

All-Party Group on Coronavirus - Oral Evidence Session 15

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Layla Moran MP

Good morning everyone, welcome. It's a pleasure to see you all. Today's session of the All-Party Group on Coronavirus is going to be looking at transmissibility of the disease and impact of Covid-19 on children which of course has many questions to do with schools and safety in schools, but we're also going to be looking slightly more broader than that and the implications for wider society. So, we've got two fantastic panels, each of 45 minutes, and we're going to start with two parents, we've got Caroline Lea and Sughra Nazir. Caroline has three children and is clinical extremely vulnerable and has had to shield due to have severe asthma, so thank you Caroline so much for being with us. No doubt at a stressful time in the household as well. Sughra Nazir, Sughra is a parent with two children aged 13 and 17, for many years she's lived with a chronic lung condition and other issues that rendered her clinical extremely vulnerable to Covid-19. And we also have in this first panel Dr Lisa-Maria Muller who is the Education Research Manager at the Chartered College of Teaching. So, welcome all three of you, it's a pleasure to have you with us, thank you for taking the time.

And I wonder if I could start by first of all asking Caroline and Sughra just to outline you know how is life at the moment and tell us of your experience of this pandemic so far and I do appreciate that could be the whole 45 minutes so if you could do it in a nutshell that would be really helpful. But Caroline if you wouldn't mind going first.

Caroline Lea

Good morning. I as you've just outlined I have three small children so they are aged ten and seven and I have a baby who is one. So, given my asthma and initially that wasn't considered the main concern, it was the fact that my steroid dose to control the asthma is so high that it suppresses my immune system, so I actually withdrew my children from school before lockdown began in March with the full support of the Head Teacher. She was extremely understanding and understood why I had grave concerns at that point. My Consultant then during lockdown decided to upgrade me to shield given the steroid dose, she was very concerned about the outcome I would have if I contracted Covid and I was told that the outcome would be extremely poor if I were to survive at all.

So, I'm a lone parent so if I were to be even hospitalised that would render my children in an extremely poor position because they would have no one to fall back on, I am their entire universe. And I think for any of us who are parents the loss of any parent is going to be extremely severe on any child and the mental health consequences of that for me personally are more severe than any loss of being in in-person education. I'm a teacher, before I had my children, so albeit on a career break at the moment I would never have been able to work at the moment had I been employed given my vulnerability and my concerns for contracting Covid. I therefore took a decision to educate my children albeit still on roll, I didn't want to de-register them, I feel it's very important that they have something to go back to and that I don't destroy their entire universe in one fail swoop and like in March saying how do you fancy doing home learning for a little while and by the way you're never going back, I didn't want that to be their situation.

So, obviously during lockdown one that was fully supported, every child was allowed to stay home and come September I felt that that would be the same, considering that not only am I vulnerable I have to shield and albeit shielding was paused I was in an extremely vulnerable position even though it was statistically less likely to catch Covid at that time, my outcome would remain the same if I were to catch it. So, on that premise I spoke to the Head and said you know I'm keeping my children at home and was extremely shocked to be told that the conditions had changed and that I was expected to send them back to school otherwise there would be normal legal sanctions imposed. I can't begin to describe the stress that that led to and the fear that that led to, I can't lie there were many tears. I was extremely concerned because it was a choice between being criminally prosecuted potentially which would obviously lead to the end of my career, I mean as a teacher I can't have any legal black marks against me whatsoever. I would have lost my whole job. But likewise, if I sent my children back and they contracted Covid and albeit they fare it well, they could pass it to me and subsequently end up with a mother in hospital or worse than that which is something none of us even want to think about but is a very real possibility right now.

So, obviously the battle began and from September through to the end of November I was threatened repeatedly, I was told that probably the best option would be to de-register my children which is something I didn't want to do, I didn't feel that was in the best interests of my children which is surely where all of this centres, is whether or not the children are OK and safeguarding their mental health as well as physical, obviously, but by de-registering they then wouldn't have their security to go back to as and when things do become safer. I kept speaking to the Head, we had an open dialogue the entire time but sadly the relationship did start to deteriorate, things became very officious from the school's part, she was being, well she says she was being very pressured from the DfE to do what the Government had mandated and that her hands were tied, that she would like not to take that approach but she had no choice is the way it was worded.

I was saddened by all of this because there were many, many schools I heard of where the Heads were being more understanding and saying despite DfE mandating something they were going to let parents shield so I couldn't understand how it was becoming almost a postcode lottery depending on where you lived, whether or not you could then be allowed to stay home and protect your life and your children's parent. During this time, I obviously being a teacher was very, very helpful because obviously I could follow the curriculum fully, it's a different age group to what I normally teach but I love teaching and I'm very, very passionate about education and would never take my children out of school ordinarily, I'm a bit of a stickler for that. Obviously I understand the education and attending schools very well, I understand what we have to do and so I obviously kept them off, kept them educated, they both learnt their full curriculums every day, they're obviously in different key stages, that was very hard, but I was given absolutely no support and no guidance and no work whatsoever from the school. I kept pointing out to them that as a school and my children being on roll they have a statutory requirement to provide education and I kept being told no, you have a statutory requirement to send your children to school. I kept outlining the difficulties that would impose and the dangers to my life quite literally that that would create. Even when over the October period there were Covid hot cases in the children's school, where there was cross-over of Covid, there were siblings in my children's classes so the threat became extremely real at that point and even then they towed the line that no, you have to send them, you have to send them.

And the stress for me and the mental health implications for me were severe. It was extremely hard to try and pretend to be happy mummy, fun mummy, teacher mummy as well as trying to manage all of this in whatever little free time I had to be able to manage this what was becoming a legal battle. Obviously I was threatened with fines, that fines would become inevitable which obviously I can't find that kind of money at the moment for two children, it would have been over £120 per week. I even told the Head that if she did impose these fines it would literally take food out of our mouths and that led to then there was a discussion whereby I was told I would be referred to what's called the Absence Legal Panel which was missold to me as mediation, it's very not mediation it's basically everybody at

County getting together to discuss how best to impose legal sanctions on me for my misdemeanour and I felt very belittled actually by the whole process because I was being treated like a truant.

You know these laws are written to prevent truancy and people taking their children on holiday during term or taking the day off to spend the day shopping because it's their birthday or other you know not really reasons to take children out of education and I was only doing this because there is a very real possibility that if my children go to school and catch Covid, I will die if I catch it. And this just kept falling on deaf ears and things became very ugly, the Head started not really communicating one to one, she would communicate through the central office system and I think that the burden on her was becoming too intense too because she's, before the pandemic we had a wonderful relationship, I felt I could trust her completely with everything, she was extremely supportive and yet suddenly she was becoming 'The Dragon' in our world of threatening us and threatening us with very real severe sanctions in terms of our future lives and I think that's why she had to withdraw because she was feeling that burden too heavily herself. And in some ways I have great sympathy for her and for other Heads in this position because fundamentally this directive came from central sources and therefore she had to do what she was forced to do.

The Absence Legal Panel was due to convene at the end of November and I was told I could attend remotely and almost comically told that it would be remotely because it's too dangerous to meet in person, which obviously I then highlighted well dangerous unless it's at school and you're making my children sit in close contact with 64 other households a day, extremely close confines of a classroom shoulder to shoulder with lots of children, with sibling overlaps in many of the classes, the risk was enormous and the Absence Legal Panel, the email I then received three days before the meeting was due to convene and I was told I wasn't allowed to attend, it was forbidden, so I wasn't even allowed to attend to defend my case, defend my character and my decisions that I'd made. I was told a statement could be read on my behalf but that's never going to be as powerful as being able to present your real reasons and eventually what was very peculiar was all of a sudden after a couple of days of having this conversation I received an out-of-the-blue phone call from someone in a senior position at Hampshire County who was very understanding and he said that he was going to introduce a new policy for the extremely clinically vulnerable who would then be allowed to educate at home and be fully supported and receive an authorised absence code.

So, at that point obviously for me the battle partially ceased, it was given to me on a terms of we'll review this weekly but I stand in my position that this has to be done when it becomes safe, it won't be that I get told yes, you can send your children back now, as much as I would love them to come back to school, they miss their friends but they're OK, you know they're thriving in their education and their lives at home, it has to be safe first. So, I fear that the battle will continue.

