RCPCH Podcasts | Impact of climate change: Nepal
Transcript of podcast – Autumn 2024

Dr Rashmi D'Souza

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Dr Jamun Singh

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Heather Watson

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[music]

Dr Bernadette O'Hare

So welcome to the Royal College of Paediatrics and Child Health, Climate Change Podcast series, where we are exploring the impacts of climate change on child health globally.

My name is Bernadette O'Hare, and I'm the chair of the international stream of the RCPCH Climate Change working group.

Now, in the summer of last year, 2023, we sent a survey to the members of the Royal College who were working or had experience of working outside of the UK to find out more about the impact of climate change, where they had worked or where they were working.

As we began to read through the responses, we decided it was critical to share these experiences that we were reading about to with a wider audience to bring awareness to the wider audience of the unequal impact of climate change on children and on their families throughout the world.

[music]

In this episode, we are focusing on the impacts of climate change on children in Nepal.

In recent years, the Royal College has partnered with the Nepalese Paediatric Society to run quality support mentorship teams. This is called the global links programme. These teams bring together local clinical champions and mentors to build quality improvement strategies.

So today I'm delighted to be joined by Dr Jaman Singh, Dr Rashmi D'Souza and Heather Watson. Who've all worked together in Nepal in the RCPCH Global links programme.

We will also feature a conversation I had with Dr Camilla Kingdom, who was able to visit Nepal earlier this year as part of the global links programme.

I managed to catch up with her in the last few weeks as the RCPCH president and to chat to her about her experience in Nepal and provide an overview of the global links programme.

But first, let's hear about Nepal from Dr Singh, Dr D'Souza and Heather.

[music]

So, number 1, thank you so much for sparing the time, for filling in the responses, and then for agreeing to be interviewed today, or to have a chat today. So, I'll first ask you each in turn to introduce yourselves and your background, and I'll start with you, Rashmi, if you would introduce yourself.

Rashmi

Hello so I'm Rashmi D'Souza. I'm a paediatric registrar. I'm currently on an out of placement doing research and last year I spent six months living in Janakpur in the Terai region of Nepal with Heather and that was in the role of a Global Links mentor with the Royal College Global Links Scheme and that's where we met and worked with Dr Jamun so it's an absolute pleasure to be here and share some of what we saw, what we experienced today.

Bernie

Thank you very much. And Heather, would you like to introduce yourself?

Heather

So hi, my name is Heather. I'm a paediatric senior staff nurse. I currently work at the Evelina Children's Hospital in London.

My background is a little bit varied from my rotation that I had at the Evelina, so my background is surgical and PICU, general paediatrics, HDU and infectious diseases as well, and I was lucky enough to have the opportunity to be able to work alongside Rashmi as part of the Global Links scheme. And I had a six-month placement in Nepal based in Janakpur, and that's when we had the opportunity to work alongside both Dr Jamun.

Bernie

Thank you very much and Dr Singh, could you tell us a little bit about yourself please?

Dr Singh

I am a senior consultant paediatrician of Government of Nepal, now working in Janakpur, which is the plain region of the country, and I am working in government since last 10 years and commonly seen the general paediatrics, intensive care and haematology. In addition to this, I also look forward to the immunisation and its policy making in Nepal.

Bernie

Thank you so much. Now the purpose of this podcast is really to explore the impact of climate change on child health. I think before we delve into that, I think it'd be really useful if we could find a little bit more about the country where you met, which was Nepal. And I'm wondering Dr Singh, if you could just tell us a little bit about Nepal, please?

Dr Singh

I think very much Nepal is a beautiful country. Made-up of Himalayas, mountains and plains.

It is a landlocked country, and it is locked by on the three sides by India and in north sides China. We have beautiful mountains having temperature list minus 40 degrees Celsius and within 240 kilometres the territories where the temperature is plus 40 degrees Celsius.

So, Nepal is a country where we didn't 250, forty kilometres. We have minus 40 to plus 40 temperature rents and we have our population is ranging from Aryans which is Indian in origin. To Mongolians, which is Tibetan, nor Isan, and we have vast majority of ethnicity in Nepal though the country is very small, which includes the population which belongs to ethnicity, which belongs to Tibet

ethnicity, which belongs to Bhutan ethnicity, which belongs to Bangladesh, Pakistan and India. So, all the ethnicities you can get in a small country in Nepal, and we have more than 165 languages spoken in Nepal.

Bernie

That's an even we've just all been transported to Nepal. Thank you so much, Dr Singh. Now moving on to the impact of climate change on child health and for the purpose of this podcast, specifically in Nepal, in some of your responses, you mentioned some challenges for me related to climate change. And I was wondering if we could just hear a little bit more about those Dr Singh from yourself and then we'll hear from Rashmi and Heather.

