capacity and hold a yearly consolidated International Academic-Industry Fair that can be used to showcase technologies and promote collaborations with Global Industry.

The pandemic brought government, vaccine, and pharma industry together to work towards a common goal and ensure a collective response to fight this humanitarian crisis. Benefits of science must be expanded to all and therefore, science and technology has to work to build sustainable solutions for humanity.

**How can global collaboration expedite vaccine development?**

There are more than 300+ vaccine development programs across the world — and we expect about 10% of those programs to eventually come to Market. Collaboration is not a choice, it is a need. With the US FDA making it clear that it will no longer consider applications for Emergency Use Authorisation and
Companies must now prove efficacy that could take more than 2-3 years, globally regulators need to come together and decide how to assess vaccine candidates while enabling innovations as they may be key to tackling variants.

With new variants that can escape current vaccines and new vaccines taking longer to prove efficacy, we need global collaborations more than ever before, not only to fund but also to ideate, share data and sequences of variants, create surplus manufacturing capacity, and above all, share doses equitably as we can only be safe when we are all safe.

Now is the time to be bolder – Governments and Academia can help reduce financial risk while collaborations will help ‘kill bad ideas quickly’ and get the right inputs, regulatory collaboration and cooperation will help in simplifying the vaccine development process, while manufacturing cooperation is key to equitable access of vaccines across countries.