Layla Moran MP

Thank you very much Caroline, it sounds like an incredibly stressful time for you and your family, thank you for sharing your story.

Caroline Lea

It's been a nightmare, it's been an absolute nightmare.

Layla Moran MP

And so Sughra if you could fairly succinctly if possible, tell us your story, I really do want to get through a range of different issues, you've touched on a number of them already Caroline, but we'll dive back into them. Sughra.

Sughra Nazir

Yeah, I have three children. I have two at secondary school, my girls are 13 and 17 and then I have a 21-year old who is a Teaching Assistant in a primary school and he is currently living in an out-building in snowy Yorkshire and that was the only way that he could keep me safe.

We followed all the guidance throughout as you've said I was clinically extremely vulnerable, we also withdrew our children from school early March before the official lockdown and that was with the full agreement and support of school at that time. I felt everybody was operating with a lot of uncertainty but there was support around. Over the summer we felt safe, we felt cocooned, the girls were learning remotely along with their peers and everything was going OK, we were hearing about deaths in the community, there was a lot of sadness, a lot of loss around but we felt safe.

From September as Caroline said the schools were very clear that all children must attend school so there was no allowances made if the parents were vulnerable or clinically extremely vulnerable and at that point I felt that I had to make a choice between, it's very difficult, you know sorry ... I had to choose between my health and my children's education. At that point I chose education because my children are older and I wasn't in that position to be able to teach or support them, say the eldest with A-level chemistry, A-level biology. I looked at what I could do to make things safer in order for them to go to school so one of the things I did was, as I say, my eldest moved out and he's still as I say in an out-building, and then we had shields fitted to the cars so that my husband could take my girls to school. They sat in the back wearing masks and a shield between them and him as a driver.

They would normally have gone to school on the train and had a lot of social contact with their friends on the train but again we deemed that too high risk, so it was an hour journey there and an hour back to North Yorkshire on the train. I tried to implement the measures that I was reading about at home, so I tried spraying things, wiping things down because that was what was known at the time in September. Really difficult for me, I realised that one of the areas that I had a lot of contact and cross-over with the girls was the kitchen, so I offered to sort of carry meals for them, quite quickly realising I couldn't do that, you know my breathing was really bad and I thought I was going to end up in hospital.

So, in the end I decided that the only way that I could keep following all the guidance and keep my girls at school was to move into a room and I stayed in that room 23 hours a day, sorry it's difficult. So, I was only coming out for essentials, I knew at the same time ... so I'd gone from somebody who is quite socially active, I was working before, I'm a Social Worker by qualification, I work in social care. I was unable to work obviously because I was shielding and also the sector I work in is high risk, I was excluded from any form of Government support but even then I thought I need to be at home, but my girls were going to schools and mixing with a thousand other households.

So, I stayed in this room and I knew my girls were absolutely petrified having had six months at home feeling safe and then suddenly being in school where there were no masks in the classrooms, they weren't socially distanced etc but I could offer them no physical reassurance, I couldn't give them a hug, I couldn't tell them it was gonna be OK and as I say that was quite difficult. But even then that wasn't enough because over that Autumn term they had three, I call them positive contact letters, where we got a letter to say your child has been in contact with a positive case in school, they now need to isolate at home for two weeks. When we got those letters, the girls were absolutely petrified that they'd not only got the virus but they'd brought it home. They were testing themselves daily with the thermometer, we had Covid tests done, they were waiting for the results. Really struggled, it was a horrible, horrible time.

At that point I decided that it was just too difficult so I kept the girls off school, this was around about October time and the options I had at that time as Caroline has said was to off-roll the girls and that would mean that they'd lose their friends, they'd lose their school places, so I couldn't do that. I didn't have the option to teach them myself because as I said A-level sciences is outside my experience, and the school offered no remote learning, they said that they were legally only obliged to offer remote learning to those that were self-isolating, not where parents had chosen to keep the children at home.

A particularly difficult conversation I had with the school was that I'd lived my life and I should sacrifice my life for the sake of my girls' education and I needed to ...

Layla Moran MP

Wait, the school said that to you?

Sughra Nazir

The Head of Pastoral Care at the school.

Layla Moran MP

That's astonishing!

Sughra Nazir

It was really, really difficult and I thought one of the things that was really hard was at that point she said well you're not understanding the implications in terms of mental health on your girls and I said I do understand, I'm a Social Worker of 23 years and as somebody who experienced parental bereavement at a very young age I also have an appreciation of the potential impact that could have on my girls. At that point she backed down. They asked me to get medical evidence of my condition even though they knew I'd been in hospital in December in the HDU etc and sometimes obviously my difficulties are self-evident. I was able to get, even though it was a really difficult time for my respiratory Consultant in October, I was able to get a letter, the letter said that the Consultant said my children attending school was a very high risk for me and said that remote learning should be made available.

That letter went unanswered for three weeks and every day in that period my girls then went back to school because I was threatened with safeguarding etc and again the implications for me professionally would have been horrific. So, I had no choice but to send them back to school. Every day I felt like I was, I mean people have used to words 'sitting duck' or 'Russian Roulette' and I can't tell you the amount of stress that put us under every day for the girls to go to school. And all the while not only did I fear getting Covid and the implication but also I felt like I was acting against health advice because quite clearly my Consultant had said I was at risk and I thought if I had or I did get Covid I'd end up in a Ward with that same Consultant feeling that I hadn't followed the advice.

And then in some ways all the sacrifices we'd made over the summer, we didn't celebrate birthdays, we didn't mark graduations, my uncle had died in May, we grieved by Zoom. All of those sacrifices would have been for nothing because we were forced into this position.

The light at the end of the tunnel in some ways came through Caroline I think and some of the work that she was doing and then there was an acceptance from school, they looked at the letter that they'd

had three weeks prior, they looked at a briefing note that was circulating and then said yes, we do have the flexibility, we'll make remote learning available. My girls are now at home, they're happy, I can spend time with them and they're being treated on the same level as their peers, they're getting work sent home but our fear now is about what happens in the Spring.

Layla Moran MP

Sughra, thank you so much for sharing again another very moving story and that part of the story I just found utterly astonishing, but thank you for telling it. Just as a quick aside have either of you been offered the vaccine yet and what impact will that have or has it had on the situation, Sughra you have, have you had it?

Sughra Nazir

Yeah, I had the vaccine, I had the first dose and obviously the second dose has now been delayed but obviously the concern with that now is that with the new variants it's not going to offer the level of protection that people are assuming and I know that my discussions with the school have hinged on well once you've had the second vaccine things should be OK for your girls to come back and to me that feels unsafe and unrealistic.

Layla Moran MP

Yeah, thank you very much that's very helpful and Caroline you haven't been offered it yet.

Caroline Lea

No, not yet. I think we live in an area where there's a high percentage of very elderly people and in all honestly I'm safe, I like the word Sughra used about being in a cocoon, I would feel awful if I had the vaccine before the elderly have had it, but I've not even been notified about my first. But I think I echo the concerns that Sughra has about the vaccine, I'm extremely concerned that the schools will say after one vaccine, because that's what's being fed to us centrally and obviously in the media that once you've had one you've got a good immunity and my grave concern lies in the delay between two vaccines and that we've had no testing at all from Pfizer or Oxford they didn't test for a long delay and therefore what kind of protection will we actually have. And for me I feel it would be unsafe to just send them straight back to school and I do fear that it's gonna be kind of mandated to us again that oh you've had a vaccine or two vaccines now, you should send them back and I don't think I'm alone in this, I think Sughra and many other parents especially the clinically vulnerable will say well we don't even know because we've gone against the vaccine testing data, we don't even know if it's going to work yet and if it does at what level. And I think that is a massive concern for most of us.

Layla Moran MP

We're doing a session on vaccines next week, so that's one of the questions we're going to be aiming to pick up. So, thank you both of you for your stories, if I can turn now to Dr Lisa-Maria, thank you for your patience but I think those stories were so compelling, it's really important to hear them in full. So, Lisa-Maria you have released, the Chartered College at least has released a report this morning summarising I understand what we've seen so far and the response so far from the pandemic, bearing in mind we are already more than halfway through the session but would you mind just taking us

through very briefly what's covered in your report or to the key findings that we need to bear in mind for this session?