Dr Singh

Yeah. The in the last 20 years. What I would like to stress is our country has undergone a massive deforestation. We used to see when we were inside as a plane in our ground or in our fields. There were lots of jungles, forests and dense forests were available. We used to see the wild animals even and they all those conditions because of deforestation has got out.

Now, because of the deforestation our country is suffering from. Landslides, water deficiency and we are also getting a lot of floods. Because of the floods, we are having problems in transport, medical services there in there and many of the times. I just, I have said there are extreme sub temperature in the same region, same time we used to face even minus two to three degree Celsius to plus-40 degree Celsius and most of the time when we have the climate change say seasonal changes, lots of children are suffering from cough and cold, they are suffering from. Especially in case in September and October and March and April where there is a change in seasons.

In addition to that, the non-communicable diseases they are coming in outburst like bronchial asthma. We are talking about now lead poisoning. We are talking about malnutrition, and they do have relations with the climate change.

We are also facing in cold seasons carbon monoxide poisoning. This is because extremes of temperatures due to climate change. In winter seasons, people used to close the window, the doors, and they use to burn the fire in the room, either by the woods or by quail, and this consumes the room oxygen produces carbon monoxide, and in the morning all the family members are found unconscious. Few children dead, few children unconscious and requiring intensive care conditions, and that it that it happens in Kathmandu, where there is a capital city.

And other than this? We also have change in rainfall pattern. Previously, when there was a forest, we used to have evenly distributed rain. Now what happens? There is a happy rain in short period of time and there is a prolonged drought

season, there is no rain at all. And because of this the temperature is varying extremely in Parai region. Because of this there is flood, there is landslides. We also have in the winter season frogs and this fog is because of burning the fires in every village they used to keep the baby warm and because of the burning fires in the home, lot of babies are coming. Even the mothers are coming with burn our whole burn unit is full in winter season.

The children are not getting better because of the lot of increasing amounts of burn every year, because of the very cold seasons, and that creates increasingly fogs because everybody in the village is burning fire. And when you move on the road you can't see when your hand schools are closed both in summers and both in fogs the children cannot study. Even the thunderstorm is coming in Nepal. You will hear every year many dates due to thunderstorms, thunderstorms.

So, these are the climate changes we are feeling in our part of the world in Nepal.

Bernie

Thank you very much, Dr Singh. So, you seem to relate a lot of the problem really to the deforestation that has resulted in flooding and in landslides and problems like that. What do you attribute the deforestation to? What? What do you think has caused that to happen so much over the last 20 years?

Dr Singh

The people used to depend on selling wood in the market, lot of the wood were exported to India to the other parts of Nepal. We are a landlocked country our border to India is open even we do not need identity card to cross the border. Everybody can anytime cross the border and even in Nepal and in cities the wood requirement is increasing because of increase in construction and people used to cut all those trees and because of the unemployment we had, we had huge unemployment in the villages and people used to depend on cutting the woods selling it either in the form of firewood or wood for construction work. And this leads, and it was the woods are very costly sold in Nepal. So, there were a lot of black marketing. There were a lot of marketing of woods, wood, wood in structures also. And then we faced the deforestation.

Bernie

And there seems to be two big problems. The very low, the extremes of temperature, very low temperatures resulting in in in very sad cases like you mentioned carbon monoxide poison. When people close their windows and light fires. And then there's also the increase in burns. And then there's the very high temperatures and where people are suffering from things like even heat stroke. You I think what about schools? How is this impacting children's education? You know, these extremes of temperatures.

Dr Singh

Yeah, our schools, the, we have in summer regions, our schools are infrastructures are not children friendly. Our schools are made-up of the group which is UPVC. UPVC is a material which is heated in the heat seasons. It is too much heat in the room classroom. The student cannot sustain. Even you can even if you visit 10 schools in our regions you will hardly find fan in the schools. The children are not having fan and extremes of temperature leads to heat induced dehydration most of the time the child comes with headache, vomiting. We used to think whether it is meningitis or acupuncture syndrome, sometimes seizures too. Sometimes swelling attack and almost many of the cases from their school. Same school comes on in a day. Due to that the government has closed all these schools in summer.

And there's long summer holiday nowadays, even even up to one month, and including that one-month summer holiday, different state government and the local government are declaring emergency holidays now in Janakpur and many cities of Nepal. In Karai regions, there is emergency holidays. Emergency vacation has had been given due to extreme of temperatures. And this has given.

This this has affected their study too.

Bernie

In health facilities and hospitals of as well. Due to the extreme temperatures, do you see any impact there?

Dr Singh:

Yeah, they do. The patient used to visit our patient doors, but they are refusing to admit if the construction even the hospital setting, as Rashmi and Heather they have seen it is overcrowded lot of people are waiting hours and hours in the queue in 42 degrees Celsius for just getting OPD ticket on which I will write prescription starting from all days to the children they are carrying children in the hand and standing in the queue for a long time period. Says 2 hours or three hours and then they get the ticket.

