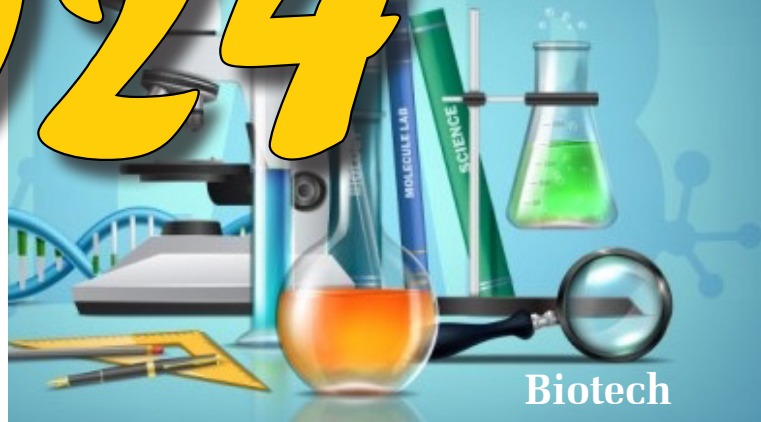


Trends and Challenges in 2024

Manufacturing



Education



Biotech



Insurance



Technology



Health Care

Dr Soumya Swaminathan, Chairperson, MS Swaminathan Research Foundation



R&D TO SOLVE PUBLIC HEALTH PROBLEM...

In the aftermath of the Covid-19 pandemic, there is greater appreciation about the drivers and determinants of our health. To achieve the sustainable development goals of health and wellbeing for all by 2030, action is needed not only by medical professionals or the health ministry, but by other sectors, whose impacts are felt on the health of citizens.

CONCERTED EFFORT BY ALL NEEDED...

THE TWO TOP risk factors for health are, nutrition and air pollution. Both will require multisectoral action. Air pollution can be addressed if a good analysis of the 'airshed' and contributors to PM emissions in different regions of the country is done, followed by specific actions to reduce those pollutants. To eliminate indoor air pollution due to biomass burning, schemes like Ujjwala need to be strengthened and expanded. Similarly, ensuring that every Indian gets his or her daily portion of nutrients (calories, quality protein, fat and micronutrients), require concerted action by the departments of agriculture, civil supply, women and child development, school education and health. These are achievable goals but will need prioritisation, convergence and collaboration between the concerned ministries and departments, with NGO and civil society support.



IN A GOOD POSITION TO INNOVATE

INVESTMENTS MUST BE done in research and development to solve India's public health problems. An example is TB vaccine – India is in a good position to lead the global mission to develop a better version. This will prevent the loss of millions of lives annually across the world. Now, our innovation ecosystem is robust and with some additional support, can develop new diagnostics, vaccines and other health products that are needed for universal health coverage. Both the quantity and quality of research funding needs to improve and young scientists with bright ideas must be encouraged. The regulatory agencies need to be strengthened and pathways should be established to specifically support indigenous innovation – this would be especially relevant for new classes of products.



DIGITAL TOOLS WILL RADICALISE PATIENT CARE

WE NEED TO explore the optimal use of digital tools, including AI, in our health care delivery system, in order to improve health outcomes. AI has paved way for genomic techniques that can be used both for diagnosis and treatment of diseases, cell and gene-based therapies, amongst others. Examples are the use of AI algorithms to read chest x-rays for TB, retinal photos for diabetic retinopathy and screening for cervical cancer. Such deployment of AI will reduce the need for specialists (who will only need to confirm the reading) and increase the speed of diagnosis. Similarly, decision support tools and other aids on mobile phones can help health care workers to do their job better. Real time analysis of data (collected from the field or from surveillance sites) and feedback can also improve quality of care. Introduction of these new technologies must be accompanied by monitoring of efficacy and safety, as the ultimate goal is to improve health outcomes. I hope that globally, and in India, money spent on health will be seen as an investment and not a cost. Only if human beings are healthy, can we hope to have a bright and prosperous future.

