

## Eradicating scabies in the Asia-Pacific

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<sup>1</sup>One Disease At A Time



Dr Sam Prince is a 26-year-old medical doctor and founder and Chairman of both the Emagine Foundation and One Disease at a Time. The foundation was initially supported by Sam's businesses including the national Zambrero group. Sam's efforts as an aid worker, a medical doctor and businessman were recognised on a global scale, named by the Junior Chamber International as one of ten Outstanding Young People of the World in 2008. Sam was also named My Business Best young entrepreneur, FCA Corporate responsibility award, My Business Best retailer, Anthill top 30 under 30, Deloitte Best emerging entrepreneur and Sir Edward Dunlop fellow.

My life has always been a bit of a dog's breakfast, so today I'm going to talk about one story and hopefully explain why my life is such a dog's breakfast, and also one of my passions, which is eliminating one disease out of Australia at a time.

My story begins in the leafy green village near a place called Galle in Sri Lanka, and this is where my mum was born, and she was born to very humble beginnings. In fact, she used to work in paddy fields so her family could pay the bills, and she used to study under a kerosene lamp so she could get by at school. When she was eight years old, her father—my grandfather—lost his job, which meant a household that was worth about as much money as the clothes I'm wearing today, was thrown into financial ruin. But, she was a very smart young girl and she went to school and worked hard and the fateful day came when she got her O-level results, which is our year 12 equivalent, and she rushed home to see how she went and my grandfather was there with the results open in his hand and he was solid and still, and he had examined the results and he had a tear that ran down his cheek and my mum thought that she'd completely blown it; that she failed her exams and a chance and dream to live outside this village had been obliterated. But, in fact, she not only topped her school, but she topped her entire district and my grandfather was crying because he just couldn't afford to pay for her to go to university. But, it being a good news story, she ended up with a scholarship to go to Colombo University to study economics. She got another scholarship to do her Honours. She got another scholarship to do her Masters, and she got another scholarship to go to the UK, specifically Scotland, to do her PhD in statistics.

Now, I was thrown out into the cold Scottish winter and I was born into a completely different world than my mum was born into. Everything that I could think of, anything I could dream of, was possible, and I never forgot that I owed it to a free education in a rural place in a developing country. Nonetheless, they settled here in Australia, in Canberra, and I was brought up there and went to study at Monash University in Melbourne, where I completed med school. Being a dog's breakfast, I learned that I was actually probably an entrepreneur, kind of masquerading as a doctor sometimes, and my definition of what an entrepreneur is, is someone who can find a gap, have a vision to fill that gap, back themselves to maintain and achieve that vision, and then have the grit to get through all the obstacles that will undoubtedly be there to get to that vision. And at the time when I was a medical student, I saw a big gap in gourmet Mexican food—kind of healthy Mexican food, and that was really big in the States, and in Australia we had relatively nothing. So it was an unlikely story, because I started the first Mexican restaurant, whilst in medical school, in a different state to the med school that I was studying in. So it started off, and through just grit, and probably a bit of foolishness, we grew this restaurant. And I started it by myself and it grew and we ended up opening a few more stores and then we franchised it, and I put in a CEO and a management group, who grew it, because they're a lot smarter than I am about franchising, and it grew and grew into different states and I'm proud to say that the BRW magazine that came out a couple of weeks ago, in the fast 100 companies in Australia, we were ranked number one. So I guess it taught me two things, really, the restaurant group: it taught me how to run a business—an organisation effectively; it taught me how to train a team and inspire them, and then ask them to inspire the next group of people; and run an organisation efficiently and effectively. The other thing is, it became profitable and it allowed me to kind of look back and be real about why I was here in the first place.

As I mentioned, I owe everything to a free education in a rural part of a developing country and so, for that reason, I turn my attention to education, which I'm very passionate about. To this end, we started a

foundation and the profits of the restaurant group went to building IT schools specifically to bridge the digital divide that exists, which means, essentially, that if you've never seen technology before, that you've got Buckley's of going to university these days because of this widening gap between those who have seen technology and those who have not. This is echoed by Ban Ki-moon, the Secretary-General of the United Nations, and this is something that we started and ran an organisation like a business. It was very effective and in two years, when we first started, we had actually already built 15 schools in Asia-Pacific region and we were able to integrate that into the wider educational curricula of the country, and also sustainably up-skill teachers, such that when we had left, we had a sustainable school. To this end, I guess I learned, and galvanised a lot of my values in aid work and how I think it should be operated. For those of us who are doctors here, I'll never forget what it's like to have a patient, who has had a heart attack, look up at you from their bed and see that fear and desperation in their eye. You know, if you have an agenda, and we often pedal one—you know, we kind of tell them, "You know, it's probably a good time to stop smoking and time to do some more exercise," and I'll never see—I've never seen people, you know, take that agenda so quickly and so effectively when they're desperate. I think that the aid work in the Asia-Pacific region is no different and, for that reason, our value system for the Emagine Foundation and the One Disease program is that we have no agenda—no financial, no political, no religious agenda, that we don't lie, that we don't spin the truth, that we don't take credit for other people's work, we run the organisation like a business and that we are transparent. This is how we were able to be effective in the developing world and we got runs on the board through the Emagine Foundation.

About seven months ago, I had a conversation with a guy called Frank Bowden, who was my mentor in medicine when I was an intern and a resident, and he's got a very interesting feather in his cap. He actually was the architect behind the eradication of donovanosis from Australia. And we had a chat about how he actually did that; he had a very elegant model of basically employing a herd-immunity-like approach and examining donovanosis and the number—the reproductive number of that disease in order to basically treat a critical mass of affected patients with donovanosis, all at one go, so that the disease self-declined in the population after this treatment. It was a really neat thing, and what baffled me as an entrepreneur, a doctor, and an aid worker, was that he was able to do it with about \$4 million, in about as many years, with only a handful of people—10, and that just absolutely baffled me that you could leave such a lasting legacy on Australia healthcare with such scaleable numbers. I asked him, "We owe it to ourselves to do it again," to which he said, "Sure," and we had this conversation with more people around Australia.