After I write any investigation, they will again go put themselves in the queue to pay some bills, and this infrastructure is prevalent in all over Nepal. Because of that, people are avoiding government facilities. The government have started working why the people are avoiding government facilities and why they are attracted towards private clinics and private doctors. So main reason is the queue, and they cannot stand for long with their children in the hand in the queue for two hours or three hours or three hours. And we don't have even facility where the children will say children will play and they will experience a comfortable temperature.

Bernie:

Yeah, and do the high temperatures impact children's nutritional status. So for example, I'm thinking it must be very hot for for mothers to cook or prepare food for example.

Dr Singh:

Yeah, so malnutrition now. Do we have ample amount of food available in the plain region of Nepal in comparison to hills in mountains? Malaysian mountains, the amount of malnutrition in plain region rise, increasing alarmingly, and we need to find out what is the cause when we need to. When we used to search in the families, how what is the cooking status? What is the type of food they used to cook then this is giving a very set back news to us.

Our cooking standard is they're using very high salt diet to mitigate with the sweating loss of the sodium loss in the sweat, and they're using very spicy diets for adults. The children with high salt diet and spicy diet. They're not taking any vegetables or even Dal, we say, which is the source of protein main source of protein in Nepal. In all families, there's children are avoiding those things and because of not making child friendly food. They are attracted towards the fast food and then of course the children's calorie is not met and of course the composition of tide is also not met because of the heat extremes in temperature. They do not cook in the daytime, they are cooking in the morning, keeping in the home and then the lid, letting the child to feed the same things two to three times with the children doesn't like they want different foods in different times and then they they are more attracted towards the again the fast food and mothers.

Or the family also the Want to go to the coil burning the coil, burning the wood for cooking and they avoid it. And they they also promote the fast food and because of that, in Tarai reasons we are having malnutrition. There's a huge problem.

Bernie:

So, a lot of factors are driving families and children towards the consumption of of of unhealthy and often and fast food because as you say, the high salt content.

I'm just going to turn before we go back to think about sort of interventions which have been the many interventions which have been undertaken to to really to, to mitigate and to adapt to this, I'm going to just turn maybe to to Rashmi 'cause. You've spent time there with Dr Singh, have you any experiences you'd like to share with us, Rashmi?

Rashmi:

Yeah. I do actually, I think I think that was an amazing overview and you've got so much experience. what stood out to me is a couple of different things with respect to climate change and air pollution.

So, for us, you know, the moment you land and Kathmandu, you do notice the air pollution there. And I know there are many factors involved. You know, Kathmandu is this beautiful, amazing city. There's so much to see. It's growing so quickly and it's kind of it's in the base of this valley surrounded by mountains. And I'm sure that's contributing to pollutant staying within the area because they can't, you know, escape and be diluted.

That's something you really notice. You know, everyone's wearing masks as they go out on their scooters and as they're walking because of the pollution that you can see. And I'm sure that's having an impact on health.

And then separate to that, it's it's the climate change and the changes in weather that really stood out down south, those whether I went events were the ones that I hadn't really been expecting before I went out there, so the heat of the 45° and and I don't know how people work in that heat, you know, without aircon and without fans and some places, but also the flooding. And I think we could talk about each of these. You know, we've got examples of each of these are flooding and how that affects getting to the hospitals. We had, you know, storms out of season, the monsoon we were only there for six months but the monsoon was delayed for at least a few weeks at the time, and you know people were talking about how the crops going to grow. The water supply was disrupted to a few places.

So. yeah, even in in my 6 months that I can think of examples for each of those, each of those questions.

Bernie:

Now, Heather, would you like to you and give any thoughts on your experience when you were working with Doctor Singh?

Heather:

Yeah, I mean, Dr Jamun is fantastic. He's literally explained our experiences in Nepal so, so well. And like we said, we were only there for such a short space of time in the six months. But even in those six months, I think we definitely saw a lot of their climate change and the impact.

And whilst we were there our friends and that we made over there and a lot of the patients and doctor nurses champions that we were working alongside kept saying about how the monsoon was delayed and at the time we didn't really

know what that meant or how the impact would it would be having on in the communities but during like the May season, I think they said that's when they normally have the monsoon season and it was delayed a lot. So, it was affecting a lot of their crops so they wouldn't be able to have their rice, and a lot of families were having a lot of struggles with this. I think we have so many examples that we could share with our experiences in getting to our hospitals. And so, Rashmi and I, we were based on the east side and this meant that we covered seven of the government hospitals. So, we're quite spread out all over the province. One of our hospitals that we were working alongside was in Raj Barrage, which was a 3-hour journey from us in Janakpur and it's three hours there, 3 hours back and it's a lovely journey and you get to go through some villages. You have a bit of the motorway. It's definitely an interesting journey, a beautiful journey. However, when the monsoon happened and it was raining or there was floods and landslides, it's definitely difficult to be able to reach these hospitals and there will be times where the bridges will be closed down due to the landslide, and I mean I have so many videos of being able to see the impacts that we had.