Dr Lisa-Marie Muller

So we haven't released that particular report yet, the one I will be talking about is our research that we've carried out, my colleague Gemma Goldenberg and I have carried out with 1,800 members of the Chartered College in May and June when we asked them about their opinions of distanced learning, some of the challenges that they've been facing and the Covid crisis more widely which was a follow on from a literature review where we looked at literature from other crisis situations and discussed how that could impact our planning of school closures.

So, I'll just take you through a couple of the findings there briefly. So, as I said we conducted research with nearly 1,800 members of the Chartered College and it showed that indeed teachers and school leaders faced a number of challenges during this pandemic and as they had to adapt to a new form of teaching in close to no time. And although many of the respondents felt confident about distance learning by the time we conducted the survey they still stressed the need for additional training, the lack of its availability, so not enough training that was available for those who wanted to improve their online teaching.

Also, nearly all of the teachers in our survey were concerned about at least some of their students access to distance learning and also their wellbeing and described the extensive work that had gone into supporting the families in the communities during this difficult time. So, we heard from parents turning to teachers for support with a wide range of issues including financial worries, housing issues, domestic violence and so on. Coping with bereavement and in many cases school staff responding to our service felt that they weren't necessarily well-equipped to deal with these issues which also highlights previous research by Child Bereavement UK that highlighted that a large number of teachers felt they didn't have sufficient training in supporting grieving or traumatised children.

But there are also additional issues for those that are currently in training to become teachers as many have missed out on crucial in-school placements leading to concerns about how well prepared they feel to face the challenges of the classroom come the new school year and also obviously currently adapting to distance learning.

And I think it's also important to highlight the potential negative impacts of this crisis on people's wellbeing has been highlighted by the WHO, but teachers have also suffered, or respondents to our survey, from the negative portrayal of teachers in the media that has been going on throughout this crisis and actually 60% of respondents to our survey said that their wellbeing had decreased as a result of this crisis and their workload increased vastly. But some have also said that it has allowed them some additional flexibility that they didn't have before.

And also there is immense pressure on school leaders who need to, or had to throughout this crisis at numerous occasions adapt to guidance that was published very much last minute or changes that were made that weren't necessarily clear so just recently after the winter break we saw a U-turn that school leaders and teachers had to adapt to very, very quickly and school leaders and teachers are experts in communicating with their communities but they need the time to prepare for these changes. They need the time to communicate them and to put them in place and in many instances that time wasn't there. So, the new announcement that hopefully going forward there will be more time for schools to adopt and adapt to changes hopefully those are very welcome, but we'll see how that will go. But that was a major factor and I think also those additional stressed, distance learning, bereavement in the communities, teachers supporting children, they are often the first point of call in such situations and all of that needs to be taken into account as additional pressures on teachers and school leaders in this particular situation.

In addition to of course also their own personal lives, the fact that we have got teachers who are themselves vulnerable who have got vulnerable or shielding family members that they are worried about and that additional stress and pressure that lies on them in this particular situation.

Layla Moran MP

Thank you so much for that summary, that's really very helpful to see it from that perspective. I'm now going to throw it to our fellow Parliamentarians to ask questions. Lord Russell.

Lord Russell

Yes, Caroline and Sughra you've covered an awful lot of ground so I'm going to direct this question specifically to Lisa-Maria, Lisa you've mentioned a minute ago sort of variability in the Government guidance, could you just briefly summarise what the experience of teachers has been in terms of the guidance they've received and you know what must be done better, briefly please?

Dr Lisa-Marie Muller

Yes, I think one of the most recent examples was the guidance that schools will reopen after the winter break and then the fact that they indeed moved to distance learning and I think it's important also to consider that of course schools are indeed open for children of key workers at the moment, that a lot of teachers are still in school, so they've been closed for the majority of students but not all of them. So that is one of the examples where then within a very short time period adaptations had to be made in order to meet everybody's needs in a distance learning environment when we could have had more time to prepare for this and to put the right mechanisms in place and ensure that teachers and students and families have got the support that they need in order to create a supportive distance learning environment.

Lord Russell

And just in terms of the horrible experiences of Caroline and Sughra interacting with their schools, how did you respond when you heard some of the ways in which schools were interacting with them and the way perhaps they were misinterpreting the guidance or were venturing into fields which frankly they were not qualified to go into.

Dr Lisa-Marie Muller

Absolutely, I think everything that was described by our speakers earlier today clearly shows I think the immense pressure that everyone is under in the current situation which creates a lot of anxiety for everyone who is affected by, and it's all of us, it's teachers, it's head teachers, it's obviously families and children and the immense pressure which then leads to potential misinterpretation over-interpretation of some of the guidance and maybe some of the guidance is not overly clear in certain instances and I think that is really something that needs to be considered, that pressure and anxiety that also head teachers are under to comply with guidance in this particular situation.

Lord Russell

Thank you.

Layla Moran MP

Thank you very much. Munira Wilson.

Munira Wilson MP

Thank you Chair and thank you Caroline and Sughra for sharing so openly and movingly your experiences. I just wanted to explore a little bit about children's mental health and wellbeing in this time. There is obviously a lot of quantitative and qualitative evidence that not being at school is having an enormous impact on children's mental health and wellbeing but clearly for families where there's somebody who is clinically extremely vulnerable or shielding at home that the mental health impacts might be quite different, i.e. actually it's quite stressful going into school so could you maybe just very briefly give us a bit more in terms of your reflections in terms of your children's mental health and wellbeing being at home versus school and how Government should be thinking about addressing your specific sorts of cases.

Sughra Nazir

I think it's important as you say because the focus has really been on the impact of lockdown and the impact of being off school or remote learning and that being seen as a negative, but as we've highlighted and particularly as my daughters went back to school in Autumn and the immense impact that that had in terms of their mental health, they are now much happier as they were in the Summer term and there's less anxiety. I think one of the concerns they have is also about the level of compliance and adherence to the rules by other people, so they're acutely aware of whether other people are following the guidance that's out there or whether the risk assessments that are in school have been followed to the letter, so I think it's important that young people returning to school get information about the risk assessments and that are confident that those risk assessments and that guidance is following the latest science.

One of my daughter's concerns, one of them wrote to the school asking for masks to be worn, the other one wrote to ask if she could sit at the back of the class, so the children aren't immune to the news and they do their own research and particularly as they understood the messaging around hands, face, space and act like you've got it and those were some of the things they were repeating back to me to say well we can't because we can't do that in school.

So, I think part of the link back to children's mental health and anxiety should be about them like the rest of the population having that clarity around the guidance and that guidance moving and keeping apace with the science that's out there.

Caroline Lea

My children didn't go back to school as you know but I think that mine being much younger than Sughra's children, but the eldest being nearly 11, they are both ... the older two that go to school they are aware that we're in a pandemic, they're aware that there is a risk to people, not just me, they know that there's a risk to other people so I felt as well that though they didn't attend in-person education had they gone back in September they would have felt very conflicted because like Sughra

we remained cocooned in our safety bubble, I mean we're in the South where cases over the summer were much lower, they're obviously not now, but even though things were allegedly safer in terms of less cases moving around they knew that we had to take precautions. I mean we still went nowhere and if we did go to places where there were humans we would obviously go to places where there were very few people where we could keep a very big distance. So, if they were to go back into school they knew that they couldn't go near people up close, they knew that they had to wear face coverings and they knew that the hand hygiene had to be absolutely A-star and therefore if they'd gone back into school knowing the risk to humanity but also the risk to their own mother, that would have really I feel been quite detrimental to them because much like Sughra's children actually lived through that experience and the anxiety that caused them knowing that they had a mum at home who was negatively affected by Covid particularly it would have harmed them much like it did Sughra's children because they know what the risks are.

