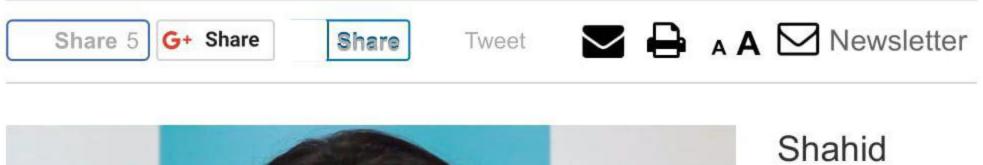




There is a surfeit of Indian doctors globally, but we have a shortage of doctors within India: Dr. Sunita Maheshwari

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Shahid Akhter, editor, ETHealthworld spoke to **Dr. Sunita Maheshwari**, Chief Dreamer and Loop Closer, Co-founder, Teleradiology Solutions, RxDx Clinics and Telerad Tech to know more about the skill gap in healthcare and how tools in teleradiology can address this.

Tell us about the skill gap that you see in Indian healthcare today

India has 450 medical colleges and trains about 52,000 MBBS students every year and yet, we have a huge shortage. The Planning Commission estimates that there is a shortage of six lakh doctors. We have only eight lakh doctors for a population of 1.3 billion and growing. Why is it that we have this skill gap? If you think about it when we look at numbers of postgraduate seats in this country, we have 52,000 MBBS doctors coming out each year but, we have only 27,000 PG seats. The gap of 25,000 MBBS doctors who are coming out doesn't seem to be able to find enough to do in our country. And so, there is a huge migration overseas. Interestingly, 30% of doctors in the United States of America are of Indian origin.

There is a surfeit of Indian doctors globally, but ...

Tell us something about the skill gap in Radiology more precisely

If you look specifically into Radiology, 20 years ago there was not much diagnostic happening in India, but the scenario is changed. Today, there is a hospital at every block; various diagnostic center across the country and yet the training of radiologists has not kept up with this. If you look at a country like Singapore – we started working with the Singapore government in the year 2005 – they at that time had 70 radiologists. There was a huge shortage of radiologists reading to diagnostics which would come back in 3 to 5 days later. In the last 12 years, the Singapore government has increased the training and presently they have 475 radiologists. They have gone up seven times in 12 years. On the other hand, in India, we have not increased the number of training spots with the rising demand.

While we have diagnostic centers and hospitals mushrooming all over the country, we do not have an increase in training positions for radiology PGs. Currently, in India, we have 10,000 radiologists, in the USA with a lower population, there are 100,000 radiologists. To change these dynamics and have more radiologists for the number of centers coming up, we need to at least quadruple the number of seats for radiologists in our country in medical colleges year on year. On the other hand, we need private centers to be able to take on the training and be able to give them the National Board recognition and increase the number of radiologists who are trained and joining the workforce.

What is the way forward to cover the skill gap?

There are several ways to address this gap. Shortage of teachers is one of the challenges that we face today in India. One of the things we have done is to really use e-teaching to address this. When you use e teaching or tele teaching one teacher sitting here can train the students across the country. I set up a e teaching programme in pediatric cardiology seven years ago. We train all pediatric cardiologists postgraduates in India. Similarly, our teleradiology group has an e- teaching programme that trains all the National board postgraduates in India. We really need to train and skill everybody in this country but at a very fast pace. So in order to do that we need to use digital platform – where one teacher teaching many students. We need to increase the number of spots so wherever you have radiology happening you need to be able to train and we are going to need to use second tier. And when I say second tier, I mean not necessarily fully trained radiologists but radiologists assistance. These could be either

technicians who are trained to help radiologists or technology solutions.

What is your opinion on Public Private Partnership?

India as I said has a huge shortage of doctors across the private sector and specifically in the public sector. If you look at government doctors – where do they want to work? They get trained at government hospitals and a lot of them either go abroad or join private sector. There is a huge concentration of doctors in cities and not enough doctors in the rural India which where the real need is. When you look at the healthcare delivery in our country, who serves the poor patients? It is the government hospitals. These hospitals are set up to server poor patients in urban and rural India as well as patients in rural India who have no access to doctors. Unfortunately, the government is the victim of its own policies, because we haven't trained enough doctors over the years there is a shortage of doctors which have gradually impacted government services.

When you talk about Primary Healthcare Center (PHCs), there are 22,000 PHCs in India and must be manned 24x7 which means we need 3 doctors to man a PHC. So, we need 66,000 doctors just for the PHCs alone. In order to fill the gap, the government it can either train very rapidly and deploy. So, one of the things that the government has done is the mandatory rotating doctors to go out to the rural area after they finish their MBBS. The second way is for the govt to tap into the private sector. In the past few years the govt has paid the private sector to take over the care of the patents. I personally don't feel that is the way to go.

When a govt through a lot of its schemes pays the private sector to do care for its citizens it in effect again strengthening the private sector. We really need a way where the government healthcare systems can be strengthened. And so, the way to really do is partnership where the poor patient comes to the centers, the private sector can help in bringing in domain expertise needed to bridge the gap, but the care is still delivered at the government level. We need to look at a model where the private sector is brought in and helps strengthen the government models. In Tripura, we have

deployed whole teleradiology for National Health Mission, Tripura. This is at a PHCs and CHCs level. So, the patient still visits the government clinics and the govt mechanism of delivery of healthcare is strengthened by having private partner. We bring in the technological expertise and how to deploy teleradiology and then bring in radiologists who is sitting in Bangalore, Delhi or Chennai can help with delivery of good diagnostic reports to patients sitting in small towns in Tripura. We will never be able to change the situation where we get all the city docs to migrate to these village centers. So, if we can collaborately work where we use the technology and domain expertise of the private sectors to impact good medical care for patients in remote part of the country.

Tell us about your entrepreneur journey

We setup teleradiology solutions many years ago. We are accidental entrepreneurs, there was no intention to set up an organization. Initially Teleradiology Solutions gave solutions to American Hospitals, so we covered US night shift from India daytime. we are in India for 18 years now and we really started feeling that we needed to take the same solution that we have developed for the western world and put them to good use in India. We started working on many areas where we felt we could positively impact healthcare. So, one was teleradiology for India itself. Teleradiology for remote parts on India where there are patients but there are no doctors and so using tech to be able to take a good diagnosis from wherever the doctor is sitting in India take that diagnosis out to the patient who is not able to access the doctor that was one solution.

The other was to work with the governments as I said the government hospitals are where a lot of poor patients go, and we felt that if we were able to offer teleradiology and telemedicine services into government hospitals we could have a great impact on delivering good quality healthcare to patients across the country who needed access to it. The third solution that we need is mass training. I have been a huge beneficiary of American system being trained at Yale university and I think what they give us the ability to think and conceptualize and really to train for the sake and love of teaching and training that is America's greatest gift to the

world. But I think in India today we have the opportunity to replicate that, we can really leapfrog how we do our training using technology as Indian is now the tech hub of the world.

We can use the technology to take one teacher's training and beam it across the country, use one doctors training and beam it to students across the country, use one good nurse to train every nurses on how to wrap a baby or how to put an IV line in, use one good technician to train every other technician to how to take a proper X ray. I think we could really leapfrog how we do our training, and this is the need of the hour to be able to be train and upskill everybody so that we have enough manpower and enough resources to deal with all the healthcare challenges that our citizens are facing.