And we were very lucky, and we had a great driver, Robbie, and we had a Scorpio like a Jeep, so we were very, very lucky to be able to get to our hospitals. And I know that obviously a lot of people are not so fortunate. So, I can only imagine the impacts that I had on the communities not being able to get to the to get to the hospitals because like we said, we were very, very lucky and able to be able to get there due to the Jeep.

Yeah, and I can totally. My heart goes out to the communities that are not able to get to the to these places because some of them are so rural that we were passing through.

Bernie

Thank you, Heather. Rashmi, would you like to comment?

Rashmi

Yeah, I don't know if it'd be helpful, but I think I can share two of the two of the examples for those two topics because they they really stood out to me. So, so the delay in the monsoons coming, so I it might be helpful to explain how the water system where we were living works in that. There is groundwater and sort of wells that go into the groundwater and that relies on rainwater supply mostly I believe. And then there's the government water supply, which has come through as a tap to the building that we were staying in. And that came twice a day, usually to that tap for about an hour or a couple of hours depending on the day.

And then we had Anita Auntie, who was our landlady, and she was wonderful. It really felt like we were daughters to her by the end of the six month job that we were living there, so she would go out and you have to pump the water either

from the ground or from the tap up to the water tank, which is on top of the building, which was three floors. And because the monsoons were delayed, the groundwater dries up. So, there's less water down there to be pumped up.

You know, you really feel that living in in this place. And we were very lucky where we lived. So, I can only imagine what it was like a bit further out. For example, if they didn't have these supplies of groundwater or the government tap being so close by.

And I had, I made an amazing friend, Doctor Bosher, who's a paediatrician in Janakpur, and she was telling me stories about how, you know, family members have to wake up at three am, 3:30 AM that she knows of to pump this water because that's when the water is going to water is going to be available.

And you know, I think that's that's a good example to me of how hard it is to live in these conditions and things that you have to factor into your daily lives. And then, you know, you wake up at 6:00 and then you do your daily routine for your family. And then you you go out to work after that. So that's from the water point of view. And then.

Heather mentioned our amazing driver, Rabbi and and the Scorpio, which really got us places in mothers Pradesh and those journeys we had to do and a few weeks after the monsoon did come and there were floods.

You know, some roads just literally don't exist anymore, and so we take different routes and even on those routes. You know, Rabbi is one of the most resourceful people I've ever met. And he would ring ahead to his friends who are living in villages further down on the routes to say “oh, hello, how are you, is your road open so that we can come and get these Global Links mentors to the hospital that's further down” and you know that's amazing he can do that. But you know how hard is it that that's what it takes to get you to your hospital so.

There's, I think, a couple of the examples and an interesting pattern is that the hospitals that were hardest to get to. So, I think for me that was Malangawa, which is in a deprived area, I think Dr Jamun, please correct me if I'm wrong. It felt like the more deprived the area, the harder it is to get there in terms of the roads and the infrastructure. So, you know, it really feels like the people who are already struggling are the ones that have it worst off.

Bernie

Thank you, Rashmi, and as always, the case it's it’s the most deprived that suffer the most in when it comes to climate change. It's their deprivations are amplified by climate change. It sounds like from what you've said.

[music]

Bernie

We've heard so much about the context in Nepal and about how climate change amplifies existing deprivations. Now, when I spoke to Camilla, we talked about this very topic, and again, she was the RCPCH president at the time of the recording, and a consultant neonatologist. And she's been a real driver and thought leader behind the Royal College's work on air pollution.

One of the questions I asked Camilla was what were some of the common problems she came across in children while she was in Nepal?

Camilla

So, I was there in January, and it was their winter, as it was with us, so, lots of respiratory problems.

And so, in terms of kind of acute presentations to hospitals, many respiratory infections and other exacerbations of respiratory problems. And then malnutrition's a big problem there. So, most of the hospitals I visited, they had very impressive nutrition centres.

Where they were doing some really fantastic work, educating and training and supporting mothers around improving nutrition for their children. You know, malnutrition is a major problem in a in a country like Nepal.

Bernie

And in terms of sort of the wider the social determinants of health, whether or anything that?

That you notice that paediatricians could be advocating for, or you know, why did a child, a given child, get malnutrition? Or for example, the respiratory illnesses? Was there anything that you could put your finger on that was causing problems?

Camilla

Well, you know, as with all our countries and and Nepal's not an exception, I mean we've got issues like this here is there are all those wider social determinants of health, which actually at the end of the day are probably absolutely fundamental to child health outcomes.