I think there are some children who have been perhaps know less about the condition, but I think if you're clinically vulnerable especially you have to make them aware because if you are anywhere at all which obviously Sughra and I don't really go anywhere, but if you do go anywhere at all they have to know the risks and therefore at school, school is in conflict with all of those safety measures of being in distance from people, being with a face covering and sadly school by nature of school can't do those things, if you've got the full classes in. So, the anxiety for them but likewise their mental health during lockdown and during our shielding process, exactly like Sughra said, my children are happy at home, they know they're safe here, they know they can remain safe here and they know that they're not in any way going to breach the Covid safety rules and consequently threaten me or anybody else in society for that matter. They're OK.

Munira Wilson MP

Thank you. Lisa-Maria did you want to come in at all with a word about teachers and their mental health, of course many of them are parents too.

Dr Lisa-Maria Muller

Yes, as I mentioned there has indeed been, so we've found in our study a decrease in people's wellbeing even though they are also finding, some found it easier to balance, to find a better work-life balance, however I think it's also important to mention another finding that comes out of our last study but is also one that we're reporting on in our current report which is more about the needs of children of special educational needs and the potential exacerbating effect on their mental health and wellbeing as a result of this crisis, so particular for example in our second report teachers in special schools have noticed that the disruption of routines for example can be particularly difficult for children on the autism spectrum for example so that's also something that is important to consider in particular.

Layla Moran MP

Thank you very much. Barbara Keeley.

Barbara Keeley MP

Thanks Chair and thank you Caroline and Sughra for your evidence and all the challenges and what you've been through in this crisis, it's really harrowing situations. I think you've answered the first of

my questions which is about safety and understanding of risk, so I'll move onto a question to Dr Muller, given that the Government advice surrounding the transmission of Covid-19 was focused on hand-washing and cleaning of surfaces rather than Covid-19 being airborne, do you feel there's adequate understanding of this in schools and what impact has the changes in messaging had on the ability of schools to ensure they're safe to open?

Dr Lisa-Maria Muller

So, I would say the changes themselves are maybe not so much of an issue but rather how they're communicated, when they're communicated and the time that schools have to put them in place. Teachers and head teachers are very good at communicating with the communities they live in. Usually with their students, with their members of staff, so if there is a change in the protocol that should be put into place in order to make schools safe then this needs to be communicated with sufficient time in order for everyone involved to have the time to implement those changes and communicate them adequately to everyone involved. I think that's the most important aspect here.

Barbara Keeley MP

Do you feel enough is being done to ensure schools have resources to ensure they're safe and has the Government provided enough support and resources to do so, I mean I think we all know the answer to that but if you could tell us your perspective.

Dr Lisa-Marie Muller

So, I think there are definitely aspects, so we know that there is still a problem with access to technology which means that there is a problem with access to distance learning. We know that there is, so from our research we've heard that the support from other Government agencies, not necessarily always in place particularly for children with special educational needs as an example which makes it a lot more difficult to support all children, if these additional resources are not available for schools. In addition to, so in our study some comments were made also about additional financial resources for counselling, for support of students who need it, who've been through traumatising situations as well as the necessary additional cleaning or cleaning supplies that are necessary to make the school a safe environment. Those were points raised in our report.

Barbara Keeley MP

Thank you.

Layla Moran MP

So, thank you so much. Baroness Brinton.

Baroness Brinton

Thank you very much, thank you especially to Caroline and Sughra and just to say your shielding letter dated the 7th of January from Matt Hancock and Robert Jenrick says quite explicitly that shielders must continue to shield even after they've been vaccinated, so you've got that tool and you may, do use

that. My question I think is more to Lisa-Maria because you have made the case very well Caroline and Sughra as to why family members who are clinically extremely vulnerable, children should be able to stay at home. But are other parents, are there other groupings of parents who are also concerned Lisa-Maria, has that come through in your survey and what extra measures need to be put in place. And given the reports of the pressure put on both Caroline and Sughra who is it that head teachers are scared of in the interpretation of guidance?

Dr Lisa-Marie Muller

So, one group of parents is as I mentioned are parents of children with special educational needs and those who are particularly affected by disruption of routines and how any of those changes may impact their children, but of course anyone who lives with vulnerable family members will find it very difficult and that goes for both teachers, head teachers, students and their families and their surroundings. And sorry, the second question was about?

Baroness Brinton

That it's clear from the way pressure has been put on parents that there is something going on in schools, so you know head teachers, the Head of Pastoral Care a lot of pressure on them, where is that coming from?

Dr Lisa-Marie Muller

Well I think from particular guidance about re-opening schools, guidance about saying that students have to be in schools, about a smaller number of students qualifying as clinically extremely vulnerable or as their families qualifying as clinical extremely vulnerable and the impact that it has on expectations, on attendance expectations and then head teachers feeling that pressure to implement because they implement the guidance that they are given and if that is not clearly communicated and if there is too much room for interpretation there then head teachers and teachers are in a very difficult position where they have to take the decisions to interpret the guidance which is in some places just not clear enough and I think this is where the main problem lies.

Baroness Brinton

So, that would include things like although we know we weren't talking about truancy earlier, absentee rates would be counted which damages the school's targets and influence all of those things, yeah OK thank you that's very helpful.

Dr Lisa-Marie Muller

For example.

Layla Moran MP

Well, thank you so much Baroness Brinton. Everyone, we've reached the end of the short time and it has felt very, very short because it's been so rich of this part of the session. We'll carry on and I'll introduce the next set of panellists in just a moment but I just want to say an enormous thank you to

Sughra and Caroline for their incredibly moving stories, certainly ones I will not be forgetting anytime soon and to wish you all the very best and best of health and we're thinking of you as we move through the next few weeks because I'm sure they're going to be tough but you're very resilient women I can see that, but thank you so much for everything you've done and for coming to speak to us. And also, to Dr Lisa-Maria for your evidence on behalf of the Chartered College. I should have expressed my interest as well because I'm a member of the Chartered College although I will say I didn't know what Lisa-Maria was going to say today, but I'm very grateful for her spending the time to do that. So, thank you so much all of you, you are very welcome of course to stay for the next panel.

And it's the moment where we can dive into the slightly more clinical side of this and we've got a really fantastic panel now and I'll introduce them very briefly before we get started. We've got Professor Anthony Costello, Professor of International Child Health and Director of the UCL Institute for Global Health. A member of Independent SAGE and a former Director of Maternal and Child Health at the WHO. I hope I can call you Anthony if that's alright and thank you so much for being with us.

Dr Sarah Rasmussen, EPSRC Fellow in the Department of Pure Mathematics and Mathematical Statistics at the University of Cambridge although currently on temporary leave for a sabbatical fellowship at the Institute for Advance Study at Princeton. Sarah has been involved in post-publication criticism on the Lancet Child and Adolescent Health systematic review on school closures which was led by SAGE members and ECPCCH President Russell Viner. So, thank you Sarah, it's lovely to have you with us, looking forward to your contribution.

And last but certainly not least we've got Dr Deepti Gurdasani, Epidemiologist and Senior Lecturer at Queen Mary University of London. Her research focuses on epidemiological and genetic factors that influence global health. So, I hope from that very long introduction we can see that we've got lots of knowledge here that we are very much looking forward to draw on.

And my first question and if I can start with Anthony followed by Sarah and then followed by Deepti. Broadly what do we know so far about in particular the likelihood of Covid transmission in schools, can we rely on the current data that we are seeing at the moment, for example given that children are more likely to be asymptomatic do we fully understand the prevalence of Covid-19 in schools? So, Anthony.

Professor Anthony Costello

Can I pass that question to Sarah because I think she's going to give, you've got a lot of questions and to get through I think she'll give, and maybe Deepti as well, the best answer to that?

Layla Moran MP

Certainly.

Dr Sarah Rasmussen

Yes, so we have a lot of very strong evidence of transmission in schools, I think there's no question that transmission is occurring, and that evidence comes from lots of different sources, so we have Public Health England outbreak data for acute respiratory infections where they count how many times they've found a link of two cases that knew each other and then they try to associate that with test data to confirm whether that came from Covid. So, the outbreak data that they've found from education systems has been comparable or sometimes greater than that they've counted from work. Now they have different methods of counting so it's not the most reliable way of comparing which

sources are the greatest source of outbreak but at least it tells us that we know that these cases are occurring.

