

# PODCAST ONE - THE FUTURE OF RESEARCH: A MODERN WORKFORCE

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## SPEAKERS

Sanjay Ramakrishnan, Laura Taylor, Sofia Cerdeira, Mital Shah

### **Sanjay Ramakrishnan** 00:00

Welcome to this special podcast series from the National Institute for Health and Care Research about the future of research. You'll be hearing from five clinicians who are the current Thames Valley and South Midlands Clinical Research Network fellows. We will be discussing the big research challenges facing healthcare. I'm Dr. Sanjay Ramakrishnan. I'm a research fellow in respiratory Medicine at the University of Oxford. And over four episodes, I'll be asking my colleagues the tough questions. Are we getting trial participants who are representative of our diverse population? Is our research workforce ready for the future? Is it all going to be online? Join us to get answers to all these tough questions. In this podcast, we will talk about the Future of research: A Modern Workforce. I'm joined by Laura, Mital and Sofia. So to start with, could I just ask each one of you to introduce yourself to our listeners.

### **Laura Taylor** 00:57

Hi, I'm Laura Taylor. I'm a research optometrist. I work at Oxford eye hospital, and I see patients who have inherited retinal conditions who are on clinical trials. And my research work is centred on improving the vision tests we use in ophthalmic clinical trials.

### **Mital Shah** 01:15

Hi, my name is Dr. Mital Shah, I am an ophthalmology registrar, and I also work at the Oxford Eye Hospital. And over the last six years I've been involved in the running and delivery of various clinical trials. My research focuses on the use of retinal imaging and artificial intelligence in ophthalmology.

### **Sofia Cerdeira** 01:33

Hi, my name is Sofia Cerdeira I'm a clinical lecturer at the University of Oxford and Dr. John Radcliffe hospital. I look after pregnant women and I have a particular interest in maternal medicine. I do research on preeclampsia, which is in hypertensive disorders of pregnancy.

**Sanjay Ramakrishnan 01:50**

Great, thank you so much everyone for joining today, I will just give you a bit of a background for our listeners. Clinical research trials generally have someone we call a principal investigator, they are the leader for that study at that local site, especially when there's a multicenter study, but it is relevant for single centre studies as well. And these are usually general practitioners or hospital specialists, and mainly just for tradition reasons. There's no legal or practical reason behind this. The question is and the NIHR, the National Institute for Health and Care Research are really keen to diversify this pool of principal investigators. And a case in point is you Laura, you're in the vanguard of this of this challenge and facing this problem, you have a research programme of your own and you are a principal investigator, an upcoming research for patient benefit research project, which is a hugely prestigious affair. So thank you. What do you think about this problem? Are doctors like me, Mital and Sophia holding it all back? Should we maybe just need more Lauras in the world?

**Laura Taylor 02:59**

I don't think so. I think there's room for everybody. I think for my study that I'm working on, it's looking at different vision tests. As an optometrist, we're generally the people, we've trained in testing vision and testing eyes. And so makes sense really for an optometrist to be leading a study looking at visual function tests. For other studies, for example, a drug intervention study, you know, where there's a clinical care responsibility to manage any side effects or anything like that, then I think it makes sense for us to have a doctor that you know, who's responsible for that. There's lots of aspects of clinical trials. So in terms of the paperwork in the coordinating, I don't think doctors need to, you know, they've got other things to do, they don't need to be burdened with all of that. But I do think you need a responsible person to go to, kind of problem solve and troubleshoot different matters. Similar to other studies, if you've got like a muscle or exercise rehabilitation study, and you want to see which exercises are better for a certain condition, it might be better to have a physiotherapist lead that project. I think there's space for everybody.

**Sanjay Ramakrishnan 04:20**

Mital. I think we are on our last legs, we are gonna get pushed out soon. What do you think about about this? Do we need ophthalmologists, or just let optometrists run the study?

**Mital Shah 04:30**

I think I agree with what Laura said. I don't think you need ophthalmologists necessarily to be Principal Investigator every single study. But I still think there is a role for ophthalmologists within clinical research related to sort of ophthalmic studies, particularly in sort of the example that Laura gave in trials of interventional trials or treatment trials, if there is an intervention that needs to be given via surgical into, via surgery, sorry, or if its a medical trial, with a new medical intervention, you probably will want to need doctor as a principal investigator not only to deliver the treatment, but also monitoring for safety and for potential new or unforeseen side effects. But I agree, I think there's a role for more involvement of allied health care professionals within clinical research studies so that they can take on new roles and responsibilities where maybe they're not taking them on at the moment.

