

Talk Richmond podcast

Episode 13 transcript - COVID vaccine – what you need to know

Cllr Jim Millard: Hello and welcome back to Talk Richmond. I'm your host, Jim Millard, and in this week's episode we're joined by Doctor Patrick Gibson, the GP Borough Chair for Richmond upon Thames, who also sits on the governing body of NHS SW London Clinical Commissioning Group. I'm going to be asking Patrick all about how the biggest immunisation program in NHS history is going.

Hello Patrick.

Dr Patrick Gibson: Hello Jim, thank you for inviting me to speak today.

Cllr Jim Millard: It's really great you can join us. 15 million people in the UK have now received the first dose of the vaccine, which is great news. But before we touch on how successful the rollout is, I wondered if you could just give us a bit of background on the vaccines themselves. I'm interested to know how they're made and what's the process for approving them.

Dr Patrick Gibson: Yeah, so there have been a number of vaccines that have been authorized so far. They are the Pfizer, the AstraZeneca and the Moderna vaccine. The first two are the two that have been in use so far. They're both really, from a scientific point of view, they're both really interesting. Vaccines are made historically by taking a virus treating it in such a way that it cannot cause an illness and then injecting it into the body, so the body reacts against it

What is very clever about these vaccines is that they have chosen to make a fraction of the virus itself, so the target spike proteins that stick out on the surface of the virus and the Pfizer and Astra Zeneca products very cleverly educate the body how to make those proteins. So they don't make the whole virus, they just make the proteins that exist on the surface of the virus, and once the cells that has have absorbed, the vaccine comes to the end of their natural life and die, they release the target proteins into the circulation, which is where the body's immune system very cleverly recognizes them. The body is then stimulated to make antibodies and lymphocytes, so immune products that will then recognize that part of the virus should you then become infected. So it's very clever strategy and it's new. The technique is new and it's been building on a lot of the research that's been going on with other with other viruses. So, that's basically how they work Jim.

Cllr Jim Millard: Well, that's fascinating to hear. I think that what you're talking about that it's quite new technology has led some people to concerns, there little bit scared by that, and I think it would be great to address that. You know people saying some people saying they feel like it's been approved very quickly and that in some ways creates a little bit of uncertainty. So yeah, what's your response to that?

Dr Patrick Gibson: Yeah, I think sort of the idea of genetics generally is scary because, you know, we've grown up with a lot of very entertaining films, often that have talked about this sort of stuff. But actually this isn't genetic material that is altering our own genetics. This is a product which is causing the body to create an immune response, in the same way that we alter our immune response whenever exposed to a cough cold, we're doing the same thing with this with this virus. So going to that point you made about the speed of speed of this is - there's a certain irony here isn't it? Sort of speed is seen as being scary, but it's also mark of progress because one of the reasons we were able to do this is there was actually a lot of collaboration internationally about identifying the genetics of the virus, which we've not really seen before, so that was a fabulous start.

Now the other part of it that made it quick was that there was a rolling review process going on as the trials were running out. So, from October the trials were running and there was a rolling review. So historically what's happened is that a product has been brought to market and then their review process goes on afterwards, but all the way through the progress of the product, the products going through their process, the scientists were working on the product and doing that review of its safety and its effectiveness all the way through. And that's why we've been able to come up with the product that is come to market so quickly. So, while it is unusual to have something that has come to market so quickly, it's really a tribute to the science which is moved on over the years.

Cllr Jim Millard: There's a strong message there really for us. well for the whole world, really, that when there's the political will and the focus that this has had, you know it's it's amazing what can be achieved.

Dr Patrick Gibson: Yes, couldn't agree more absolutely right.

Cllr Jim Millard: The MHRA is the UK official regulator, is that right?

Dr Patrick Gibson: Yeah, so the Medicines and Health Product Regulatory Agency and they are the group who will authorize any products that come to market in the health sphere, whether that be a treatment or a drug, it's the same agency who authorizes any other product that comes to market in the UK.

Cllr Jim Millard: And that's given it a full okay?

Dr Patrick Gibson: Yep, so it's been through all of the regulation processes. There's no difference in the process that's been applied to this. As compared with any other drug, it's just the time at which it was done, so it was done during the process of research and production, as opposed to waiting until the research production been done and then and then doing the regulatory process. So it's been a real success story

Cllr Jim Millard: As you very clearly explained there, there are different vaccines, I think we've got three, as you say, currently approved for use in the UK, and is that normal to have more than one kind of vaccine when dealing with the virus?

