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Interviewed by Professor Tarun Khanna, Harvard Business School
October 10, 2017 in Boston, MA
Video interview conducted in English

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Interview with Dr. Devi Shetty

Interviewed by Prof. Tarun Khanna

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TK: *Dr. Devi Shetty, thank you for joining me to participate in our Harvard Business School Creating Emerging Markets project. You've been a colleague and a friend to me for many years, and I've watched with admiration as the Narayana Health City and Health Hospitals have grown over time, and also watched in admiration as many organizations have correctly bestowed many recognitions on you. The ones that come to mind most readily are, I think,* The Economist *magazine gave you an award as Social Innovator of the Year some years ago, and the government of India gave you the Padma Bhushan, which is the second-highest civilian honor that is available in India. So many congratulations.*

DS: Thank you. Thank you.

TK: *You're known for your iconic work on making healthcare—particularly tertiary healthcare—affordable to the masses, particularly in India, and increasingly around the world. I'd like for you to start at the*

beginning of your career in some sense and reflect on what it is that made you start out on this journey, and subsequently perhaps, think a little bit about what are some of the pivotal moments in the early part of that transition, particularly in India.

DS: Tarun, when I was in fifth standard—I think it was in fifth standard—Dr. Christiaan Barnard did the first heart transplant, and my teacher came to the class and announced that today somebody removed the heart from a dead man and put it on somebody who had a diseased heart, and the man walked out of the hospital. So I thought, "Wow, this is what I want to become." But then I realized to become a heart surgeon, you needed to become a doctor. So then, I said, "OK, if that's the way it should be, fine, let me become a doctor."

You see, becoming a doctor in a developing country like India is dramatically different than becoming a doctor in US or Europe, because you do these complex operations—my teachers, surgeons did all kinds of procedures—but these patients are so malnourished before operation that the wound doesn't heal. So at a very young age, I realized it's not just about surgery and treatment. There's a lot more in healthcare in terms of what you need to do.

I remember when I was a resident in general surgery, I used to cook eggs—my cook used to cook some eggs—and I used to take them to the hospital and feed all my patients. So they used to call me egg doctor. (Laughter) But essentially, if you undergo training—for example—as an

engineer in any country, you're really not exposed to the ground realities. Whereas, if you are groomed as a medical student and a doctor, you're constantly in touch with the reality, because you are getting educated in a public hospital where the poorest of poor people come because they have nowhere else to go. So from morning until evening, you're exposed to people who are not as privileged as you. Then you really understand what is required in a healthcare system—the delivery of services throughout the country. This is how it all started.

TK: *How did you go from that realization that the delivery of healthcare in a country like India is a systemic operation, in some sense? It's not just the actual surgery. It's a collection of interventions that must happen before and after the surgery. It's systemic—a societal ecosystem that must operate in the areas where these patients are living. How did you go from that realization to deciding to open the Narayana group of hospitals?*

DS: After my residency in general surgery, I went to England for training in cardiac surgery—because those days, we didn't have opportunity to be trained as a heart surgeon in India. There were very few training positions available. I had the opportunity to work at the Guy's Hospital in London, which is considered one of the best cardiac centers in Europe. Strangely, I belong to South India, but I had an offer to start a large cardiac surgical program in Kolkata, because there weren't that many in the region—you're talking about 27, 28 years ago. There weren't that many cardiac surgical

programs in India. So for me, the transition from Guy's Hospital London to Kolkata is like the difference between Heathrow and Howrah. I'm not sure whether you have been to Howrah Station—railway station.

TK: *Howrah Station in Kolkata, yes.*

DS: Yeah, it's a very crowded place. I used to see a large number of patients, because I was the only heart specialist. I was perhaps the second heart surgeon in that part of the world to operate on people's hearts. So I used to see large number of patients, but no one ever turned up for treatment, because they couldn't afford it. They simply couldn't afford it.

