

### Message

Dear Readers,

I am happy to share the second issue of the *News Brief* from Ashoka University's Science Policy Initiative.

In this issue we present to you some of our ongoing work in bridging academia-government industry gaps, policy research across different scientific, interdisciplinary domains, and a new initiative to promote policy advocacy.

'Focused Interactions' is a new feature of SPI in which we shall, from time - to - time, present an expert's (either a scientist or a practitioner or a faculty member or a policymaker) perspective of the scientific challenges and solutions to overcome them. In other words, sharing the views on a critical scientific subject from the eyes of the expert. The first session features an interaction on non-communicable diseases and their burden in India.

I am hopeful you will find this Brief useful for your work and interests you enough to contribute to Ashoka's efforts on Science & Technology Policy.

Stay well and wishes for the new year.

Best wishes, **L.S. Shashidhara** Professor and Dean of Research Ashoka University

# IN FOCUS: strengthening academia - government linkages



Academia-government engagements and interlinkages are crucial for strengthening the science, technology, innovation policy ecosystem in India. In an effort to reinforce academia-government partnerships, SPI invited Dr. Akhilesh Gupta [Senior Adviser and Head Planning Coordination and Performance Management Division, Department of Science and

Technology (DST), Government of India] to Ashoka University (AU) campus on November 24, 2021. Following a campus tour of the University, an interaction was held with Dr. Gupta to understand the possibilities of joint engagement, partnership and collaboration opportunities between AU and DST. Both sides felt the need to collaborate to facilitate centre-state initiatives in the field of science policy research and advocacy. Dr. Gupta was impressed with the nature of teaching and research being carried out at AU and was hopeful that a mutually beneficial partnership could be explored, going forward.



Non-Communicable diseases (NCDs) are a group of diseases that affect individuals over an extended period of time causing socio-economic burden to the nation (WHO). SPI in collaboration with The George Institute for Global Health (TGI - India) conducted 'Focused Interaction' with Dr. Praveen Devarsetty, Program Head, Primary Healthcare (TGI - India) to examine the burden of NCDs in India, their linkages with food and nutrition, the underlying challenges, and the overall policy ecosystem governing them. <u>Select excerpts (summaries) from</u> the discussion are given below. Click <u>here</u> to read our complete discussion with the expert.

# Could you please throw some light on the challenges of managing NCDs in India and the impact of Covid-19 on NCD care?

When we talk of NCDs, there are 3-4 areas that need attention. I personally feel that the major influencer is adherence to medication. During COVID times, NCDs were one of the most neglected areasthere was no new diagnosis or follow up, and severe supply chain issues in medicines. Many patients stopped taking medication for a finite period of time, leaving aside early detection and other components.

# Do you think that the existing data on NCDs is sufficient to evaluate & assess the impact of burden?

Unfortunately, when we talk of primary health care facilities and then when we talk about data, it doesn't match. We have seen doctor's writing prescriptions on a slip of paper and giving them to the patients. In some states, we have systems and records to collect the information, but there is still a long way when these records can become electronic records - something that could be tracked in real-time for NCDs? Our health systems are wonderful! But when the data is lacking, then how do we know whether the approach which we are taking is working or not? Apart from the lack of prevalence of adequate data, we have limited information for health system performance or follow up care data for every individual; over time we will need to have that.

## How could we delay the risk of developing or prevent NCDs?

Healthy dietary patterns and physical activity are consistently associated with reduced risk across all the NCD categories. According to the National Family Health Survey, The targeted public distribution system (PDS) that we have, supplies rice and some in some states PDS provide pulses, but this is not uniform. Along with food security, we also need to consider dietary diversity and not only be dependent on starchy staples. We need to see that the people get some amount of proteins, fruits and vegetables in their diet. Consuming carbohydrates alone could lead to specific nutrition-related diseases such as for overweight and obesity, but which

## Any global best practices that you feel are important learnings for India?

There are country-specific dietary guidelines in India. We are working in front of package labeling so labeling legislation is also available. Media campaigns are promoting healthy diets. So, all of these are available in many countries, and we can definitely take examples of these things. When we talk of dietary guidelines, we talk of only two dietary guidelines in the Indian context [the dietary guidelines by the National Institute of Nutrition last published in 2011 and the other by National Nutrition Service]. Need of the hour is to have region-specific guidelines. Diet patterns usually change from district to district, and I think it might be useful to have dietary guidelines in place that suit the local context - make it more feasible for the population to follow.