We have ONS data, that's one of our really richest sources of data, random sample testing data so that's not sensitive to whether people have symptoms or how we target the testing and if you look at the weighted fortnightly estimate data from that we find that from mid-October to mid-November the largest relative increase from the September to October prevalence rates occurred in primary students more than any other age group. And then if you look at December just after lockdown the two largest increasing groups were primary and secondary students and again primary had the largest relative increase even though they had started out very high.

It's still the case that secondary students are probably the largest, the fastest transmitting group and they tend to have the highest prevalence but both groups are substantially transmitting. We also see the reverse happening, so when schools closed if you look at the ONS data from 27th of December to 3rd of January the primary nursery and secondary were the only ones to decrease when everyone else was increasing even though before the primary and secondary were the ones who were increasing faster than anyone else.

And now unfortunately as schools have reopened there is only about a 21% average attendance rate in primary schools but that still seems to be enough that there is then a substantial uptick in prevalence in primary students since schools opened. Even though they had been decreasing dramatically when schools were fully closed. So, we have React One data from the Imperial College studies that shows us that during the half term break there was an overall drop in prevalence and that there was a dramatic drop in primary school prevalence. We have ONS schools infection survey which where they just tested the people who are asymptomatic in schools and not identified by symptoms or by contacts and they were sort of rather staggeringly high rates of prevalence there compared to the prevalence that we knew already occurred in students.

And then we also have Public Health England pillar one and pillar two test data and if you look at the positivity for that initially that under-counted students because I think it wasn't adequately targeting asymptomatic students but now pillar two shows primary students as the highest infected age group and pillar one has them has the highest increasing rate of age group. So, I think there is no question that there is transmission occurring in schools and that it's pretty dramatic in cases. I mean it takes time to ramp up, there was less transmission at the very beginning when they started out with little prevalence but once prevalence got high enough there was definitely substantial schools transmission.

Layla Moran MP

Thank you, that's really helpful background. Deepti, have you got anything to add on here?

Dr Deepti Gurdasani

Yes, from the beginning I think there's been this idea that children are less susceptible to infection and less likely to transmit and this idea was based on a very limited data from very flawed studies that carried out testing based on symptoms and as you said earlier children are much more likely to be asymptomatic, less likely to be identified as the index of first case in a household with those studies. With much better studies now, we know that children play a very, very important role in transmission and actually if you look at evidence from many different countries it's very clear that school closures is one of the most effective interventions in bringing down R, or our rate of transmission. If you just look at evidence from within England the ONS household infection survey shows that children, including primary and secondary school children, so children two to 12 years are two times more likely to be the index case in the household, so more likely to bring infection into the household than an

adult. Children 12 to 16 years are seven times more likely to bring infection into a household if you look at data from April to November and once they become infected and bring infection in they are two times more likely to infect contacts within the household compared to adults.

So, that's a substantial increase in risk and we still don't know whether children are more or less susceptible but in many ways it doesn't matter because the level of exposure that they have is so high that overall they contribute a lot to transmission within schools and transmission within the community and that's very, very clear from global evidence.

So, schools are a huge link of transmission between different households and unless we address this and make schools safer it's very unlikely that we will be able to get on top of pandemic control.

Layla Moran MP

Thank you so much that's really incredibly helpful. We've already got lots of questions coming in and ones that are pre-set so I'm going to go ahead and throw out to my colleagues, Baroness Finlay.

Baroness Finlay

Yes thank you, you've answered quite a bit of the question I was going to ask but can you tell us a little bit about different groups of children such as those who've got learning difficulties and who may need more personal care and whether we've got any data from them and also the new variants, like the South Africa variant that people are getting worried about. How much are we testing children in those areas where it exists for transmissibility and if there's any evidence of difference in transmissibility in children with the different variants.

Dr Deepti Gurdasani

Sure, so I'm going to answer the question about the variant first regarding clinically vulnerable children I'm not aware of very much data in this area but I'm going to defer to Anthony and Sarah for that. But to answer the question about the variants, I mean certainly earlier data did suggest that at least what we call the UK variant was more common in younger children but as time went on it became clearer that it was more uniformly spread across the population, so we think it may have been more common in children early on because it was spreading at a time when schools were open but other restrictions were in place for adults, so it's very likely that transmission in children was higher than in adults at the time. It's unlikely that children have a special sort of susceptibility to the variant but it does mean that if it's more transmissible across everyone the mitigation measures we need to reduce transmission in children, which is a huge part of a contribution of transmission in the community, need to be stricter. It's very clear during the last lockdown for example when schools were open but there was a lockdown in place, the cases of the new variant were rising with an R of 1.5 which is very, very high and it's only closing schools that actually really brought our R below one and even now as Sarah very elegantly said it's very clear that in primary schools cases are still not dropping, even though attendance is just one in five children.

So, the variant does change the way we look at this because it overall increases transmission. The South Africa variant is quite concerning but not just in terms of transmissibility because of its ability to escape immune response to previous variants, potentially rendering vaccines less effective as recent trials are showing. So, I think the impact of that needs to be considered more in terms of vaccinations but it's true that as vaccination increases across the population this variant is likely to have an advantage and become more common. So, I think both of those things are concerning. But,

I'm going to defer to Anthony or Sarah if either of you want to comment on the clinically vulnerable children.

Dr Sarah Rasmussen

I guess the only thing that I would know about special education is from school absence data for staff where they had confirmed case data. The special education teachers had a higher rate of infection than those for other teachers. The DfE recently published a correction to their absence data and I haven't looked at the most recent so I don't know if that's still the case with their recent correction, but at least with the earlier version it looked like those in special education had a substantially higher rate, so that likely you know was an indication at least some sort of metric on what level of infection was occurring among the students.

Professor Anthony Costello

Yeah, I don't have much to add. I would simply say look, children spread this disease, they carry this infection. They generally don't get the same level of symptoms and the younger they are the less likely they are probably because of the receptors that the virus binds onto being much lower in younger children. So, you know in that sense they are much more likely to be asymptomatic or to have very mild infection. But, they are carrying it and they can spread it as Deepti and Sarah have said. And there was a recent study in Austria which showed where they measured all the levels of primary, secondary and teachers and actually primary school children in that study had the same level of infection as in secondary schools. You know other studies have suggested, I don't know what Sarah and Deepti think of this that secondary school people are more likely to have it than primary school, but [inaudible 1:01:20.3].

Layla Moran MP

We've just lost Anthony, he's just frozen.

Professor Anthony Costello

Oh sorry.

Layla Moran MP

No, it's alright but perhaps Deepti wants to pick that up because you looked like you were wanting to come back on that.

Dr Deepti Gurdasani

So, yeah I just wanted to add to that so in one study that it looked at thousands of interventions over 200 countries and the effect of them on R. They found that education institution closures was the second most effective and when you compare closures of primary, secondary schools and pre-school settings the results were very similar. All of them uniformly resulted in about a 20% reduction in R.

Layla Moran MP

Is that the Nature paper, is that the one that was published in Nature, yeah.

Baroness Finlay

Layla, can I just ask a quick follow up then and that is that with this data which sounds quite powerful, how much dialogue has there really been between those who've got the data and interpret it and the Department for Education?

Dr Deepti Gurdasani

So, my understanding is that a lot of experts actually misinterpret the data around schools because a lot of the studies are based on symptoms and when you test children based on symptoms it doesn't look like many people are having infection and often you attribute the case wrongly to the adult who got infection later but developed symptoms. So, for example there was a Norwegian study that's been cited by many people recently as no transmission, but if you look at the study carefully almost all the children were studies, there were 13 children studied already had an adult in the household who was thought to be the index case, so infected before the child but it's very likely that it's the children who brought the infection in and the adult was actually the index case. And it's just complete misunderstanding of the evidence, even amongst experts who are not epidemiologists that has sort of led to this narrative that children don't transmit and for that reason we've really struggled to get any change in policy on this despite the current evidence strongly suggesting children play a huge role in transmission, not just globally but even in England. Even our own ONS evidence which is based on surveys of asymptomatic people shows this very clearly, children actually transmit more than adults, but somehow this evidence isn't being considered in policy.

Layla Moran MP

Thank you, well I'm sure we'll return to that point. Munira Wilson.