And I think probably the thing that struck me more than anything was the poor air quality in Nepal. And I know from our work that we've done here in the UK. That you know the evidence base for understanding the impact of air pollution on pregnancy on foetal development, on early newborn and childhood development, you know we're we've got this greater and greater understanding of how poor air quality impacts across that crucial phase of development.

And it struck me as I was travelling around Nepal. You just can't fail but notice the poor air quality and I just kept thinking, I wonder what this is doing to all these children, these pregnant women. If you've got issues with undernutrition or malnutrition and then you add in poor air quality. You know, I think it's pretty obvious to those of us that that are working in this space that just cannot be good for pregnancy and early newborn development.

The air quality really is very, very noticeable as you fly into Nepal you see this glorious view of the snowcapped Himalayas in the distance. And actually, one of the internal flights I did, I could see Everest. It was just incredible, you know, it's a real kind of moment. They're just stunning, stunning mountains. But then as the plane descends to land in either Kathmandu, Kathmandu or wherever you're flying. You sort of descend through this cloud and actually after that you never see the mountains again. So, it was very strange experience I thought just kind of at a personal level, you know, there are these beautiful mountains because you saw them when you arrived, but actually you never see them. And that's because the air quality is so poor.

In fact, I've there were many days when we just hardly saw the sun. You were just aware of the sun somewhere in the distance, through the through the cloud of sort of pollution, it's not surprising that there is so much pollution because.

Lot of agricultural land. They often burn. The farmers will often burn the wheat stubble, there's a lot of dust because I was there in the dry seasons so that lots of just dust around. Cars and motorbikes spit and lorries spitting out fumes. You know, it's very easy to see why the air quality is as bad. And of course, that part of the poor sort of sits in a bowl surrounded by those mountains. And I no good at geography and understanding how these things work. But it sort of felt like we were in a bowl and that this the poor air was the poor of the air. Pollution was kind of trapped.

And so, you know as a as a, as a paediatrician travelling around and looking at the issues that local paediatricians were dealing with, I just kept thinking.

We surely should be thinking much more proactively about what air quality's doing, how it's impacting pregnant women and children, and we had a real opportunity to work together to advocate for the importance of addressing air pollution in Nepal.

Bernie:

Thank you, Camilla and I couldn't agree more, and I think it's always been difficult for paediatricians. We're in hospitals and we see the outcomes of problems and issues that happen outside the health facility, in the Community and we're busy in the hospital.

How far do we go to advocate sort of on more, you know, the social determinants of health are upstream. And I think that the one that we've just discussed, no more so. In terms of just on your, on our experience with the RCPCH in the UK and you know, progress that we've made, but could you just tell us a wee bit more about that in terms of our advocacy on air pollution.

Camilla:

So, I think you know, us paediatricians have got a a real role to play in all of this. And I've been really taken aback because I sort of thought well, who's going to be interested in listening to me talk about this. But the truth is that health is often not discussed enough when we talk about climate change and air pollution, people are focusing on agriculture or transport or the economics and health as we know, is often a sort of slightly forgotten bit of it all. And child health particularly.

And certainly, when I've been around in my role as President, I've got to meet some amazing people outside of the health arena, and they've been fascinated to hear me talk about the evidence, scientific evidence base that we've got and the cases that I see. And so, I think paediatricians, we shouldn't underestimate the power of the stories that we can tell about the patients that we see.

In our A&E departments or the babies that we, you know deal with on the neonatal unit or whatever the story is, there's real power in telling those patient stories and actually as doctors, we're a really trusted source of information.

Not everybody's got an appetite to do this kind of work, but I think for those of us that do, we should feel empowered to step up and describe what we're seeing and really advocate for children in this kind of way.

And I'm really hoping that we can do some work with our Nepali colleagues along similar lines because as you said, most clinicians are just busy seeing, you know, an enormous room full of outpatients or, you know, dealing with large numbers of small babies that need their care. They haven't got time to be thinking about these things. But some of us have and actually it's about galvanising that support and you know, really getting people energised about truly appreciating the role that they can play as clinicians, because I think we've learnt a lot in the UK and I'm really keen that we can share that learning with our friends and colleagues internationally. So, I think there's a real opportunity here for us to get people excited about the really important influencing role that they can play as paediatricians.

Bernie

Thank you, Camilla and I agree completely. I think we can continue to do our day-to-day clinical work if we know that somewhere in our network, for example or

RCPCH, there is someone advocating on the causes of the child before us or the cause of the newborn child before us to try and sort of at least advocate. I'm not going to say fix that, but at least you take our voice to a sort of a higher place and I think that's the role that the RCPCH has done so beautifully in the last couple of years, and I think as you say, it's a privilege to work with our colleagues overseas and to do that together because of course the larger number of us who are saying with the same voice as you know, this is really impacting child health. The more impact that we'll have, you know, at the level where it needs to be, which is really at the global level.

[Music]

Bernie

It's always wonderful to hear Camilla talk about advocating to reduce air pollution, but also is the role that we as health professionals have.