But the transition was dramatic, Tarun. I used to spend an hour to convince a patient to undergo a heart operation when started my career. Today, if I see a patient and I tell him he needs an operation, he nods his head and asks for the date. If I tell him that he don't need an operation, I need to spend an hour convincing him why he shouldn't need the operation. (Laughter)

TK: *So it has become accepted.*

DS: It is such an accepted procedure. As I say, the transition was dramatic, and it is—

TK: *You talked about Heathrow versus Howrah. Give some sense to our audience about the scale of the need as it was in the late 1980s, '90s, and as it is today, compared to the scale in Boston or London.*

DS: First of all, let's look at the need. As Indians, we are genetically three times more vulnerable for a heart attack than Caucasians. Also, the average age of my patients in England was 60—post-retirement. In India, it was 45. In my practice, it was not the young man bringing his old father for a heart operation. It was the old father bringing his young son for a heart operation. It was like an epidemic. We needed to do two million heart surgeries a year.

TK: *Just in India?*

DS: Just in India. Currently, all the heart hospitals put together perform hardly 130,000, 150,000 surgeries. The rest—the patients who don't have access to the surgery—perish gradually over a period of time. These are not old, retired people, Tarun. They're all young breadwinners of the family—especially young, male breadwinners of the family. In the process, we perhaps produce one of the largest number of young widows in the world. So there was a desperate need.

TK: *It was a tragedy.*

DS: It was a tragedy, and it was a needless death. One operation once in their lifetime, it can cure them. If you're not able to cure them, at least you can give them a meaningful life so they can live to see their kids grow and find a job for themselves. It's a sad situation.

TK: *Your most celebrated hospital is the headquarters of the Narayana Group in Bangalore, which I've had the privilege to visit over the last 10, 15 years. Tell us a little bit about how you went through many interventions to make sure that it could accommodate a massive scale of operation. What are some of the key interventions within the hospital—the way surgeries were done, the way you treated patients—that come to mind as being salient?*

DS: See, Tarun, from the very beginning, we knew the data. That's very important. So when we designed the hospital, our idea was that we should be able to do 60 major heart surgeries in a day.

TK: *Six-zero?*

DS: Six-zero, and six days a week. We work six days a week. We don't have the luxury of taking off on a Saturday. We all work long hours. Today, we do between 27 to 35 heart surgeries in a day. The whole hospital is designed for heart, cardiology, and cardiac surgery. In that building, we don't do anything else. So the entire system, starting from the person who receives you in the reception as a porter, they're all geared for heart care. That helps.

And over a period of time, we got recognition as a cardiac institution. We trained a large number of cardiologists, cardiac surgeons, cardiac anesthetists, so we had a huge number of people who were working there long hours. When you're an academic institution, your cost of operations goes down significantly, because you have at any given time we have about 37 to 40 young residents undergoing training program only in cardiac surgery, and you don't pay them a salary. You pay them a stipend, and they work for you for six years. We also helped the government to run health insurances. So there are multiple things that we have done. You can't achieve this by doing one thing better, Tarun. You need to do a lot of things.

TK: *But I think it's helpful to hear a little bit about some of these things. For instance, as I remember, you've often spoken about what I would refer to as task shifting—which is the critical care is done by the most skilled person, and then you make sure that other people are on hand to do things that are less complicated. Can you give a little bit of a flavor for how that works?*

DS: Tarun, most of the jobs in a heart hospital, or any hospital—they're repetitive jobs. You just need passionate people, and you train them. Nursing education is relatively expensive, so a lot of girls—bright girls coming from poor families—are not in a position to join the nursing school because of the high cost. Also, when they are getting trained for four years, they don't earn money. This is another obstacle. So, we identify such girls who couldn't get

admission to nursing college, but they have all the qualifications, and we train them for a particular task—like assisting for a heart operation. So they work as nurse assistants, and over a period of time, they do amazing work.

When I operate on the heart, Tarun, you put out your hand and you say to the nurse, "I want 6.0 proline." She knows that, for the task I am doing, I don't need 6.0, I need 7.0 proline. So she gives me 7.0 proline, but she doesn't tell me what she has given. She gives me what I need than what I asked for. This is the level of maturity they attain. And they do amazing work.

TK: *By virtue of doing it many times, they've learned the protocols for how to communicate and work as a team in different ways.*

DS: They understand the moment—just by your body language. You don't even need to tell them. They know exactly what we want, and they're amazing. And these are the girls who train all our other nurses. Credentialing of a particular degree in a profession where you are doing a repetitive job—this is the greatest insult to human imagination.