Munira Wilson MP

Yeah, so given what you've all just said how does that square with Dr Jenny Harries' comments to the Education Select Committee where she said that children, she didn't see pupils as a significant driver of large scale community infections and Professor Devi Sridhar was looking at some international evidence over the weekend suggesting that children, particularly younger children, are not transmitting as much as we first thought and actually that the harms of keeping them out of school are far greater?

Dr Deepti Gurdasani

So, I've looked at this evidence carefully, especially the evidence cited by Devi and the evidence published from the Scottish Government saying that children don't drive transmission and I've actually communicated this with them as well but not really got a response. All of the studies cited including the ECDC guidance is heavily flawed, it all focuses on studies that were conducted based on either symptoms or for example the Public Health England study that was conducted in England and showed very low transmission, again symptom based testing at a point in time when community transmission

was very low and when only 7% of children were attending schools. So, a lot of these studies have been carried out either at points in time where schools were closed so household transmission for example when schools were closed, zero prevalence studies where schools were closed, attendance was very low, community transmission was very low or there was only symptom based testing, so outbreaks were not likely to be picked up and adults were more likely to be thought as index cases rather than children.

They have also cited this particularly study that is heavily flawed showing that parents of children don't have a higher death rate or higher rate of infection than people who are non-parents in comparable groups, but if you look carefully at that study what you find is that the non-Covid deaths in the parents are much lower than the non-Covid deaths in the non-parents. This actually suggest that these groups are not comparable at all because there's something different about the parents that puts them at overall lower rate of any sort of death, so the fact that they have similar Covid deaths doesn't actually prove that they are at lower risk.

If you look carefully at the study you actually see that parents of children in secondary school actually have a higher rate of infection, a statistically significant higher rate of infection. So, a lot of the evidence that's been quoted to justify these policies is heavily flawed and cherry-picked. There is so much evidence out there which is less flawed which is based on studies of asymptomatic cases, like the ONS data, like the study that Anthony spoke about from Austria, including studies that look at impact of school closures temporarily and geographically in a global context on R, but none of those studies are ever considered in these documents that seem to justify having no mitigation policies in schools because there's no transmission related to schools.

If repeatedly the same study is quoted again and again and again and the evidence that is less biased is completely ignored and that less biased evidence is actually very consistent in what it shows.

Layla Moran MP

That's really interesting, thank you very much. Perhaps the others would like to come in on that. Anthony?

Dr Sarah Rasmussen

Yes, so I think that there are a lot of even kind of basic data related misinterpretations of some of the studies that have come out, for example one of the earliest metastudies on susceptibility for children was a German paediatric study that came out in September and it used ... there's sort of technical reasons like it used geometric means of odds, odds means... instead of weighted arithmetic means of ratios of secondary attack ratios which is the thing that you actually care about and it's a very technical point that it actually makes a huge difference so you get like a point eight ratio ...

Layla Moran

Can I stop you?

Dr Sarah Rasmussen

... of children to adults rather than a .56 which people have said is just about a half and that's before you take into account that the majority of the studies didn't test you know nearly all of the children and you know before you get into the issue that many of these were based on household contact

studies where you had say one child and one or two parents and [inaudible 1:07:58.8] and maybe the grandparent had more primary care of the child and you're comparing the rate of a parent passing infection to their partner versus a parent passing infection to a child who is maybe more [inaudible 1:08:13.3] grandparent. So, there's really not kind of a comparable measure of susceptibility when you look at that kind of case and if you look at contact tracing studies that are community based rather than household based the susceptibility of children goes much higher so it looks more comparable to adults.

Layla Moran MP

OK, that's very helpful. Can you just go backwards, you were talking about the ratios, can you just explain for those who don't ...

Dr Sarah Rasmussen

Yeah, I mean it's kind of ... there's this thing called an odds ratio where you take the number of positive cases versus the number of negative cases instead of the number of positive cases versus the number of positive plus negative cases and people tend to use this in statistics sometimes because it's for technical reasons easier to work with and there's some justifications people make for using it as well, but it's only really a good approximation if you're dealing with very low fractions. If you're dealing with higher fractions it's a very poor approximation and it can make you know, it can have serious impact on the computations that you make.

Layla Moran MP

OK, thank you, so quite technical but important when you've got bigger numbers is that my understanding, thank you very much. Anthony what's your take on this, because I'm finding myself and I don't know if I speak for my other fellow Parliamentarians here, we are trying to help shape policy but when we've got different experts saying different things it's just very confusing, so help us, you know what is it that we need to be looking for?

Professor Anthony Costello

Well I was going to come onto your next question which was about the latest findings of ONS that up to 15% of children have on-going symptoms five weeks after, could I address that or do you want me to go back?

Layla Moran MP

Well, we're going to come to that, we'll come to that but on this point around the transmissibility among children has been under-estimated I mean do you concur with ...

Professor Anthony Costello

Yeah I do, I think what Deepti and Sarah both said for technical reasons and because there hasn't been a proper survey of all the literature at the right time I think they are absolutely right that children, the

evidence I've seen suggests children are, you know not far off the same as adults at transmitting this infection so we have to treat them as such.

Layla Moran MP

OK, that's really helpful thank you. Sorry, Barbara to ask that question.

Barbara Keeley MP

Yeah, I was just saying that the ONS has suggested that 13-15% of children have on-going symptoms five weeks after testing positive for Covid-19, we've also talked a lot about asymptomatic transmission, what does all this suggest about changes in guidance and the prioritisation of vaccinating teachers and young people?

Professor Anthony Costello

Yeah, I think this is a really good question. So, you know this data has just come out that 15% actually of secondary school children, 13% of under 12s had symptoms or were struggling with symptoms five weeks afterwards. Now, on December the 30th the Joint Committee on Vaccines and Immunisation have put out statements saying following infection almost all children will have asymptomatic infection or mild disease, very limited data on vaccination in adolescents and none in children, although I think trials are on-going at the moment in America. And so, they advised only children with very high risk of exposure, serious outcomes, older children with neuro-disabilities should be offered a vaccination.

However, I think, and we were discussing this just last night at Independent SAGE, and we shall write to the Chair of the Joint Committee to say in light of the ONS data the worry is this, we don't really understand Long Covid and what it means, you know we don't know how long this virus lasts in people's bodies, even in their brains, we don't know the long term effects on the immune system and there's a lot to be concerned about looking at the figures, you know already we've heard of 300,000 people with Long Covid and many of these will have presumably symptoms for a very long time.

Now, children are very special risk area in that regards. Now, there are 19 million children in the UK, if we just let them remain unvaccinated and half of them become infected, that's nine and a half million and if 15% or 13% of them get prolonged symptoms that could be 1.3-1.5 million children, that's a lot of children, and we don't absolutely know what the impacts are going to be long term. It's absolutely true what the JCVI say that they generally get mild disease or no infection, but in that group of children do we know and hand on heart this is just a gut feeling, we don't know exactly, and therefore we're writing to them to just say look, should we be thinking on the precautionary principle about as soon as we get data of safety that we should be vaccinating children, even if they're the lowest priority group because of the potential risks here.

You know, I'm not saying we must vaccinate all children and it should be tomorrow, I'm just saying this needs some new consideration in light of these findings.

Barbara Keeley MP

Thank you. Do either of the other panellists want to add?

Dr Deepti Gurdasani

Can I just add a bit to that? So, you know there's this thinking about Covid-19 from the beginning that's a bit like flu and when we talk about Long Covid it's some sort of post-viral syndrome like fatigue after flu or something like that. That is not the case. We don't understand Long Covid yet but earlier evidence shows at least in adults that even with mild or asymptomatic infection you can develop long term effects like multi-organ dysfunction even in children we see worrying markers, inflammation and [inaudible 1:14:11.2] persisting over time. So, we don't really know how long these effects last, what is the impact on children's health and even if they're reversible in everyone and given that it would be completely negligent to put children at risk in this way when we know a substantial number of them develop these long term symptoms, when we have no idea what these symptoms mean.

But, it's very clear and it's becoming very clear that this may not be a short term illness in many people, it might be actually a chronic illness and that's how we need to look at it. We can't keep comparing it with the flu which is predominantly an acute illness.