We're going to jump back into a conversation with Doctor Singh to find out more about some of the already impressive adaptations Nepal is working on.

I asked Dr Singh if he could tell us about some of those interventions to adapt the change in climate that is already underway in Nepal. For example, what had been implemented at the level of the government at the level of the health facility and even at the level of the school.

Dr Singh:

Yeah. From the government level they have started for budgeting to reduce the climate change to reduce the pollution that every construction, every big project, they need to separate at least 2 to 3% of percentage of total budget to improve the climate, they have to spend it in every project.

In construction also they have fixed amount that people have to building builders have to spend to reduce the pollution and climate change. This new policy government of government of Nepal has introduced since last, I think few years which is going to mitigate some amount of climate change and including that government of Nepal has declared that if anybody is purchasing electrical equipment for cooking then government is giving tax free. There is no taxes on government have started being no taxes and electrical equipment. Which will be used in kitchen, so the government is promoting it. In addition to that, government is also giving tax very reduced tax, really low amount of tax in electrical vehicles. Now we have 300% tax in petrol and diesel vehicles in comparison to government is only taking 25% tax in electric vehicles and this is promoting everybody is using now electrical vehicles. This is become common Nepal.

And for forestation, reforestation has been a prime goal in all the budgets of seven provinces, central government, provincial government, everyone has a separate budget for reforestation in our hills, mountains and the plain region. Every, every year they have new plan of plantation in the bare fields or in the mountains, which has been deforested because the water level drinking water level has gone so down. That it has, it has become a great problem in [ ] region and even in the hills. So now the government is open, and it has been a clear vision that there is no way to escape from the climate change or the deforestation and everything. So now government has started doing this and we are using clean energy because our country is made up of almost 80% of mountains in Himalayas. And because of that we are lucky to have a lot of rivers of high current and that high current river gives huge amount of electricity. Now we have become independent in electricity in most of the season of Nepal and now we have become the exporter of electricity in last 10 years. You can't imagine just 10 years back we used to have 20-hour power cut in 24 hours, no electricity for 20 hours in a day because we don't have electricity. And in last 10 years we have we have created so much electricity plant, hydropower. Now we are exporting to India and Bangladesh.

Bernie:

Amazing.

Rashmi:

What an absolute goal that is, though, that more than 98% of the country's electricity is generated from hydropower. You know, renewable source. It's amazing, isn't it?

Dr Singh:

Yeah.

Bernie:

Yeah. And it's great to hear something which gives us hope really, you know? Yeah. Positive. Thank you. And at the at the facility level, is there anything that facilities are doing to try and sort of adapt to climate change that you'd like to mention to us.

Dr Singh:

Yeah, at the school level, the government has instructed to construct all the buildings, to be child friendly, but for low-income countries like Nepal, it is not possible in few years or few decades to construct all those buildings, convert those buildings into child friendly. But due to the lack of the budget We are not able to do within few years, but government have definitive plan where the

children will play, where the children will stay or the children's friendly things the government is given emphasis over those things in hospital as well as in schools.

Bernie:

It's fantastic, absolutely brilliant to hear this. Thank you so much for sharing this.

I'd love to hear from Heather and from Rashmi when we when we work overseas, and we always bring back a lot of learning from our colleagues and friends that we've made.

Have you any comments you'd like to make on changes to your NHS practise as a result of your time working overseas?

Heather:

I definitely think it's almost a reverse culture shock when you come back in and you're working in the NHS after seeing the conditions and the strength and the resilience that the doctors and the nurse champions have over in Nepal.

I think if anything it just made me realise how incredibly lucky, we are to have the NHS because we don't have to pay all of these fees on all of these bills that we were having to witness. A lot of these patients and their families and the communities having to do in Nepal and we would often see scenarios where patients in Nepal, the parents would have to choose what child that they would want to pay for the treatment and to be able to see all of those things and to go back into the work and to be going back to the same place that I that I worked before I went over, I think definitely puts a lot of things into perspective and as part of my role as one of the nurses is to be the nurse in charge.

So I think it definitely changes the style of thinking and the way that you manage scenarios and things from learning so much and being able to take all of those things that we did witness in Nepal and sort of put things into perspective and it was incredibly hard the first few weeks and I did struggle a little bit. But yeah, I think it definitely makes you a bit more resilient and being able to sort of see the challenges that the nurses and the doctors faced over in Nepal. It definitely puts a lot of things back into perspective and definitely makes you realise how incredibly lucky we are to have the NHS.

Bernie

Thank you, Heather. And Rashmi, would you like to comment? Thank you, Heather. And Rashmi, would you like to comment?

Rashmi

Yeah, I think the first things are the friendships that are made on that job. I mean, Heather and I still speak via voice notes most days. I would say, you know, I'm still

really close to the Nepali team out there Nirala and Preeti Bindu and Doctor Basha that I mentioned.