TK: *Say more about that. What do you mean by that?*

DS: I'll tell you, Tarun. In my office—I'm not sure whether you noticed that when we were in my office—there is one photo. It's a beautiful painting of a flowerpot, and I often ask visitors coming from various parts of the world

when this discussion comes about—I ask them, "Can you guess who the painter is? It's a beautiful painting. You can't fail to notice that." And they start from Michelangelo to M.F. Husain, one of the famous painters, and all kinds of names. Then I tell them that the beautiful painting was painted by a trained elephant in Thailand. In Thailand, they have an elephant park, and they trained elephants to do a particular painting. You look at a painting, and whichever painting you like, you tell them, and the elephant will pick up the brush, and the elephant will paint it in front of you, and you can buy the painting. If you can train elephants to do a beautiful painting, can't we train girls from the villages to do these repetitive simple tasks?

TK: *A lot of this sounds like you've taken a process that people think of as a very highly skilled process—and it is a very highly skilled process. But you've identified portions of it that, as you say, are repetitive and that can be farmed out to people who can be trained, so that you're not held hostage by a limited number of surgeons or very highly skilled physicians.*

DS: Tarun, today, we are doing it. Tomorrow, everyone will do it. The World Bank estimates that in the next 12 to 13 years, there is going to be a shortage of 80.2 million healthcare workforce. And you can't produce them overnight, Tarun. It takes 14 years to train a surgeon to operate on your hand. So unless we get into a nontraditional way of training medical specialists, unless we create a methodology of using technology to train people, this world will be in big trouble. These are very highly skilled jobs. It takes time.

Irrespective of how intelligent the teacher is, or how intelligent the student is, it takes time.

TK: *Tell us a little bit more about the experience when one visits the hospital. You can't fail to notice the many other things that you see in the hospital that are not traditional in a hospital setting in Boston. There's a chapel. There are buses bringing patients in. There's the insurance scheme that you mentioned. There's a visa desk in the front end. There are so many little things. As you said, these are the many little interventions that have contributed to dealing with scale. But tell us how you think about all this ensemble of different efforts that have come together.*

DS: Tarun, it's very interesting. You have to realize that healthcare is an integral part of society, and it has to reflect the emotions, sentiments, and beliefs of people. So when you enter the building, you find a temple complex where there is a Hindu temple. I'm a Hindu. Next to that, there is a mosque. Next to that, there is a church and a gurdwara for the Sikhs. So when you go down, whether you like it or not, you have to go around all of these things—because, believe me, there are no atheists in this world. When somebody is sick, when he or she is going under the knife, they all become very spiritual. You provide them a space to pray, and the family members, too.

When we started the hospital, it was in the middle of nowhere, and there was hardly any public transport. I remember telling my colleague jokingly that one day, all the public transports would come here. And sure

enough, in five years, we had a bus station in front of the hospital with so many people coming. So essentially, an ecosystem is created around the hospital. You look at Cleveland Clinic, look at Mayo Clinic—they have transformed the entire ecosystem of those areas. And when I look at what is happening in your own town in healthcare—in Boston—it's amazing. It is so enriching. I'm so happy I have visited Boston and visited all those places. When a non-medical person visits this place, he may think that these people are 100 years ahead of their time. But believe me, this is the future. You are creating the future. It's amazing how different parts of the world are trying to do something which is meaningful for them.

TK: *The cost of a so-called CABG surgery—coronary artery bypass graft—is so much lower in your Bangalore hospital than it would be in the West, maybe even two orders of magnitude lower in some ways—a few thousand dollars compared to tens of thousands of dollars, at least. What are the principal drivers that have contributed to lowering that cost?*

DS: Tarun, the first thing is it wasn't like that when I started my career. Twenty-six or twenty-seven years ago, when I did the first heart surgery, I clearly remember that the patient paid today's equivalent of $2,000 for a heart operation. Twenty-six years later, they're paying $1,200. Nothing in this world, in service, that was $2,000 26 years ago has come down to $1,200 today. It's only by economy of scale.