**Sanjay Ramakrishnan 05:30**

Great, Sofia, getting pregnant women in is always a challenge for trials. And you do this every day. How do you work with midwives? And would you want midwives to be principal investigators on your studies to help really turbocharge recruitment? What do you think?

**Sofia Cerdeira 05:50**

I mean, I think, I think this is a deeper problem and deeply rooted problem that is connected also to our the way we deliver to the health, the health care as well, I think then, all healthcare professionals need to be involved and should be involved in being agents of knowledge and agents of change, and also helping research. And it's possible, you know, I think some people may be only helping to recruit, some people may be very well be able to do to be PIs. And it's important to have people that can go out to the communities as midwives can, and to be able to increase the diversity and to be able to talk to the patients where they are, and be able to recruit more patients that way, I don't see why only doctors should be involved with that, in fact, we do have a team of research midwives that is responsible and is doing a stellar job of keeping our studies up and running. But now, I think the next step would be to involve midwives in the communities and get them and start to take the research out of the hospital into the communities. And this is also where other allied healthcare professionals can help in, in this, and I think that it's something quite important. I think it's the old mindset of institutions, universities, academic hospitals, and that also needs to change. And with that, you know, I think we need to change policy, create flexible working and opportunities for other allied health care professionals.

**Laura Taylor 07:45**

I think that the NIHR and the government are seeing the potential of involving allied health professionals and other healthcare professionals as to what opportunities they can bring to research. But there's a lot of barriers and something I've been looking at in my research fellowship, has been trying to understand why other health care professionals aren't really involved in research, why is it doctors that really lead it and drive it forward? You know, from my experience in hospital and in practice and primary care, there isn't a research culture research doesn't in opticians, you don't really get research studies. And, you know, why is that? There's loads of barriers time you know, there's no, there's no emphasis, it's, it's no benefit really to your career, you go to university to train to be a you know, an optician or a physio, you come out, you're an optician, you're a physio. And then you know, the research doesn't really come into it. And I think if we're going to bring research in, then we need to change that we need to bring research into training, and make it part of the career progression and pathway that you have that doctors have. I think we need to understand more, why doctors getting involved in research and see what we can learn from that.

**Sofia Cerdeira 09:08**

Yeah, I mean, I totally agree, I think you hit the nail on the head with that one. And I think it's also changing the mindset, at all levels, even policymaking and funding. And I can see a change, as you say, and I can see that there's an increased number of funding opportunities and career development, specific for allied health care professionals that are not doctors. And you need to start this from the beginning, from the moment that they go into their own training and see that there's a chance of their career progression for all four known doctors, all allied care professionals. And you can see that in nursing, you can see that in you know, you are a great example on how we can empower all the allied

care professionals and make sure that they we can invest in their our care force and, you know, make sure that that we can progress.

**Sanjay Ramakrishnan 10:12**

Great points both we know it costs less to hire, and maybe we will cost less and to run trials with PIs who are who are not doctors, principal investigators who are not doctors and we are going to encourage recruitment because both being in community as well as having more time with the participants and the patients. We are more likely to build that trust needed to recruit and training you both of you brought this up and is key and happily in the UK we have the clinical research network model which actively seeks to train allied health professionals, nurses physiotherapists, optometrists, and recently the addition of clinical research practitioners as an accredited specialism of health workers. So what else can we do? Laura? What do you think needs to happen to really motivate what why did you do it? Why did you get into it?

**Laura Taylor 11:10**

I got into research because I needed a change, you know, I needed something new, the danger of being an optometrist can be quite repetitive. I just, I was getting a bit fed up with it. And I needed a new challenge, literally, living in Oxford, there's an active research unit in the Eye hospital, and an opportunity came up. But something I was reading recently for allied health professionals, was the development of a research strategy. And within that benefit, empowering allied health professionals and training and looking at how, how can they get them more involved. And there's talk about developing clinical academic pathways, where you can still practice and be involved in clinical practice, but also be involved in research as well. And I think that's what we need to see across the board. You know, in optometry, you can go into research, that usually you leave practice and you go to one of the universities, you undertake a PhD, and then you have the choice to either return to practice, or stay in academia, I think it's quite rare to have a situation where you're, you're kind of doing the two, and that sort of clinical academic programme would enable for at the moment, we don't really have that in place. And I think that's what we need to work towards to make it more of a reality to make it appealing for practitioners to get involved.

