

**Assembly:** OMS

**Issue:** Bioethics, transhumanism, vaccinations, towards a New Deal for global health?

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For years the Indian state has struggled in distributing vaccines, deciding which people to prioritize and how to act in case of an emergency because of its high population density. Today, with the constant developments of transhumanistic innovations and biohacking, we are facing complex ethical dilemmas that, if not addressed correctly, could have disastrous consequences. This is why India believes in the benefits of technological advances but recommends setting boundaries in order to keep safe from any potential problems.

The Indian medical device industry has been witnessing significant growth in the past few years with the state and central governments' support. Most importantly the innovations are happening in India for the world. Some of them include: robotic surgery, artificial intelligence in healthcare (Healthcare applications of artificial intelligence-based algorithms are already in use in illness detection, drug development, patient monitoring, and self-care) , telemedicine, 3D Printing and innovative wound care devices.

Gene editing is also being used such as in the Institute of Genomics and Integrated Biology (IGIB) where they used CRISPR to develop a cure for sickle cell anemia, a genetic blood disease that is particularly prevalent and devastating to populations in India as it is bearing the third-highest global burden in the number of SCD births.

As for bioethics, India is very careful and tries to advance one step at a time in order to ensure that its citizens understand every innovation that is happening with its risks and benefits and in which types of interventions to allow and which ones to ban. It is important that, even if this might be revolutionary for some types of diseases , it cannot compromise the humanity of an individual. India believes that it is crucial that every country works collectively in order to ensure global health but also its complete understanding by all parts.

For instance research involving human germline gene therapy, reproductive cloning, and clinical trials involving "xenogeneic" cells—tissues or cells belonging to individuals of different species—is not allowed. However, in vitro studies—genome modifications to an embryo that will not be carried to term—are allowed. Human embryos that have undergone modification may not be developed beyond 14 days of fertilization.

To lower the disparity that was ongoing in previous times, India has adapted Telemedicine which is a way for people to get clear instructions from a physician without having to visit a hospital. This was especially implemented for people who live in a rural area and where the infrastructures are mediocre. The use of telemedicine helps to reduce the disparity in access to healthcare between rural and urban locations. In India, 90% of secondary and tertiary healthcare facilities are located outside of rural areas, where 68% of the total population lives. Bias and disparity have always been present but if we don't cooperate on an international level and ignore this problem It can affect many peoples life. This is why India believes that communication and understanding between countries is fundamental to help the world progress toward a better future.

Because of the rise in the younger population India fuels the markets growth thanks to the progressive interest of "optimizing the human body" .Growth of the nutritional supplement market in India is driven by the increasing health awareness of nutritional supplements and the lack of a nutritional diet. The Indian population is witnessing a decline in the nutrients from daily diets, which is impacting their health adversely. The lack of nutrition in the diet is contributing to the rise of diseases such as anemia and obesity in the country. The increasing income levels in the country are contributing to the betterment of the quality of life of people, which is leading to spending on personal health, thereby contributing to the market.

Because of the local sourcing of low-cost API and the efficient production of finished pharmaceutical products (FPPs) the Indian pharma industry has primarily excelled. India is concentrated in the research for low cost medical innovations such as Diphtheria, Tetanus and Pertussis (DPT) and Bacillus Calmette–Guérin (BCG) vaccines, and 90% of the WHO demand for the measles vaccine. It is one of the biggest suppliers of low-cost vaccines in the world and accounts for 60% of global vaccine production, contributing up to 70% of the WHO demand. India produces a third of the world's drugs, and is the largest supplier of low-cost generics, vaccines and affordable HIV medication. Its pharma sector serves more than 200 countries and territories, it has the second-largest number of FDA approved medicine-manufacturing plants and it is currently worth \$130 Bn. Furthermore, India believes that sharing medical discoveries within countries would benefit all sides economically but also on a social aspect and we should always remember that we all have a common goal which is to keep improving medical innovations and discoveries in the best way possible to reach a "New Deal" and try to make it accessible to all, no matter their background.

In conclusion, India is in need of applying strict protocols regarding biotechnological innovations and prioritizes vaccines and affordable pharma because of the high population. Nevertheless, it still has an active role in the developments of technology and ground breaking medical discoveries.