Today, we are privileged—about 12 percent of heart surgeries in India is done by us. The companies that supply products, they look at us differently. And we have converted our hospital to an academic institution. Every hospital we build, we treat it like an academic institution to train young people. And more than anything else, we are very, very conscious of the quality. The cheapest way to produce something is to make it the best in the first attempt.

TK: *Why is that?*

DS: Then you don't have to repair it again. If you fix the heart properly the first time, you don't need to take back the patient for a re-exploration or give them a massive quantity of blood. Around seven years ago, Tarun—I think maybe more—we wanted to get Joint Commission accreditation, called JCI. In the US, if you are running a hospital, you can't run a hospital without JCI accreditation. So we wanted to get our hospital accredited by the Joint Commission. Nobody in my part of the world knows what JCI is, and it won't give any value additions in terms of getting more patients. But we wanted to do it, because we wanted to benchmark our standards—our quality—with the American or European standard.

By doing it, there are two things that we have done. One is we have told ourselves that we may be offering affordable healthcare, but we are not a cheap hospital. We offer what is good compared to any of the best hospitals in the world at a price that is much, much less than what you would pay in

other parts of the world. The second thing is that, by insisting on quality, the entire philosophy of our approach towards the care changed. Tarun, you have seen how an Indian railway station is not very clean. But a good Indian airport, it's spick and span, because when everything looks nice, people don't mess it up. When everything looks dirty, people feel they can do a shoddy job. So quality matters.

TK: *What happens when a very poor patient walks in and cannot afford to pay? How do you think about that?*

DS: There are a lot of emotional things involved in this, Tarun. Let me put it this way. I always introduce myself—when people ask me what is my job—I tell them my occupation is heart surgeon, but the job is putting a price tag on human life. It is really true, Tarun. Not only me—all the surgeons in developing countries—we are putting price tag on human life.

A typical kid of mine is a little baby on a mother's lap. I examine the kid, and I tell the mother, "Look, your baby has a hole in the heart. He requires a heart operation." The first question the mother asks is, "How much is it going to cost?" If I tell her, "It's going to cost, say, $1,200 or $1,500"—which she doesn't have—that is putting a price tag on the kid's life. If she comes up with the money, she can save the child. If she has no money, she's going to lose the child. This is the reality. You can always try to justify it, saying that it's not my job to find the money for the operation. I am a surgeon. I can operate. But, then, they have nowhere to go.

So we talk to the family. We have a separate division which spends time. Always – it's very simple. If it is a boy—if it's a male baby—we know with great difficulty, the family will arrange some money. If we tell them it's going to cost $3,000, they will not arrange the money, so we bring it down to maybe $1,000 or $800, whatever. If it is a girl child, we make sure that before they leave the building, we have finished—we arrange the money and do the operation.

TK: *Because there's a bias towards male children in Indian society.*

DS: Huge bias, yeah. So they don't have the money, but we give them hope that, if you come up with this much of money, we will arrange the rest of the money. Everyone has a sphere of influence. All these people are working for somebody. So when you talk about an amount which is not within them, but it is possible to—with great difficulty—come up with, they can manage it in two months or three months, because most heart surgeries are elective procedures. So we help them, and in no time, they come up with the money. We keep their address. We keep in touch with them.

And we have a large pool of donors, and they keep funding these operations. There is this organization called Have A Heart in Bangalore, which is made up of regular people running shops in commercial complexes of Bangalore. They sponsor 100 heart surgeries a month. We have done more than 12,000, 13,000 heart surgeries with their benevolence. Like this, there

are so many organizations. One thing good has happened—when the economy of the country was liberated, good people became rich.

TK: *This is back in ’91.*

DS: Yes, in ’91. When good people become rich, money gets utilized for good causes. So raising money in India today for this kind of cause is not a problem. I can confidently say that we have never refused a single patient with a curable heart condition who had no money because they couldn’t afford the surgery. It’s not because of me. The ecosystem that we created makes it possible.