### How do we create more awareness among the students in schools, colleges, universities in this area?

I feel from the school level there is not much of a focus on food and health; can we have something in relation to diet and nutrition just as topics on reproductive health are studied? In the school curriculum when they are talking about the food pyramid, stating types of food - we should also have sections on health, nutrition, physical activity; what needs to be avoided: what is to be taken- Issues around salt and junk food etc. I think that would be an early start for us. In the educational/academic institutions, several dietetics courses are running which is fantastic; but could we also have some specific courses, programs or laboratories to improve dietetics research.

## Any suggestions on the policy front to curb the spread of NCDs in India?

For effective delivery of NCD care at the primary care level, strategic planning might be required. One solution does not fit all. Importance needs to be given to multisectoral coordination. NCD prevention requires influence and cooperation of policy, academia, legislation, urban planning, environment and food industry and should not be thought of as a responsibility of only the health sector.And finally, another area for development is could also be a precursor for other chronic diseases like cardiovascular disease, cancer, diabetes.

building capacity for implementation research around the prevention and promotion of NCDs.

[SPI thanks Dr. Praveen Devarsetty for his useful inputs and Dr. Sarah Iqbal from TGI - India for her assistance in this initiative]

### Policy Research @ SPI Team

Papers, editorials published in peer reviewed journals and books

#### Ways to tackle hunger during COVID-19: strengthening supply-chain networks

Anjali Taneja

Economic and Political Weekly, 56(40), 2021.

### Researching the pandemic and research during the pandemic

**L.S. Shashidhara** *Current Science*, 121(6), 2021.

#### The framework of nanopesticides: A paradigm in biodiversity

Shashank Shekhar; Shreya Sharma; Amit Kumar; **Anjali Taneja**; Bhasha Sharma *Material Advances* (Royal Society of Chemistry), 2 (19), 2021. [this research paper has been put together in collaboration with the lecturer and students of Delhi University]

### Skills for Employability and Development in South Asia: A Comparative Analysis A. Srivastava; Anjali Taneja

In: Rahman A., Tiwari N. (eds) Development, Governance and Gender in South Asia, 2021. *Springer*, Singapore. <u>https://doi.org/10.1007/978-981-16-5109-0\_5</u>. [This research chapter has been put together in collaboration with the faculty member of National Institute of Educational Planning and Administration] `



In 2019, Ashoka University started this unique SPI that helps facilitate or support the different stakeholders in the framing of evidence based policies to address societal problems. It positions itself to become a forum, initiating discussions on issues, societal problems, science and technology concerns; and defining the roadmap for future with the help of evidence-based research, partnerships & collaborations, training and mentoring students of science policy. Dr. Anjali Taneja with formal doctoral training and professional experience in science policy is the force behind all activities of SPI.

Since 2019, SPI has carried out some policy-oriented work across different fields; sustainable development, artificial intelligence, blockchain technology, higher education, new Science, Technology, Innovation Policy (STIP 2020), healthcare, to name a few. The onset of pandemic and the associated nationwide lockdown led to quite severe challenges in India like the shortage in PPC kits, medical devices, oxygen supply, etc. SPI took up some of these issues and after a series of consultations and research, advocated the need for nation-wide consortiums of research, academic institutions and industry to enable domestic manufacture and supply of RT-PCR kits.

### **Annual Reflections**

A need has also been felt overtime to develop our capacity at Ashoka to collect, collate, curate, and analyze health data and develop India-specific metrics and visualization tools that would enable policymakers to identify appropriate strategies and schemes in the field of healthcare and public health. As a result, through our stakeholders' discussions and research efforts in SPI, we have initiated a project on Health Analytics, Research and Trends at Ashoka. Similarly, SPI has played an active role in putting together the overall framework for the Centre for Data Science and Advanced Computing (which is coming up) at Ashoka, to promote advanced research and analyses in the field of data science. <u>read more</u>



Food for Thought 😇 🤔

Food, nutrition and health are inextricably linked. The 2021 Global Nutrition Report reveals that India is off-the-course in achieving 7 (sodium intake, raised blood pressure, obesity, diabetes) of the 13 global nutrition targets; in another 2 targets (anemia, childhood wasting) of the 13, no progress or worsening has been recorded. Is it time to review the nutrition initiatives in the country to meet the 2030 nutrition targets and overcome malnutrition, food insecurity, nutrition inequality, etc? Do we need a revamp of the public distribution system? Do linkages of food, nutrition to medicines and the environment need to be better understood? Afterall food is life! A good diet leads to a healthy mind.

Core Team of SPI: L. S. Shashidhara Anjali Taneja

For any feedback or suggestions, please write to us at: spi@ashoka.edu.in