And that's really special and I'm so glad that it hasn't ended coming back, coming back to work clinically here.

But another thing I think is that I just feel like I'm take notice more or I'm more aware of projects going on here, which maybe I wouldn't have understood the significance of previously. So so one of the things that you you mentioned before and Doctor Jamun definitely mentioned was about having data out there and it's so obvious what's going on to everyone working in you know the 12 hospitals that we were involved with through the project of how climate change is affecting health, but also child health, but also education and how they live, how easy it is to get everywhere.

And you know, kind of the men and families have to leave to move abroad to get jobs because the food's just not as available in local areas.

But from the data point of view, you know there's so much going on that you can learn from. So, when I came back and I've come across one of the projects, I don't know if we have time, time to for me to talk about that.

So, one of the projects is this really exciting, one called the kids environmental and health cohort and it's being led by Professor Pierre Harderlid, who's a professor of epidemiology at UCL.

And it's as a national study in England and it's creating a data data resource for research into how the local environment effects Children's Health as they grow up in England. So, it's linking administrative data as a data that already is out there on birth, death, census, health education and Geo environmental data. So, things about the weather or green space and how these, how these environmental changes are affecting child health, in the border sense. I was speaking to Pierre about this. And you know, she she was talking about how this kind of opportunity has the potential to look at the impact of extreme temperatures such as flooding, water pollution, building infrastructure, you know, all these things that we're talking about that we saw in Nepal and and how it affects child health. And I think that's a really exciting opportunity.

And an example of you knows what can be done from from learning about what what other people are doing. So yeah, I wanted to bring that up as an example.

Bernie

Yep, thank you so much for that. Rashmi, that's a very important point to make. Thank you.

[Music]

Bernie

So, it's been wonderful to hear about the experiences that the global fellows had in Nepal, that opportunity to build friendships, to learn resilience and to develop our leadership skills and take these back to the NHS is also it's both a privilege and an opportunity. And the fact that the global links programme people go for six months is also another added benefit. So, it's it's quite a long time, it's that they're spending in country.

Now let's go back to my conversation with Camilla and find out some more about the global links programme.

Camilla

Well, I've it was in an incredibly fortunate position to join the global RCPCH global team for my second trip actually to Nepal. I went last year in 2023 as well.

And this year in January, I joined them and I was there with Sue Broster, who's our global officer and this time having arrived in Kathmandu, we then travelled out across Madesh Pradesh, which is the province.

The RCPCH Global team is currently undertaking a large piece of UNICEF funded work in collaboration with the Nepali Paediatric Association focusing very much on improving newborn and child health outcomes, so particularly around newborn survival and also the acute care triage and care of children attending the hospitals across the province of Nadesh Pradesh. So, we did quite a lot of travelling. So having flown into Kathmandu was then by road and well, everyone knows that Nepal is in the foothills of the Himalayas. So, lots of very steep mountain roads. I have to say quite nerve wracking. I'm not the best traveller, particularly when you are sitting looking right down a steep slope into a distant valley somewhere below. But an absolutely fantastic opportunity to get out and about and see the countryside. And obviously meet lots of paediatricians and paediatric nurses working across the whole range of district hospitals.

Bernie:

Fantastic, it sounds like an amazing trip Camilla. And has the programme already seen some improvements in the management of triage neonates and children's outcomes?

Camilla:

Yes, you may know that the global team actually works in a number of countries around the world, and the principle for our work is all about partnership and collaboration. And I couldn't be more delighted with the improvements in

outcomes that we're seeing in Nepal. On this trip we were actually joined by a team from UNICEF who were coming to see actually what was happening on the ground and they were very impressed as well. You know, there's a long way to go, obviously, but already significant improvements in newborn survival in timely assessment and treatment of neonatal sepsis. Improved rates of kangaroo mother care. Improved rates of maintaining normal body temperature in the in the newborn.

And then in children, some really exciting work around triage. Early identification of children that need emergency care when they attend a district hospital.

All of this done through a process of mentoring and collaboration. It's slow, painstaking work that's built on developing partnerships between the paediatricians and paediatric nurses that we send out from the UK. But working with staff on the ground in these hospitals. So yes, some really exciting improvements, but it's still a lot, a lot of work to do going forward.

Bernie:

Fantastic. And I think it's that collaboration and partnership that really, really makes these programmes work and it's it's built up, as you say, over time over years, you know.

[Music]

So, we've had a wonderful overview of the project from Camilla.

But what does it look like on the ground? What is it like actually working there? To answer this, I asked Heather and Rashmi more about what it's like to volunteer with the global links programme in Nepal.

Heather

Yeah. So, I'll just give a a bit of short background and then I'll hand over to Rashmi. But. Rashmi and I were the Global Links mentors on the east side of Nepal and there 2 west ones that were based in the province too as well. So, Rashmi was the doctor GM, and I was the nurse GLM. We previously worked together briefly at the Evelina, which was really nice to have a familiar face, a friendly face to start off with the programme.