Layla Moran MP

Thank you and we had a very moving session on this last week where we've been taking up this cause so thank you for your contribution there. Baroness Masham.

Baroness Masham

To what extent have or should the new variants of Covid-19 in the UK be taken into account in determining Government policy around the reopening of schools and I would like to add are the vaccines effective to these variants and should the teachers and teaching assistants and/or school workers be vaccinated? Perhaps Professor Anthony could start.

Professor Anthony Costello

Yeah, my understanding of the variants are that the UK variant and the South African variant do obviously increase transmissibility. The South African variant does seem to lower the responsiveness to antibodies but many virologists say, or immunologists say yeah but it's not at a level that should significantly damage protection. We don't know so much about the Manaus variant unless I've missed some papers in the last two or three days and maybe Deepti or Sarah know more about that.

But your point about teachers I think is interesting because there is one argument that says well yeah, teachers are no different, you know if you vaccinate teachers why don't you vaccinate shop workers, taxi drivers, you know railway workers, shop assistants, etc, why should they be a special case. Actually, there is [inaudible 1:16:32.9] first they're the only group that I know of who will actually spread this amongst age groups because all the others will not be in contact with children. They're the only group of workers who I can think of who cannot use social distancing and masks when they're at work in order to do their work. We're also asking them to go back to work before many other groups without protection and we want to keep teachers in work and not to be off work absent with the infection or self-isolating. So, a vaccination early would be the best way to reduce it.

Now if people say oh yeah but there are lots of other people and you're gonna delay them getting the vaccine, look there are 500,000 teachers, that takes a day on the current regime, so we could actually vaccinate all teachers within a day and I think on those grounds there's a strong argument to be made that teachers and teaching assistants and people in schools should be getting a vaccine earlier and move up the priority table. But I know Government are thinking about this right now so we'll have to

wait and see, but I think those arguments are rather persuasive. But I don't know what the others think.

Layla Moran MP

I'll come to them in a moment, but can you just also comment on nursery workers, do you comments apply to them as much as they would to the rest?

Professor Anthony Costello

Well, the data from a couple of weeks ago was that nursery schools were the biggest contributor to transmission from amongst all education sources because most of the others were closed. So, I think I would include nursery workers, yeah.

Baroness Masham

There are more variants appearing practically every day, there's one in California and then there's the two in Brazil, there's one in Germany so they keep on coming.

Professor Anthony Costello

Well they will do and I think we have to be a little bit cautious about jumping with every variant and every headline in the newspaper because this virus will, it will just continue to mutate. My hope actually is that viral mutation will eventually solve this problem for us, in other words I may be completely wrong here but a lot of ... and we can't take this, but I'm hopeful that eventually the virus will in order to survive will make itself more and more transmissible but will reduce its virulence, that's what quite a lot of viruses have done in the past. But there's no evidence of that yet, so don't take that as any kind of advice. I don't know what Deepti thinks about that.

Dr Deepti Gurdasani

Yeah, I do want to add to that, so I'm really concerned about the mutations that are happening and I'll explain why. So, you know we've looked at the so-called UK and the so-called South African variants and the South Africa variant has this particular mutation that Anthony mentioned, we were very concerned about vaccine effectiveness. Unfortunately, what we saw in the laboratory has now borne out in vaccine trials, so the Novavax and Johnson and Johnson trials have shown a difference in efficacy in areas where the South Africa variant is not present like the UK and the US and within South Africa and difference in efficacy, well it's about 20% so of course it still provides protection and people should take the vaccine but it suggests that there is a reduction in effectiveness of vaccines against this variant.

Now what's really concerning is a Public Health England report that came out yesterday that shows that the UK variant has now developed the same mutations and its developed this not once but many, many different times in many, many different parts. So, it's very clear that this virus is adapting in different parts of the world but converging on the same mutations that are favourable for it and there is no reason this process will stop. I think this will continue if we let transmission continue and vaccination per se is not going to solve this problem, at least not in the short term, and if anything, vaccines are going to put more selection pressure on variants for these mutations to emerge.

So, we need to really think about controlling transmission urgently alongside vaccination because as you say we do hear about a new mutation every day and yes, all of these are not concerning but the ones we have circulating in the UK including the new variant that was found, or was reported on yesterday is very, very concerning.

And regarding the impact on schools, so the South Africa variant and the UK variant both are associated with higher levels of transmission and it's very clear from the last lockdown that even with very strict restrictions cases of this variant were rising. Even now when we're in national lockdown and schools are closed to most children the ONS data suggests that cases are dropping but not quickly enough, in fact we seem to have plateaued recently and if you look at why the cases have plateaued in primary school children but are dropping in all other age groups and that seems to be at a time when only one in five children are actually attending primary school. So, that tells you how much harder it is to get this under control than it may have been previously with the previous variant because it's more transmissible.

So, to me this makes the need for mitigation measures in schools all the more important and the need to reduce community transmission the background to prevent surges in schools as soon as they are open very, very important.

Baroness Masham

Is it a possibility that when you've been vaccinated you could carry the infection, because that's very important if that's the case?

Dr Deepti Gurdasani

So, vaccines are not fully effective even in preventing disease, so it's very clear that even if you are vaccinated you can get infected, the efficacy for preventing infection is not currently known but it's definitely going to be lower than the effectiveness in preventing disease. So, for example for AstraZeneca if the effectiveness is 60-70% preventing disease it's going to be lower in preventing infection. So yes, you can carry even the previous variant of the virus but it's more like that you will be able to carry or be infected with a variant that is not well neutralised by the response to these vaccines and that's exactly what we are seeing in the vaccine trials that are being carried out now in South Africa.

Baroness Masham

Thank you very much indeed, that's very interesting.

Layla Moran MP

Thank you, Sarah do you have anything you'd like to add there before we move to Baroness Brinton?

Dr Sarah Rasmussen

No, I mean I don't really have any background in vaccines so I probably shouldn't opine on that.

Layla Moran MP

OK, thank you very much. Baroness Brinton.

Baroness Brinton

Thank you very much. We heard in session one some of the concerns about parents feeling that schools were unsafe and I think there's a distinction I'd like to draw in my question between those where children maybe going home to members of the family who are clinically extremely vulnerable and to other families as well. So, what has to be done to ensure that schools are safe and is that a practical possibility that schools could ever be totally Covid secure. Take it as read from Professor Anthony Costello that you're recommending vaccination of teachers and other classroom staff as soon as possible but what other things do we need to do?

Professor Anthony Costello

Well on safety there's a whole lot of stuff, we put out a report from Independent SAGE and we've just updated that on maintaining safety in schools and the WHO have put out stuff which is very good around what you can do in classrooms, what you can do with buildings, activity schedules, policies and the like. So, you know students wearing face masks, washing hands frequently, moving classes outdoors if possible, increasing ventilation which is extremely important, possibly filtering indoor air, how practical that would be, holding PE outdoors, stopping high risk activities like choir practices which we know can transmit and then of course for certain schools whether to stagger arrivals and all the various policies which actually a lot of schools have put in.

But one of the most important things is what advice would we give now to head teachers and local authorities about when it is safe to open schools, you're never gonna have totally safe schools but at what period. At the moment, you know the Prime Minister is saying March the 8th, so you know if we assume that children amplify viral transmission then the criteria for reopening has to be sensitive to the local prevalence of infection. Because schools in low incidence areas will have a much smaller risks of amplifying that community transmission than schools in high prevalence areas and when you look at all of this you've basically got to ensure that you're keeping the R below one and stopping exponential growth and so you would want to open schools at a certain threshold level and my colleague Professor Karl Friston has quantified this as basically around 100 cases per 100,000 per day in your local area. If you get it below that then it's safe to open schools.

And then you can categorise as we have done schools in low incidence areas that would be less than 10 cases per 100,000, medium risk between 10-50 and higher risk areas which would be greater than 50 up to 100 for opening and beyond 100 you wouldn't open them. And then we've got criteria about what safety measures and the stringency of them that you would impose on each of those. We've got two areas in the country I'm told at the moment which do have levels less than 100 cases per 100,000 and therefore arguably you could open in those areas now and having a date is less good than having a quantitative explanation to head teachers and local authorities of what's happening in their area and what they'd need to do and then of course how to keep people safe and I think as part of that having teachers vaccinated for the reasons I gave earlier would be a good part of that.

