INTERVIEW | KIRAN MAZUMDAR-SHAW

'Breakthrough innovation is taking place but we're not leveraging it'

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MUMBAI

It is easy to be seduced by fancy terms and images of bots performing surgery and doctor-less hospitals when thinking about the future of healthcare. For Kiran Mazumdar-Shaw, a global influencer in biopharma, philanthropy and healthcare innovation, however, future of healthcare hinges on three simple things: affordability, accessibility and availability. She calls this the "triple A rating of healthcare". In an interview, the chairperson and managing director of Biocon, Shaw explains her vision for the future of healthcare innovation in India, the country's research and development culture, and the importance of embracing digitization. Edited excerpts:

One hears about designer babies, 3D-printed organs and a brain-computer interface when it comes to the future of healthcare, but you've said that India needs to meet the basic three As —affordability, accessibility and availability—of healthcare. How do you envisage the future of healthcare?

If I look at a country like India where we are trying to deliver universal healthcare as a right for all, then we have to look at a model that goes beyond urban India. Today, if you look at the access to modern medicine, you will see that urban India is the only part of the country that has access to quality healthcare. To provide the same level of healthcare to rural India, which is a tougher challenge, we definitely need to strengthen our primary healthcare.

We need to use digital technologies so that we can map health parameters of the nation. This is easily done because Biocon, through corporate social responsibility programmes, has run a number of pilot projects in rural India. These have shown us that it is possible to start building high quality primary healthcare centres in rural India using digital technology. So, this is the first thing we should do: use primary healthcare for early detection and diagnoses so as to downstage diseases. Unless we do this, any financial model will be unviable. Digitization must become the backbone of future primary healthcare.

You say that digitization is a dramatic change that is already happening today. Each breakthrough and innovation will continue to reshape our own understanding of healthcare. How can we drive innovation at a scale in India?

Driving innovation in India on a mass-scale would require the entire ecosystem to change. The first way to do this would be to allow all clinicians and physicians in public hospitals to spend at least one day per week on research.

Secondly, smooth mobility of data can help primary centres become more efficient for early diagnoses and detection so that diseases that are easily preventable can be downstaged.

Thirdly, we need a proper structure to start filtering patients, based on the absolute need to send them to secondary and tertiary care

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centres. Our present healthcare system is based on cashless hospitalization for the poor. This is what Ayushman Bharat is also aiming to do. And that is a great vision, but it is currently not feasible because we are not able to ensure that only those who need hospitalization are admitted. Until our primary healthcare centres are empowered and improved, any financial model for futuristic healthcare delivery will be unviable.

Where on the value chain is India when it comes to futuristic healthcare techniques such as regenerative medicine and nanomedicine?

The biggest challenge we have in India is that our overall medical system is not research-oriented. We've had a huge setback because of the resistance to clinical trials. Because of this resistance there was a complete blackout on clinical trials for three to four years. We've resumed clinical trials but there is no trust in the system in terms of international clinical trials.

So, it's going to be a long time before clinical trials become a serious part of clinical research. Just this morning, I attended a workshop on CAR T-cells. CAR T-cells are now the new personalized medicine for many types of haematological cancers. And it is curative. But these are beyond the reach of most people in the world, forget Indians. These cost nearly a million dollars, most people in the world cannot afford that. So India has an opportunity to look into how to can bring down the cost of this therapy.

How can India own the future of the heathcare narrative? Have you seen life-changing, breakthrough innovation coming out of India, and do we see enough of it?

Absolutely! There's been a lot of breakthrough innovation. But nobody is quite reporting some really exciting innovation that's going on in India—which is, in fact, being appreciated in the west, but not in our own country.

Let me give you some good examples. There is a handheld mammogram, called iBreast—developed in India from scratch by UE LifeSciences—which is available for $1, or ₹50 per mammogram. A normal mammogram costs at least a thousand rupees. But for ₹50 you can get just as good quality a mammogram on this new, handheld device, which is made in India. We have been trying to convince the government to use this mammogram for mass screening of breast cancer. We have used it in all our CSR centres to great effect. And yet India is not using it. It is being used on a big scale in countries like Brazil, Mexico, and even the US. But sadly, it is not used as much as it should be in India.

Then, there is a company called Bugworks in Bengaluru. They have developed a next generation of antibiotics for drug resistance. For nearly 50 years, nobody has developed a new class of antibiotics and this company is doing it, in Bengaluru, in India. So, this type of imaging diagnostics and antibody research is actually going on in a big, breakthrough way in India.

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