**Mital Shah 12:39**

So I'd absolutely echo that as well. Laura just said, and I think in medicine, specifically, there is a clinical academic training pathway, sort of from when you leave medical school, in your foundation years through your specialty training up until the point where you, you finish your training, and you get your certificate of completion of training. But even then, I think there's still room for improvement. And for somebody who doesn't fit perfectly within that academic training pathway for various reasons, finding alternative streams of funding is really difficult. And without those alternative streams of funding, you're not going to be able to have the time to be able to dedicate to undertaking clinical research alongside your normal clinical activities. And it's things like this CRN fellowship that we're all part of, for the 2021/22 year that gives us an opportunity to step away from clinical research outside of a formal academic training programme. To find out more and get involved more in clinical research.

**Laura Taylor 13:41**

I think what's nice about the academic training programme is that clinicians are given salaried allocated time for research activities. And I think that's something if you're going to get other professionals involved, then there needs to be allocated time, because it's really hard. It's impossible when you've got a busy clinic, you know, 20 patients waiting to seem to seem that day, to then fit in research into that, you know, it becomes you have a few patients with problems and complications, and then the research side of things goes out the window. So it's, it's Yeah.

**Mital Shah** 14:19

I guess I would agree. I think trying to reduce the barriers of entry for anyone who's interested or would like to get more involved in research is really important. Like you said, if we want to take it seriously, you need to actually be able to give people time away from it from their normal sort of clinical activities and requirements to be able to dedicate that time towards clinical research.

**Sanjay Ramakrishnan** 14:44

And what I'm hearing and I agree, is the whole system change and it's not a shortcut, it is not just a cost saving that should be driving this, it should be a systems change. Sofia recently pointed out this report to me is all party parliamentary group on global health from the UK Parliament.

**Sofia Cerdeira** 15:04

Yeah, it's a fantastic report. And I think we should all read it and I say we used all health care professionals, it looks at how the future of health and the workforce should be and it talks a lot about what we just say now and how important it is to invest in, in the workforce in more flexible employment conditions enable to have research as part as a routine and for healthcare professionals to be curators of knowledge and agents of change. And that is it's quite important. So It's it's really nice to see that the that there has been looked at, but this is just the beginning. And we all need to get together and behind this initiative to make it happen. Because as you say, there's many barriers. But I think, you know, it's time to change. And we can do it.

**Laura Taylor** 16:08

I was just going to say that I was reading recently about clinical research practitioners, which is a new role that kind of come about looking at growing the clinical research delivery workforce. So these are staff that aim to facilitate the production and collection of data and work with patients to do that, but they're not actually involved in patient care. So these are considered dedicated staff members solely for research. And to be honest, in my opinion, for research to happen in the NHS, I think you need to be dedicated research people that that are there to support other people, because you know, to make research happen.

**Sanjay Ramakrishnan** 16:50

Yeah, we need more of you again, Laura. So these people like you who are moving forward the field and I've said that a few times, but but we heard about the barriers, and I agree there are challenges, and it's an exciting time, because everyone is getting on board, the health bodies and universities, the industry partners, and it's a really exciting time because everyone sees the potential. And, as always, we can't not talk about the big COVID pandemic and how that changed it. One great example of success of this was the PANORAMIC trial which looked at using new antiviral therapies at home for

patients who with early COVID-19 within the first few days and getting sick and incredibly they recruited almost 35,000 participants in a few months. And this is an interventional study. It is a new medication. So yes, it comes around all the potential risks with that with testing a new drug. But even then, they were able to empower allied health practitioners, nurses, physiotherapists, clinical research practitioners to support the participant throughout the process from initial contact, to consent to delivery of the medications to following up and all of this was done at home so there is great value in diversifying our our workforce who deliver research. I always go back to this Ipsos MORI poll about trustworthiness. Nurses and physios and midwives tend to score higher on trustworthiness than doctors on average. I mean, that's not let's, let's not be harsh, and doctors, overall, we all score above 90%. But nurses say that 99%. So it's very, very uncommon for someone not to trust ia nurse. And at the end of the day, all of us run trials, we know the biggest challenge is recruitment, if even 10% boost in trustworthiness will include improve our recruitment, we should actually take it right. What do you think on that?

**Mital Shah 18:50**

So I think I would agree, and I think all the help that we can get for recruiting participants on the ground is a good thing. And I think absolutely this is where allied health professionals, or non medical professionals, in terms of non doctors would play a really valuable role. Doctors don't always necessarily get to spend as much time with with potential participants, whereas nursing staff or physiotherapist or other allied health care professionals may well get to spend more time have built a better relationship with them and report over time, and be in a better position to approach potential participants about research studies. So I think we definitely need to open up our what least what used to be routine thinking that only certain people are able to undertake certain activities as part of a research study, such as consenting and things like that. I think these changes that have been brought about or partly sort of expedited, because of the COVID 19 pandemic. Hopefully, we'll be here to stay. And we'll see more changes coming through in studies that are both sponsored or set up from academic institutions, as well as studies that are set up from industry partners, to help reduce barriers for those sites that are trying to deliver those research studies and making sure that it's accessible, recruiting the right number of participants in appropriate timeframe.