The longer term issue of vaccinating children is a separate issue I think.

Baroness Brinton

Thank you. Could I just come back to both you and to Deepti who both referred to air filtering in schools, can you dive a little deeper into the aerosol transmission and what schools would have to do to make sure that air is filtered in classrooms given that we're not really gonna be warm enough in this country till probably May or June to teach outside.

Professor Anthony Costello

Oh, children are tough aren't they, wrap them up, all this nonsense about they've got to be at 27 degrees, you know, for goodness sake.

No, on ventilation I'm no expert on this, opening windows but actually some schools can't open their windows so it's difficult. There are these ultra-violet things that are supposed to have some impact. Air conditioning doesn't help you that much because it doesn't circulate the air sufficiently. I think this is probably beyond the expense of almost every school in the country bar a few, but I'm no expert on this, I would like to ... I think we'd need to talk to some air circulation engineers.

Dr Deepti Gurdasani

I can certainly add to that although I'm not an aerosol expert either but I think the Department for Education guidelines are completely out of whack with current evidence on aerosol transmission in many, many ways. So, one is mask use for secondary school children and being encouraged for primary school children given the high levels of transmission which is completely in line with WHO and CDC guidelines which we're not following at the moment. Air filtration devices with air purifiers which have a high turnaround rate, so maybe five times per hour could actually reduce the aerosols by 90% very, very quickly so within half an hour and we need to have covered outside monitoring alongside and these are measures that have been implemented in other countries like Germany and a lot more attention to these has been given and they are effective and actually they are cost-effective because they're not very expensive and the reduction in transmission within schools into the community would actually have huge cost saving impacts that need to be considered rather than ending up with more people in hospitals which costs a lot more money and of course the huge impact of absenteeism and deaths on the economy.

The second problem with the Department for Education guideline is that currently if you look at when people get infected we only require isolation of children who are literally sitting next to this person or in front, that's completely not in line with aerosol transmission. Aerosol transmission is like smoking so imagine you were smoking in a room, the smoke would get to everybody in the room and we know this from studies of indoor transmission, it can happen well beyond even two metres so the current Department for Education guideline is really putting children at risk and teachers at risk.

The third thing is that there is absolutely no bubble cap in our Department for Education guidelines so we've heard of bubbles of up to 300 children in schools which frankly is completely out of line with any sort of infection control, so we need a cap on bubbles and class sizes which doesn't seem to be present at the moment. And as I think many parents mentioned before, we need options for remote or blended learning for children with clinically extremely vulnerable parents, you know I'm not saying we close schools to everybody but certainly parents need to have the option if they don't feel safe or their children are vulnerable and don't feel safe and that means supporting parents, supporting schools, supporting children with whatever they need so we don't worsen those inequities and don't subject parents to the sort of things that we heard about during the last session.

And smaller class sizes, smaller bubbles, use of large spaces which I think Independent SAGE has spoken about a lot, including recruitment and maintaining additional staff to make those classes smaller. Protection of teachers who are vulnerable as well, let them teach remotely where possible or at the very least they should be allowed to protect themselves by wearing PPE, so we really need to bring our schools in line with the current evidence. They are not magical places where transmission doesn't happen. We have all these things in place in our indoor settings in workplaces, there's no reason that we should be putting children and teachers at risk and not having these things in place.

Baroness Brinton

Thank you. Sarah, was there anything you wanted to add to that or has it been covered?

Dr Sarah Rasmussen

I think it's mostly been covered, I probably wanted to add a plug for not having these Draconian measures against parents who are clinically vulnerable or medically vulnerable, I think it's really important that there is official guidance that is changed to instruct schools that that is not appropriate. In fact, there was a legal proceedings against the Department for Education, or a pre-legal letter where they responded saying well actually it's up to the schools whether they allow children to do this or not, we never really said that they couldn't do it. But they didn't change their guidance saying that it's up to the schools, so if they really feel that they need to change their guidance and they need to say that schools need to support parents who want to remote school their children. And it's daft to say it's a safeguarding issue because the way that parents are forced to respond is to take their children off-roll so you can't claim that it's harder to safeguard people when they are remote schooling than when they are off-roll.

Baroness Brinton

Thank you.

Professor Anthony Costello

Just one other thing is even if schools don't open until March there is a huge difference between the haves and have-nots in this country and it's really hit and miss about ... a lot of children are not getting any education at all at the moment and the access to online education you know, we know in private schools almost all of them are getting this, in many parts of the country the poorest people don't have access to Wi-Fi, I think there should be Alan Turing schools, in fact Robert Halfon who was on The Week in Westminster was suggesting this, saying like Nightingale Hospitals where you've got you know proper circulation of air with lots of laptops and people able to access them, not just Nightingale, I think using community centres and the like, we've really got to focus on getting children back into their online system of education, even if we can't get them back into schools right now and we need more laptops and we need the finance to do this for our next few weeks. And of course, France and Sweden haven't actually closed schools because I think they have much smaller classrooms particularly in Sweden and therefore they pay attention to all of this.

So, there are things that we can do to not make everything totally safe but to get things improved and to make sure that the poorest children are getting access to some kind of decent online education.

Layla Moran MP

Thank you very much. Lord Strasburger.

Lord Strasburger

Thank you Chair and good afternoon. Professor you've already given us a very clear set of criteria about when schools are ready to reopen but I wonder if each of you could wrap this session up by telling us what is your key message to the Government regarding reopening schools, what's your key message. Professor would you like to go first?

Professor Anthony Costello

Yeah, well my key message would be that the advice needs to be based on solid quantification of risk because you know we put out reports on this and we're about to send it to the Chief Advisors as we usually do, you know which Professor Friston has quantified around what's the level at which you implement these severe measures, slightly less intense and less intense and we have to take account of the fact that you know the UK is diverse, diverse in risk and it's shifting and as Deepti has said there's gonna be new variants emerging and we don't quite know how those transmission levels will run. So, I think in terms of opening schools it should be based on solid criteria of the risk from local community prevalence, but in addition to all of that even if we have to keep some schools shut longer than others, putting in place a proper plan to support all of the kids, all of the children who need access to online learning, because I'm in no doubt this is a devastating impact on our children and we've got to do something to ameliorate that, whether we can open schools or not.

Lord Strasburger

Thank you, that's very clear. Deepti what's your key message for the Government?

Dr Deepti Gurdasani

So, I think that there is this false dichotomy between schools remaining open as they are and being completely shut that's been created and that sort of meant that we have never really thought about keeping schools open safely. The Government has repeatedly said that it's prioritising children, education, it wants education to be not disrupted and school closures should be the last resort but unfortunately all the policies that we haven't put in place have directly led to school closures. It's very clear that if we don't change this, if we don't put mitigation measures within schools as soon as we open schools we are going to see a huge surge in community transmission. So, the only way to keep schools open and if you really want to prioritise that is to make schools safe and there's no silver bullet like lateral flow tests or whatever, we need to put in all the public health measures that other countries have done that WHO and the CDC have suggested that we know that work, unless we do that we are going to be in this position very, very soon, again.

Lord Strasburger

Thank you, also very clear, thank you very much. Sarah is there anything you'd like to add to that?

Dr Sarah Rasmussen

I don't think I could top the answers that the first two just gave.

Lord Strasburger

I don't blame you, thank you very much.

Layla Moran MP

Well, that brings us to the end of this session which I'm sure everyone would agree could have carried on for another hour and thank you all for your very thought-provoking evidence, it's been really very helpful.

So, I'd like to just simply end by saying an enormous thank you to Anthony and Sarah and Deepti, very grateful for your time and again to Caroline and Sughra and also Lisa-Maria for the first panel and their very important contributions to this debate that I'm sure we're going to be having continuously over the next few weeks as we look to reopen schools.

So, I'd like to also thank Parliamentarians and everyone who is watching, next week we will be having an evidence session on vaccinations, impact of efficacy, variants, how's it going in the UK, a look at the impact of the worldwide response and I'm sure there'll be plenty there for us to dig out teeth into, so see you all hopefully next week. Thanks everyone, stay safe and goodbye.