Dr Patrick Gibson: Yes, yeah. There's a history of being different viruses, so with polio for example, we've got two different products for that. So it's not unusual to have a number of different vaccines.

Cllr Jim Millard: It's the sort of the sort of thing that's never had this level of public scrutiny, but I just wondered if you could expand anymore if there's anything else that's worth saying about the differences between the vaccines?

Dr Patrick Gibson: Yeah, so they're both extremely effective. So even with a single dose. With the Pfizer product with a single dose, the initial figures were 52% effectiveness. Now when they actually looked at the data with it, most of the vaccine failures were actually people who became infected in the first 10 days after exposure. So by that point the vaccine wasn't going to be effective. So when you make a correction for that, then the success rate actually went up to 89%, if you look at the protection from day 15 to day 21, which is the point at which we would expect immunity to be well established. So we know that single doses are really effective. And similar story with Astra Zeneca really that single standard dose of that shows 73%, and when you do the two vaccines, the second one you get up to success figures of 90 - 95%. It's also worth saying, I think, that even those people who are not given complete protection against the virus are extremely unlikely to get significant disease with it, so they'll have relatively mild symptoms, even if they are unlucky enough to contract the illness despite having been vaccinated.

Cllr Jim Millard: This might seem silly question, but I'm gonna ask anyway. Can people choose which vaccine they want to have?

Dr Patrick Gibson: So it is a good question that. The three reasons for having vaccination are that you don't want to get a complicated illness, you don't want to have hospitalization and you don't want to die. Now the risk with delaying a vaccine is that you then put are putting yourself at risk. So, when we run our vaccination clinics, there will be a particular vaccine that we're using on that day and you'll be you'll be told that's the vaccine they have. Patients can decline a particular vaccine so they can sit tight and wait until their approached about clinic with a vaccine of their choice, but I would just say you know why are you doing that really? There isn't evidence that one product better than another. We don't have the data about the relative long-term effectiveness of it, so we haven't got all the information we would want to have to be able to say whether one product is better than another. They're both excellent products, they have a success rate significantly higher than our flu vaccination program, which obviously we've been running for many years. So I really wouldn't want people to delay vaccination because they have a particular belief that one is better than another because the evidence just doesn't support that.

Cllr Jim Millard: Well, that is fascinating and I'm going to come back to that in a second. But first I just wanted to touch on the misinformation that's about with vaccines and we did ask Shannon Catillo about this, he's our Director of Public Health, and we spoke to him in an earlier episode because you know there are this sort of this idea of these sort of anti vaxxers and there are some interesting ideas out there. What are some of the top myths that you've heard as a Doctor? Where should people go to Get the facts?

Dr Patrick Gibson: Yeah, so it's a difficult one this isn't it because people do have health belief systems and we need to be sensitive and tolerant of peoples health belief systems and I don't think it's helpful to rubbish those views. I think what we need to be trying to do is just get the science, get the information out to people, try to deal with their with their concerns and counter where we possibly can. So there have been reports of, myth reports about fertility being affected, and we know categorically on the information we've got, that there isn't an impact on fertility. That seems to be a complete red herring. The concept that there might be a microchip being injected so that people can be tracked. Again, there's this, absolutely there's nothing in that story at all. That it contains aborted foetal cells. That isn't true. And again the common one that we often get with flu as well, that people think that they've got covid from the vaccination. You cannot get covid from the vaccination, it provokes a production of a tiny part of the of the virus, those spike proteins that I mentioned earlier. What is true, though, is that that that provokes a reaction in the body. You want the body to mount an inflammatory action against vaccine that that's what you're trying to achieve after all, so you are likely to get some side effects from it, and I think sometimes people confuse the side effects that may well get from the vaccine with the actual illness itself. But as with flu, you cannot get influenza or covid from vaccination with either of those two products.

Cllr Jim Millard: Oh yeah, thank you for touching on that. That's actually something I wanted to ask. You know what are possible side effects? How many people tend to get side effects?

Dr Patrick Gibson: Side effects are reasonably common for the reasons I was saying. So you're trying to provoke an inflammatory reaction in the body. Inflammation is that is a two edged sword. It's a helpful thing because it helps us to heal. So, when the body does react against something than you are likely to get some symptoms and the common ones that people will get with the with the vaccine and sore arm is probably the commonest one and that often is at its worst about two days after the vaccine and people often will feel tired, headache, general aches, even mild, flu like symptoms. Fever is a possible side effect as well, but it will be a mild fever. So importantly, if somebody gets a significant fever, a high fever, then that's unusual and they should really be thinking about other infections separate from covid, or indeed covid itself, and they should be contacting their doctors to talk about that. Another uncommon side effect, some people get a lymphnode response. Again, it's part of the body trying to to react against something, so these things are a good sign. In that there indeed indicate indicators that the body is mounting a reaction, even though it's quite uncomfortable. We often encourage people to use some Paracetamol in that situation to make them to make themselves feel better.

