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Member profile: Childbirth training in the developing world



Dr Atul Malhotra (left) runs a training session in India.

Dr Atul Malhotra works as a neonatologist at the Monash Children's Hospital, among a number of other interesting roles.

After beginning his medical training in his homeland of India, Dr Malhotra furthered his education in the United Kingdom before settling in Australia around 15 years ago. Deeply concerned about the training gaps in maternal and neonatal health in his country of birth, Dr Malhotra initiated a life-saving program in India, which he now runs with his obstetrician wife, Dr Arunaz Kumar, to help combat this. He spoke to Vicdoc about his work.

I love science and I love spreading it. We sometimes take things for granted and we don't always understand why things happen. If we don't understand the why, then how can we improve them? When I was training in India, I used to think there is so much work to do, but I never used to stop and

think why are so many people getting sick and why is it so much worse compared to the developed world? Now when I stop and think, I still have many questions but luckily also a few solutions! There are things that can be done on a basic level that can really affect outcomes in a big way.

Tell us about the program you run in India.

For the past three years, every few months we've been going back to India to run workshops in communities which may be attached to medical universities or hospitals but are underresourced and under-staffed to run education programs.

The key focus is to have a safe childbirth for the mother and a safe start to life for the baby. There is nothing new or novel about it. We aim to do it in a manner that sticks in their memory so they are equipped to a handle a situation, instead of having to learn on the job. One of the biggest killers in these communities is post-partum haemorrhage. Much of the work on the obstetric side is to develop better understanding and insight into how to manage blood loss in an acute situation.

I'm a senior lecturer with the department of paediatrics at Monash University and I teach a lot of med students, nurses and post-graduates, so the educational role comes fairly natural to me. My three main roles are as a clinician, researcher and educationalist.

In India, after receiving some funding from the Bill Gates Foundation for ground-breaking intervention for neonatal brain injury, I realised I needed to move back one step and help improve their medical education first, before we could start translating our first world work into those communities. We wanted to make a good platform with basic education for healthcare first.

In most of the developing world, it's the basic things that are not being done right. I wanted to teach them how to look after women and newborns in a standard way first, before introducing new therapies.

What level of training do maternal health workers usually have in India, before seeing patients?

They get into medical or nursing school and get a standard degree, but following that they are put straight into the deep end, and start working without any hands-on training. They are made part of the workforce and expected to learn on the job. The biggest contribution in maternal and child mortality comes from India and parts of Africa.

When we first started our workshops, they were so grateful for us just being there and teaching them these things. They could be in their first month out of university and straight into a clinic, looking after women and babies and somehow expected to learn it on the job.

It's been a great experience for me. I have been doing it for the last three years and my wife has come on board in the last couple of years. We are able to contribute to a huge number of people. They look after thousands



Dr Arunaz Kumar (right) conducts a childbirth simulation session.

of people in just one jurisdiction. We've done training in Punjab, Uttar Pradesh and (soon in) Rajasthan and each of these states has a population larger than Australia. There's a huge amount of people that we can impact.

When you studied in India, were you aware that western medical training was much more advanced?

I initially trained for my own medical career 20 years ago in a big hospital in Delhi and as an intern and junior resident, there was hardly any skills training for us. Simulation was unheard of back then and even now it's hardly used.

In Australia, simulation training usually starts in year three or four of medical university and when the students come into our clinical rotations we get them to do some front loading clinical skills training before they get access to patients.

The advances in the way doctors and nurses are trained in the last 15 years in developed communities has gone much faster compared to the developing world. The biggest deficiency is a lack of trainers, so our focus has been to train the trainers. If we can train some master trainers, they can keep training others to do the job once we leave. If we can raise more awareness of our work, hopefully we can get more support and expand the program.

What are your main objectives for raising awareness about the program?

We are trying to raise awareness in the scientific and medical communities. The RACP has been really kind to me (funding support), as has Monash University. While extra funding is always helpful, we want to raise awareness about our work because there are a lot

of doctors out there who want to do something to help, but don't necessarily know how.

We have doctors and nurses going to Laos, Cambodia, Vanuatu and Papua New Guinea with existing volunteer programs who are starting to use our simulation models and our training packages. With the funding and support we have received, we have a couple of models dedicated to our program called OneSIM - obstetric and neonatal emergency simulation. That's been fantastic!

What other work do you focus on?

I work at Monash Children's Hospital as a neonatal intensivist. I have been working part-time as a consultant for the past few years while I pursue my research interests. I'm a basic scientist, which means I do animal research and laboratory work at the Hudson Institute. Most of our work is translational in nature - we take the problems from a baby and replicate them in an animal. We use similar equipment and similar techniques as you would in the hospital. I mostly work with sheep because the sheep brain is very similar in structure to the human brain.

What do you enjoy most about your work?

Without a doubt, saving lives! I am directly involved in saving lives in the NICU but after that the most exciting work that I do is to actually take the problems back to the lab and try to devise new ways to help sick babies. I also educate doctors and nurses about how we can equip ourselves better to save lives. It's a circle for me and I'm lucky at Monash to have the opportunity to do all this work together.

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