We had it with a chap called Jonathan Carapetis, who many of you may have heard of—a Professor of infectious diseases, like Frank, as well as paediatrics, as well as public health. He heads up the Menzies Research School in Darwin. He talked to me about some research they had done in Elcho Island, and I know we've got someone here from Elcho today, in a community called Galiwinku, where they targeted a disease called scabies. And I know that a lot of us know that it is a mite that burrows under your skin and you itch at it, it often causes infections, which then cause things like acute rheumatic heart disease, and post-strep glomerulonephritis. It's a significant problem and, in remote Aboriginal communities, 70%—that's seven out of 10—Aboriginal kids get it at least once before they're one year old. The Menzies Research School had done some terrific work there, in a population of about two and a half thousand people. For the first five years, they used a cream—permethrin cream—but found that, intuitively, if you didn't have an itch, then it didn't make sense to bathe in this cream, and looked to the evidence base of a novel drug called ivermectin. They looked to Africa and the Solomon Islands and saw how the mass drug administration of ivermectin had a significant impact—a significant impact on the prevalence of scabies in these communities. Something very similar to the herd-immunity-like reproductive number concept that Frank Bowden used in donovanosis. Of course, this time, you had to treat many more people than you had to with donovanosis. Still, The Menzies, as they always are, are fantastic at executing these kinds of initiatives, and their research—they did it very sensitively and they translated what I've talked to you today, about scabies, into the Yolngu Mata—the language in East Arnhem Land—and also into a Dreamtime story as well. They worked with communities, not on communities, so that the Aboriginal people in the communities could up-skill in these healthy skin issues, and also administer the mass drug administration—the ivermectin—and also educate the people about health and hygiene, which was another component to this study.

Nonetheless, we had another conversation, this time with a chap called Glenn Keys; a mentor of mine in business, a guy who runs one of the largest medical logistics organisations in the world now, Aspen Medical, which has outposts and people all across Australia doing amazing medical healthcare work. Glenn Keys is a

fascinating entrepreneur and he works very differently to scientists, but still very effectively, but really cuts the crap and gets straight to the root of a problem. I asked him, “Glenn, if we were to do this scabies elimination campaign in a coordinated approach across Australia, could Aspen help us achieve it with your logistical arm?” and he said, “Standing on our heads.”

So now we had assembled a group of people who had eliminated diseases out of Australia before; a chap who had the evidence base, and the research, and the pilot that shows that it could be done again, in Australia, in Elcho Island, and the logistical business grunt to actually just make it happen. We added, to this board, people who had run large charities before and we started this organisation, now almost seven months ago, called 1 Disease at a Time, running under the same value system that we had done our work in Asia-Pacific region with the Emagine Foundation.

And I’m proud to say the work has actually started. It started about three months ago, where we did the consultative approach with communities. We are now gearing up, in April, to work with Menzies on the second wave of the mass drug administration in Elcho Island. We also have some of the best social marketers in Australia, who have put their hands up to help us de-normalise scabies. As you can imagine, when seven out of 10 have it, then it becomes something that is normal, and the same people who have done the largest organisations—marketing for the largest organisations in the world—have now tipped in a couple of million dollars’ worth of marketing to make this happen, but still be filtered through a very sensitive approach, such that it’s sensitive to the communities that we work within. We have a quadrilateral agreement now in East Arnhem Land, with Miwatj Health, the Aboriginal delivery agency in East Arnhem Land, Menzies Research, ourselves, and the Northern Territory Government Department of Housing, to make this a sustainable initiative. The Goodbye Scabies campaign is going from strength to strength.

I always wanted to leave a twin legacy with 1 Disease at a Time, and that was because I was giving a lecture in a medical school amongst first year medical students, and I said, “You know, we’re going to do some work in Aboriginal Australia,” and I was met by this unmistakable degree of pessimism, you know, that Aboriginal health was a place for failures, that it was too hard, that it was too complicated, too political, don’t waste your time. And this was really, really hard for me to accept: that our first year medical students—the people who are, you know, the most idealistic in our profession, the people who, only a year ago, were telling our selection committees that they wanted to make a difference, you know, are now already pessimistic about Aboriginal healthcare. And I thought, “What does this mean in the next five–10 years, when they become practising doctors, after they’ve gone through the internship and residency, they’ve, you know, been kicked pillar to post by Government and also by their hierarchy? You know, where will their idealism be then?” So I always wanted to leave a twin legacy for 1 Disease at a Time: to first take out scabies in a coordinated, agenda-less role, and also bring healthcare students, all around Australia, with us along on this journey. And to this end, we’ve started our movement, and that starts in the next couple of months, helped by people from GenerationOne and a large organisation that has done just this; starting movements.

So this is what has led me here. This is why my life is such a dog’s breakfast. I understand that I’m a Scottish-born, young Australian doctor, who does aid work in places like Sri Lanka and Vietnam, running a chain of Mexican restaurants and now embarking upon eliminating one disease at a time from Australia. But as you can see, from a medical point of view, I got into medicine because I believe that healthcare is a basic human right, and it should be afforded to everyone. That by going through—building a national business—and now I have diversified into different areas, that you can run an effective organisation that can scale a country, that you can then use that same knowledge and skill set to apply it in aid work and be effective, and to have large ambitions to take out diseases—neglected diseases out of Australia. To have a lasting impact, to have a true legacy here in Australia: it would be great for me—when one day I have kids—to tell them what scabies was.

Thank you very much.