There are 12 government hospitals in the province. So, Rashmi and I would cover 7 on the east, and Anna and Hannah, who was on the West, covered the five on that side and we would literally go over into the government hospitals and work alongside the doctor, the nurse and the paramedical champions that we had. And we did a lot of ETAT teaching and been able to facilitate that. So the doctor

and the nurse champions would be able to be able to deliver teaching sessions to the members of the staff there in each of the government hospitals, which I can hand over to Rashmi and she can give a bit more information about and alongside that we would be able to work alongside Narella and mindy Bindu who is we said was like our Nepali family over there. They looked after us really well, all part of the programme and alongside with them we'll be able to help and come up with hospital improvement plans for each. But I can hand over to Rashmi and she can sort of talk about that a bit more.

Rashmi:

So, it's a UNICEF funded collaboration between the Royal College of Paediatrics here and the Nepal Paediatric Society in Nepal. And you have the Global Links mentors on the ground doing this quality improvement mentoring projects depending on what each hospital needs, and that's led by the doctor, nurse and paramedic champions in each of the 12 hospitals. And we would go out, do visits, walk around the hospital, see what they think the biggest problems are and make a QI model of, you know, how to go about improving those.

Some examples could be introducing triage to the emergency and outpatient departments because there's no primary, secondary care referral system.

Or it can be helping them set up a neonatal network so there's referral pathways or standardised documentation such as postnatal, check pro formas or observations charts.

And the other stream is the collaboration between Nepali consultants and UK consultants to to help write guidelines and national standards, so all of that came within the within the global programme in Nepal.

Bernie:

Thank you so much, Rashmi. And I don't know Dr Singh, would you like to make any comment? We we've we're talking about the Global Links programme, but it's so good. I'm I'm reluctant to stop it. So maybe you would like to make a a comment on that.

Dr Singh:

Yeah, in on one sentence. I can summarise global link programme. It is to elevate or standardise the child health care, neonatal care in all government hospitals of Nepal.

Not only that, but this programme has created standards of common diseases, common paediatric emergencies, common medical emergencies in Nepal.

Not only that, but they have also stated how the child is to be cared in the hospital in the outpatient and in the emergency.

So it's a beautiful programme required by the country and I will express my sincere thanks to RCPCH to take the lead of this programme and, of course, to Heather and Rashmi and all their friends were in 42 degrees Celsius now working in Janakpur and sacrificing their life, so many things I still I still remember the moving stairs that Heather has forgot to told about moving stairs. So, a lot of people used to come and see Nepal moving stairs was a huge crowd. Rashmi, would like to add it?

Rashmi:

There's a new shop that opened which which it was a very exciting unveiling. It was a big supermarket with six floors and that was the first escalator, I think of the region. So those moving stairs, you know, really made made headlines.

Bernie

Excellent, excellent! So, I think the Global Links programme, and particularly the Global Links programme in Nepal, might be getting a flood of applications. I think after this goes out. So, I think it sounds the most wonderful experience and thank you so much for for all of you to for describing it for us. Thank you.

So, we're coming to the end and first and foremost, I would, I'd just like to recap a little bit of what we've heard. We've heard about deforestation in Nepal. We have heard about the impact of as a result of the landslides and the floods we've heard sadly about the impact of very high temperatures on children in the homes.

And in schools, and we've heard the impact of very low temperature resulting in use of fires, carbon monoxide poisoning and sadly burns. We've heard also heard about the impact on nutrition in the children are becoming quite dehydrated and tending to drink foods which are higher high in salt, and mums are less able to cook in the very high temperatures driving them towards sort of less healthy food options.

On the other hand, we've also heard about the amazing work that's been done in Nepal in which many countries can learn from in terms of the changes to the taxes for the different types of vehicles and the huge efforts to re-forest, all of the districts and the efforts at the level of the schools and the hospitals, so we can only sort of thank Dr Singh so much for joining us and really for telling us about this. This has been truly enlightening and we've all enjoyed it so much. Thank you, Dr Singh. Thank you, Rashmi and Heather, for also joining us and for telling us about your experiences of this, of your time in Nepal and with the Global Links programme.

We're indebted to you for your time and for for spending this time with us. Thank you.

So, I just like to wind up with saying to anyone who's listening. Thank you for tuning in and I hope you're now inspired to explore actions that you can take as child health professionals or as child health advocates to reduce the impacts of climate change on child health.

We've added some links in the descriptions for you to really to educate ourselves and then to think about what we can do in our in our local area or with our network. There's always something we can do to move to reduce the impact, to try and reduce the impact that climate change is having on children throughout the world.

Finally, we will be publishing a report summarising all of the responses which everyone can read very shortly, thank you.