Cllr Jim Millard: Thank you for that. We wanted to ask about pregnancy and whether the vaccines are safe for use during pregnancy.

Dr Patrick Gibson: Yeah, so it's unusual for a drug company to do a test of their product during pregnancy. So in a similar way with the covid vaccine, it hasn't been tested in pregnancy. And the advice at the moment is that women should not have the vaccine during pregnancy, unless there's some really unusual circumstance for that individual woman, so if they happen to have a condition where the complication of covid would be really important for them, and then it might be worth considering that. And that's a discussion that the individual woman would want to have with her with her with her doctor with her GP. If a woman happens to have been vaccinated without realizing she's pregnant, there is no evidence that that is harmful. So we are not recommending that you should alter your pregnancy in any way as a consequence of that, but we would not be recommending that you have your second vaccine in that in that situation until after the pregnancy is complete. With breastfeeding after pregnancy, we started off recommending that you should not have the vaccine, but more and more evidence has come out since. To show that you can have the vaccine while you're breastfeeding. So if we would want to do that, that's a that's a reasonable thing to do.

Cllr Jim Millard: We are moving forward with the program, the rollout of vaccinations in England has, I understand officially been expanded to those age 65 and over now and to younger people in at risk groups. So what should these people expect when getting the vaccine?

Dr Patrick Gibson: They will be offered a vaccine in the same way that the cohorts have been so far, so you will get a contact, which might be a telephone call or text message and or a letter, and your appointment will be booked on that basis. We are asking patients not to contact the practices until they know that cohort has been exceeded. So the only the only group who should be contacting practice at the moment are patients who are over the age of 70 and cohorts one to four because if they haven't had a contact, they might have slipped through the net, but the practices are unbelievably busy with not just this work, but the normal winter work in practice and they are struggling with a lot of contact from the public, which is really difficult to manage. So please if people can be as patient as possible and wait until their contacted. Unless there's been advice nationally, as there has been for that over 70 population for cohorts 1-4.

So one of the one of the challenges with this is how do you deliver a mass vaccination program safely? Because you inevitably have a lot of patients who are going to need to go through this process. So before we started this, well before we started this actually, there was a lot of preparation going on in anticipation. So, we've become familiar with the use of personal protection equipment through the first wave and through the rest of the year so that had become very familiar to us. We'd also become aware of the need to offer services to patients - normal GP services - while at the same time providing a facility to assess patients who might have acute covid in the practice as well. So, there's a familiarity with signposting people through the building, segregating areas in the building. So we built on those as part of our objective and when we set up the program. We knew with the Pfizer product that people would have to wait 15 minutes afterwards and we couldn't have a lot of people waiting inside the building because social distancing inside the building is challenging. So we kept the inside waiting areas for our most frail patients and practices would often would set

up marquees or the like in their car parks or areas outside of the practice where patient could wait 15 minutes supported by the marshals until they were free to go. So there's been a lot of work going on to do that. We also liaised with public health from the start because we wanted to know and be confident that the vaccine sites were safe. So I have been in contact with the public health Department and I asked them at the start of the program to let me know if there was any sign of clustering of infections around vaccination sites and the good news is that they have not demonstrated any clustering around vaccination sites. So as the sites came on, they came out sequentially so we were expecting perhaps if there had been a problem to see that reflected in those early weeks of vaccination and we did not see that. So that is good news.

Obviously we were starting the vaccination program to time were prevalent in the community was quite high, so a number of patients who were vaccinated did contract covid in the first few days after they've been vaccinated, which is the experience that they had in the trial as well. But that reflected the prevalence in the community and not transmission from the sites as far as public health have been able to advise us.

Cllr Jim Millard: Thank you. That all makes a lot of sense. Once you've had the vaccine, do we know how long protection last for and whether vaccinated people can still pass the virus onto others?

Dr Patrick Gibson: So there's a little uncertainty about how long you'll have protection for, and that's inevitable if you think about it, because the product only started to be developed from October, so they are doing post surveillance trials on all these patients to see how long they do have protection. Our anticipation because it is a coronavirus, which is a little bit like the flu virus, is that the little adaptations that we're already seeing to the virus will mean that there needs to be a yearly booster, probably. But we're confident that the protection it'll give will be of the order of a year, so we should be in a position where patients having the vaccine now should be covered, right the way through until the end of the end of this year, by which point there will probably be an evolving policy to address booster vaccines from then on.