TK: *You’ve been at it for 27 years. Just reflect on some key moments in this journey that stick with you as being particularly important because they taught you something about this process in either a positive way or a negative way or an inspirational way, so that we can learn from how you reacted to it.*

DS: Perhaps the most important milestone, I would say, was when I was working in Kolkata. I had just started my career, and I was operating. In those days, there were no mobile phones. There was a call, and my anesthetist took the call, and the caller asked if I could make a home visit to see a patient. I said, “Look, I’m a surgeon, and I don’t make home calls.” I mean, what could I do? Then the caller said, “If you make the visit, it may change your life.” I

said, “That’s interesting.” I didn’t have much work, also, in those days, so I said, “OK.”

Then when I actually met the patient, it so happened it was Mother Teresa. It might seem strange—because I’m a doctor, I’m like a scientist—for me to accept someone with flesh and blood to be like God, but I strongly feel that she wasn’t like us.

TK: *It’s like a divine presence, yeah.*

DS: You really, truly felt the divine presence when you were with her, and I had the privilege of spending at least four or five years with her. That was perhaps one of the best parts of my life.

TK: *How did she influence you?*

DS: You see, Tarun, she had a very simplistic solution to life’s complex problems. I’ll just give an example. What is the definition of a pediatric heart surgeon? She was not well, and once in a while, she used to get admitted to the hospital. Once in a while, when I was doing the rounds in pediatric ICU, taking care of the little kids, she used to follow me. Once I would examine the kid, and she used to tell me—she said, “Dr. Shetty, I know why you are here.” I said, “Why, Mother? Why am I here?” She said, “When God created these kids with a hole in the heart, he realized he made a mistake, so he sent you to fix it.” This is the best definition of a pediatric cardiac surgeon. She

really didn't know how powerful, how famous, and how big she was in this world. She had absolutely no idea.

TK: *That's very inspiring set of encounters and a privilege, in many ways. What about subsequent to opening the Bangalore hospital? It's been many years now from the first days that I visited, more than 10 years ago. It's grown quite dramatically. There must have been some setbacks, some surprises.*

DS: Tarun, I never thought that one day I would raise money from a private equity company to grow the business. I come from a business family, and at a very early stage of my life, I realized that charity is not scalable. Good business principles are scalable. And the second most important lesson I learned in the formative years was that money is like oxygen. Your purpose of life is not oxygen, but without oxygen, you don't even survive for more than three minutes. So I realized that money is important, and I raised money through private equity.

It was mostly a happy experience, but obviously, they are investors. They want return on investment. I never thought that I would list my company in the stock market, because my vision was to create something that would give33 me the total independence to do whatever I wanted. I did go through a lot of introspection. I realized that I had to either choose to remain as a small player with all the independence of what I wanted to do, or list the

company and run the company in a manner that the shareholders would have to agree with whatever I wanted to do.

It was a big, big risk, because nobody in my family ever listed their company. So it was a big transition for me. But fortunately, I looked at the future. I'm blessed with four wonderful kids, and I realized that we had to build something big. So I took the dive, and I have had no regrets since then.

TK: *It's a very unusual combination of Mother Teresa and private equity. You don't see that very often.*

DS: (Laughter) Yes, yes. That's what makes this world beautiful.

TK: *There's a lot of power in that seeming contradiction, in some ways. Let's switch gears to your vision for healthcare in the world. Tell us about how you would describe that vision.*

DS: I strongly believe that India will become the first country in the world to dissociate healthcare from affluence.

TK: *What does that mean?*

DS: India will prove to the world that the wealth of the nation has nothing to do with the quality of healthcare its citizens will enjoy. And I also believe that if East and West come together and address the problem of inequality in

terms of access to healthcare, we will be able to dramatically transform the way healthcare is delivered across Asia, Africa, and Latin America. And it can be done within 10 years, 15 years—definitely in our lifetime. I have no doubt.

The reason why I'm so confident, Tarun—healthcare is not limited by any of the finite components. We're not limited by oil or petrol or steel or minerals—nothing. Healthcare is delivered by people, and people are replenishable. All you need to do is to give them the skill. Giving them skill for healthcare is a very complex task, but it can be liberated. This is what I'm trying to propose. If we can create a virtual medical university to train doctors, nurses, and medical technicians, believe me, healthcare will reach everyone.