**Laura Taylor 20:16**

I am not really sure about the trust thing, but I think perhaps sometimes patients are a bit more open and honest with perhaps nurses and other healthcare staff, you know, they, when you see the doctor, they might just say what they think the doctor wants to know or it's a very quick appointment, they, they're trying to take everything in. Whereas if you're like if you've got more time with someone to build up a rapport, you might, you might get a bit more out of the patient in terms of the problem and things like that. I'm not sure. I don't know what the research is on that. But just from my experience in practice, sometimes I think patients want to tell me what they think I want to hear. And yet they still tell the receptionist, their whole life story of everything that's going on.

**Sanjay Ramakrishnan 21:03**

Maybe this is something we can, sitting in the Global North, learn something from our colleagues in the Global South. Mital you are into artificial intelligence and in Thailand, you've seen that great work, looking at diabetic retinopathy screening and how they, they trained local care workers to take retinal

images and send them all to either reporting ophthalmologists in a bigger city in Bangkok, or to a computer to analyse and decide how high risk they have the diabetic retinopathy. And do you think we are we should take that on board? What why what's holding us back? Why that's something that works in Thailand can't work in the United Kingdom.

**Mital Shah** 21:44

I think, different healthcare settings, for starters, and I think we need to take that into consideration. But I think, new technologies as they come along, I think we just need to be open to exploring new ways of working. I mean, in the UK, we've got a fantastic diabetic screening service setup nationally. And so people are routinely invited those with diabetes to have photographs taken of the back of the eye and there is a national setup for this to be done. So as an example, that's, that's a system that's already set up, although the analysis of those images is by diabetic graders. And that system has been there for a number of years. But certainly, I think looking at new ways that people are working, either both within the UK or even internationally. There's always things to learn, and things to take on board.

**Sanjay Ramakrishnan** 22:36

So before we wrap up any final thoughts from from anyone?

**Mital Shah** 22:40

Yeah, so I think I mean, going back to the question of are doctors holding research back, probably my view may be biased as a doctor is in short, no, I definitely think that there's there's role and there's a lot of scope, actually to open things up to allied healthcare professionals, and others who are who are not Nestle healthcare professionals at the clinical research practitioners that you mentioned before. And I think if we can open things up and enable those who are otherwise qualified and competent to to take on other roles and responsibilities, including being PIs of other research studies, where appropriate, I think they'll actually make a huge difference to enabling people in the UK to deliver more research to recruit more patients and hopefully, progress our learning.

**Sofia Cerdeira** 23:29

For me is absolutely I agree with Mital. And I think it's a systems problem. And I think now, you know, it's time to properly invest in our healthcare force, and create more flexible employment conditions, and progression opportunities, whatever that might be. That might be for a research pathway for someone that might be for more other special interests within the area. But we need to be able to create those opportunities.

**Laura Taylor** 24:00

We haven't researched it. But I think we need also greater collaboration between the hospitals, between GP between universities, between primary care, the moment we all seem to work in silos, that we need to come together and support each other because we can't, we can't do it on our own. Primary Care has a huge access to a huge number of patients. The university don't always have that we need the universities to support the infrastructure and the you know, the administration and the contracts side of research. We need to work out a way of bringing all that together.

**Sofia Cerdeira** 24:40

Yeah, that's a crucial point. Yeah.

**Sanjay Ramakrishnan** 24:42

What I am hearing from everyone is, this is a challenge we want. This is a challenge we need. We want to get more healthcare professionals interested and active in research. The umbrella is already a big umbrella research umbrella is huge. And we are open family and we want an even bigger family. So thank you so much to all three of you for all your kind words and thoughts today. And thank you to our listeners for joining us on this special series of podcasts looking at the future of health research. Don't miss our other episodes, also available through the series. Thank you again. Bye bye. Thank you for listening to this special podcast series from the NIHR. If you're a member of the public interested in research, please visit the Be Part of Research website to search for studies near you that you can take part in. For health workers who want to find out more please visit the NIHR Your Part in Research website to get started with your specific research, training and research career related questions please speak to your local friendly NIHR Clinical Research Network.