Dr Patrick Gibson: So while it is great that we have managed to get all the vaccines in arms so far, we do know that vaccination in itself at the moment does not mean that we can change our behaviours until we are guided to do so nationally. There's a lot of research going on trying to identify whether, in addition to preventing severe illness, the vaccines also reduce transmission, and that's been one of the imponderables so far. The really good news is that there is some emerging evidence that not only does it prevent some serious illness, it does reduce transmission. But until there's a lot more evidence about that, there will still need to be a requirement for people to follow their hands, face space guidance, which has been so effective along with lockdown in reducing the prevalence of covid in our community. And we are in the happy situation in Richmond, where it is a fraction of what it was six weeks ago, so please keep following that and that that recommendation.

Cllr Jim Millard: And how's the program going locally?

Dr Patrick Gibson: So we've been very fortunate in Richmond I have to say. I think we knew that the only way we were going to get out of this was get people vaccinated. And it's quite an ask getting on

with this program, in some areas, practices were, or PCN's (Primary care networks) were happier to see how colleagues elsewhere had got on before they launched forward with it. Whereas in Richmond, as I say we started with two practices right at the very start and got a lot of people vaccinated. And that was whether it was cause or coincidence, we did see the Richmond numbers coming down in Southwest London before some of the other boroughs. So there's also a healthy competition that goes on between the primary care networks, so you see your peers doing well, and it does spur you into more action and there have been occasions where there's been an opportunity to get short notice vaccine as well, so some of our sites have been notified on a Thursday that they're going to get a supply which has to be used by the Sunday and have then preceded to get 1100 patients vaccinated in the course of a weekend.

Cllr Jim Millard: Wow

Dr Patrick Gibson: Practices have been working their socks off. They have often chosen to work the weekends because it has less impact on the extra work, the normal work that's going on in the practices. And it does mean that we've got a lot of tired people out there, but if you keep your eye on the goal, which just to get the population protected, I think that's acting as a big Philip for the population. And to be honest, the public have been unbelievably supportive. You would not believe the extent of support from our voluntary sector coming in with Marshalls, we've had FISH driving people to appointments, bringing cake and biscuits in, and the goodwill that comes from the public has been a huge support for the people trying to run this program. So it's a good chance just to thank the Richmond public.

Cllr Jim Millard: That's so wonderful to hear, it's a great community response to this, which is very heartening, and we've been talking about coronavirus in various podcasts over the months and always hoping that perhaps one day we'd be talking about vaccination rollout. And here we are. And you sort of touched on this, the sense that we needed to vaccinate it was going to be the way out of this. I mean, do you? Do you think we can vaccinate our way out of this crisis and will the virus go away?

Dr Patrick Gibson: I think we can vaccinate ourselves out of the current situation we're in. You know that the limitations on everybody's lives are tough, and I think we can vaccinate ourselves out of that. We will have to I think live with the virus because we've had to learn to live with the flu virus and we have managed to do that and I'm sure we will do so. The key part of it is, is this first part of work though to get a significant element of immunity into the population. It's always difficult with viruses to predict what's going to happen with them because they are constantly evolving and generally have not become progressively more aggressive overtime, so that's one comforting thing, but you have to watch them, and that's why there's so much attention being focused on the on the variants that are emerging. I referenced at the start the technology that's gone into making vaccines, it will be possible to adapt the vaccines very quickly if necessary. It's unlikely that we will need to, because the changes do not generally cause big changes in the virus that would cause us to need to change the vaccines. But we do have the technology there if we need too, which is really very comforting thought really.

Cllr Jim Millard: It is and you know it's been very fascinating listening to you telling us so much about it. Thank you very much for coming on Talk Richmond and for sharing your knowledge.

Dr Patrick Gibson: You're welcome Jim and I say thank you very much for giving me the opportunity at and particularly to thank the public of Richmond.

Cllr Jim Millard: It's so great to finally be talking about the light at the end of the tunnel of this phase of lock down and as we said, 15 million people in the UK have not had their first vaccine and I can't help but feel a bit optimistic about life starting to slowly get back to something like normal. As always, you can find more information in the show notes of this episode. Please do subscribe and leave a glowing review. We will be back in two weeks' time with a break from all things coronavirus as we dive into our rubbish bins to explore how we can reduce our amount of food waste. I think I'm looking forward to that. Until then I'm Jim Millard. Thanks for listening.