Tarun, when you hear somebody's unwell, only one percent of the people who are unwell require operation. Ninety-nine percent of the people who are unwell don't need operation. So essentially, it's not that complex. Just train an adequate number of people, and you will transform the healthcare.

TK: *So your vision is to take all the learnings that you're acquired in 27 years of being a practicing surgeon and an entrepreneur, train a large enough cadre of people, and make them available to the rest of the world—or make those training methods available to other countries as needed—so that those people can then provide affordable healthcare to the rest of the*

world. You had one experience with taking your Narayana model overseas in the Cayman Islands. It's been about three years now.

DS: Yes.

TK: *Tell us what you've learned from trying to adapt the model to the Cayman Islands.*

DS: See, it's a very interesting model, because our whole intention was to show to the West—especially the US—that there is a different way of delivering healthcare. We learned a lot. We made so many mistakes. But on the whole, it's a very, very joyful and a happy experience. Tarun, we look at young people having cardiac arrest—either American tourists or locals—coming to the hospital and then walking out of the hospital in ten days' time like normal people.

In an island with 50,000 people, with absolutely no facility for surgery—let alone major heart operation with artificial heart support—you have a very basic facility, and that is possible mainly because we created something with the intention to save human life. This model can be replicated by anybody, and it's not a very expensive model. And this is the way we believe that healthcare will be transformed, because people will be forced to look at an alternative way of delivering healthcare.

Our desire is to make it like a very large institution. The first thing we did before we started at the hospital was to buy 50 acres of land, and the

government of the Cayman Islands got confused—am I building a hospital, or building a dock, or something else? Because normally, you don't require more than one or two acres of land for a hospital. Our desire was to build a large health city in the Cayman Islands where people from the western hemisphere, people from South America, from the Caribbean, from the US, who can't afford care in their country can go. If they can afford it, we want them to get treated in their own country—but if they can't afford, we want them to come to us.

TK: *Why didn't you open a hospital in the United States?*

DS: First of all, I don't think they need it. I'm a great admirer of the US, first of all. I'm a great admirer of the US and a great admirer of Britain, because Britain gave me the training program and they made me what I am. The US—I always look upon the US as the peacekeeper of the world. I have a great admiration. I don't want to do anything in that area. I just want to work with them and ensure that together, we prosper and make this world a better place.

I don't envy American hospital owners and the healthcare providers. It's a very complex industry. Like every industry, you go through difficulties. You make mistakes and you learn. And Americans, believe me, they are very smart people. They will learn. You may think that the US is spending 18 percent of the GDP on healthcare, and the way they are going, they are going to sink. It is not going to happen. They will learn. They will emerge. They

have shown this for generations, Tarun, how they can come out of the mess where they landed.

TK: *It's very interesting, because the Cayman Islands are close enough to the US that, as you implied, if you were in America and you needed cardiac surgery, for instance, or some forms of surgery that you already provide in the Cayman Islands, it's possible to get to the Cayman Islands and be treated. So it's an option that's available to patients, and also to people in Central America, and the Caribbean, and so on. What aspects of your model from Bangalore and India have you been able to transplant successfully, and what have you had to change?*

DS: The most important message we want to give is that when you choose to be a doctor, when you choose to be working in a healthcare industry, you really can't look at work-life balance. You have to realize that this is a different profession. I'll ask you a question, Tarun. You know the Siachen Glacier—with -10, -20 degree conditions? Our soldiers live on Siachen Glacier, walking on the ice at midnight. Do you think they are doing it for the salary we are giving? What kind of a work-life balance do those soldiers have?

TK: *They have a mission, yeah.*

DS: Exactly. Also, we have to make healthcare a little less complex. I'll give an example. When we designed the hospital, we designed it for predominantly cardiovascular, and orthopedics. A typical hospital from the western hemisphere, for the cardiology, cardiac surgery, and other services, they will hire an adult cardiac surgeon. They will hire a pediatric cardiac surgeon. They will hire a vascular surgeon. And they'll hire a thoracic surgeon. And for the first three years until the hospital takes off, believe me, almost all of them will be having endless cups of tea without much work.

We have one surgeon who is an outstanding adult cardiac surgeon, a brilliant pediatric surgeon, a marvelous vascular surgeon, and added to that, he's a thoracic surgeon. You look at the savings. When the workload picks up, you get all the others to take over individual specialties. So essentially, we have to look at our limitations, and then we plan—essentially, money is our scarcest commodity. We don't have the luxury of spending that kind of money.

TK: *What is your vision for what will happen to the Cayman Islands hospitals or your other plans to take your healthcare model outside of India?*

DS: We have a major interest in Africa. We believe that Africa genuinely requires a large number of hospitals, because there's such a large population—close to a billion population. Fortunately, today, there are reasonably well-trained doctors, but they are not specialists. So, with a global university, we would like to convert these doctors to specialists. For the

Cayman Islands, at some point in time, we would like to start a medical school, and we want to start all the other specialties.

So healthcare has to grow. Tarun, 100 years after the first heart surgery, less than 20 percent of the world's population has access to heart surgery, and statistics for all the other complex operations are no different. So we are not even touching the—

TK: *—there is a long way to go.*

DS: A very long way to go.

TK: *What is the role that intelligent policy can play in developing countries to further this vision of making affordable tertiary care available to everybody?*

DS: Our biggest problem is lack of skilled manpower. If you go to any of the Asian or African hospitals, you'll see that it is not that they have no infrastructure. They have an ultrasound machine, but nobody has unpacked it because the doctors are not trained to do ultrasound. They have a CT scan. They have an MRI. These machines never gets used, because there's nobody who's trained to do it.

In most of these developing countries, their healthcare budgets are partly funded by overseas—by multilateral funding agencies like World Bank, the WHO, and various organizations. If these funding agencies—if the

WHO insists on doing an audit of skilled manpower, especially for surgery, Tarun, you will be surprised. You visit any policymaker in developing countries in healthcare—whether health minister, or health secretary, or any of those countries—and you ask them what are your priorities, they all talk about malaria, HIV, and TB.

TK: *Infectious disease.*

DS: Infectious diseases. Malaria, HIV, and TB kill 3.8 million people across the world every year. Lack of access to safe, simple surgery kills 17 million people every year. And these are not heart operations or brain operations. These are emergency Cesarean sections, laparotomy for a burst appendix, surgical treatment for compound fracture. Any doctor in two years can be trained to handle all this. But if you ask for a policy document, from any country—what are your strategies for addressing the surgical treatment?—they have none. They don't talk about surgical treatment as an important criteria.

In healthcare, Tarun, if infrastructure and expertise is available for surgery, that can easily take care of all the infectious diseases. But if your thrust is on infectious diseases, that cannot take care of the surgical treatment. So essentially, if the policy shift happens and multilateral funding agencies give huge amounts of money for uplifting the healthcare of developing countries—if they put a condition that they want to see how they are going

to train the medical manpower, especially for this skilled job—believe me, everything will get changed.

TK: *If I were to paraphrase, it would be a shift in focus so that it's not purely on infectious diseases?*

DS: Yes.

TK: *And attention to medical education in the broadest possible sense? These are the two main policy changes?*

DS: Exactly.

TK: *As opposed to a pure reliance on physical infrastructure and fancy hospitals?*

DS: It is already there. Hospitals are there. Equipment is there. You just need operators who are licensed. Our industry is complex, Tarun. If you start a software industry in any part of the world, anybody can do anything. You start the automobile industry, anybody can work in auto. In healthcare, we need proper training and licensing. I am licensed to operate on the heart. If I do a Cesarean section, I lose my license. So you need to train those people.

TK: *Do you have any reflections for the future, for the next 10 years that you hope to see embodied within your Narayana hospitals? Any aspirations that you're working on that you'd like to share with our audience?*

DS: I don't want to speculate about my company, where it is going to reach, but I am convinced that healthcare will reach everybody. Whether it will happen in 10 years or 15 years, I only hope and pray to God it happens in my lifetime.

TK: *Thank you, Dr. Shetty, for sharing your insights and your journey, and godspeed for the future.*

DS: Thank you. Thanks a lot.