



Exercises in Pregnancy III - Ref245

with Zoe Mundell

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TRANSCRIPT

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Steven Bruce

An excellent bit of CPD from the wonderful Zoe Mundo. Now, it seems like it was only recently that Zoe was on the show to talk to us about exercises during pregnancy and related issues. Since then, she's got pregnant, she's had a baby, her son is now eight months old, and she's got a puppy, which is even more important from my perspective. So Zoey, welcome. I hope you've been practising what you preach during your own pregnancy?

Zoe Mundell

I have. And it's a whole new eye opener. I've been training people for years, previously as a personal trainer for prenatal exercise. But the first time I've obviously actually had my own baby and realise how hard it is.

Steven Bruce

I'm tempted to offend half of our viewers by saying, as the first intelligent woman I've come across, you go through all of that and says, no, I'm not doing that again.

Zoe Mundell

It's really hard.

Steven Bruce

Yeah, well, I can only imagine. So last time, we spoke quite a lot about, particularly pelvic floor exercises, and we talked about your own role. You're a Pilates instructor, as well as a sports therapist, and an osteopath and expert in obstetric issues, aren't you? So, what are we gonna talk about today?

Zoe Mundell

So today, I thought about, a lot of people think Pilates has to be on the ground, and sometimes for a pregnant woman that's really difficult, for myself during my pregnancy, I got to about seven months and I just unfortunately kept collapsing. And anytime I lay on my back, I would just pass out. So exercise, the thought of looking at in the standing position, in the kneeling position, and looking at strength and endurance for the muscles ready for birth, and also flexibility and mobility.

Steven Bruce

Okay, that's great, thank you. And we're not going to spend much time on this particular aspect of it. Because on previous occasions, we talked about the fact that what you are doing is offering advice to osteopaths, chiropractors so that they can pass this on to their pregnant patients. And they don't need to be a qualified Pilates instructor to do this, because we aren't just doing body work and we're all experts in what the body does. So they don't need to worry about the insurance aspects of advising on Pilates based exercise, do they?

Zoe Mundell

Correct, correct.

Steven Bruce

Right. Okay, then where are we going to start?

Zoe Mundell

So let's start because I'll need to move my camera down for the standing bit, let's do some standing work, I'm going to keep it really gentle. So if you want to join in, please do, I'll use the chair. And we'll start with some spinal, I thought we'll do spinal mobility, and then move into some flexibility for the hip and pelvis. And then we can look at some strengthening work, because they're really the big main pillars of exercise for Pilates. So, we're going to start first of all with an easy exercise, which is a roll down, which gives your spine lots of movement. Normally, or very often, it can be done in a cat curl position on our hands and knees. But let's start standing. And then we can use our chair as a prop. So we've got our feet nicely wide apart. Obviously, with pregnant women, their base of support needs to be a little bit wider, slightly turned out just to help with balance. And we're just going to take the lock just gently off the knees. From here, I'm going to ask you to take a nice, big deep breath in through the nose and as we exhale, we're just going to lower the chin down towards the chest. So as you do this, just slightly retract the chin in, just to gain that real length through the back of the neck. And then just roll your chin down, as if you're rolling a marble down your chest with your nose as you exhale, just as far as the upper part of the neck, into the upper back. And then we're going to reverse it on an in breath, come back up to standing. So just a small chin tuck first. We're going to repeat, exhaling, draw the chin in, lengthen the neck and roll down to the chest. We might go a little bit further. Take a breath in and return to standing. I'm going to go a little bit further this time, maybe more into the upper back. So as we exhale, we draw the chin in. We roll down, my hands just tracking down just to beyond my knees. Take a breath in and return back to standing. If more breaths are needed, just continue with those long deep breaths.

Steven Bruce

Is it a stupid question of me to ask how doing that is affected by having a great big bump in front of you?

Zoe Mundell

So actually, providing you have a nice big, broad base of support, you can go quite far, quite comfortably and it's really nice to loosen off the lower back. You've also got a chair here should you need it for balance, but it's definitely as you get more pregnant, it's harder, but it's nice to do to release the back. And that's why we can bring it down onto the floor in a moment, which gives you more space because you can have your knees wider apart. So I'm gonna do two deep ones. And then we'll do it holding on to the chair, all the way down to the bottom as you exhale, bending the knees if you need to take that slack off the hamstring. But as we're in a deep lordosis through most of the pregnancy, getting that flexion in the back can be really, really nice. And then rolling all the way back up to the top. So there's your basic roll down, which is usually done as a nice warm up in Pilates. Let's just do one more, then transfer into the chair. Exhale, throw the chin down. Again, you'll get so far but as the hips go back, you're making space for the baby bump. Take a nice breath in and exhale to come back up. Now let's just turn the chair around and use the chair for support. So maybe you need a bit of extra support as you're doing this. First of all, taking my feet back further than my hips. So if I have a plumb line down my body, you can see my feet are sitting further back than my hips, we can just take this back further into a, kind of like a down dog if you've done yoga or a nice deep hamstring stretch, dropping back, you can soften your knees, and then gently coming up using your chair for support and gently arching into your upper back. Repeating and dropping back to get that length, finding the space here between your thighs and legs for the baby bump. Again, I've got a broad base of support and coming back up right. Now let's just take that into that cat cow movement again. So I'm going to bend my knees. And then again, round up, draw the baby bump in

towards you to round your back and release. Lengthen as you take a nice deep breath. Repeat again. So this exercise we've done previously on our hands and knees. But now just for anyone that can't go that low on the floor, maybe someone that's elderly that can't get on the floor, maybe someone's got a knee injury that can't get on the floor, it just gives you that variation. Now let's add in some spinal side bending from here. So gently, you can just swing your hips to look at your tail, other side, swing your hips to look at your tail, gently side to side, allowing a little bit of lateral movement. And then we can take it up into rotation. So just looking up at this hand reaching up to the ceiling, allow the hips to shift, that's fine. And then sweeping underneath, reaching out across the body, big deep breath in as we reach and reach under the body. One more time, lift and release. Let's change hands, lifting up to the sky and rotating again, this can be done on your hands and knees. But for anyone that doesn't have that option, it's just a variation. Of course, you can do this seated in a chair as another option. So that's the first part of some spinal mobility. Now let's take it into the hips and pelvis, maybe something slightly different.

Steven Bruce

Just before we move on Zoe, can I ask a question again, I don't treat very many pregnant women. How nervous are pregnant women generally about doing exercises like that? We talked a little bit in the last show about that exaggerated lordosis that you were getting in your cat position there which would make me feel a little bit vulnerable myself if I can imagine being pregnant.

Zoe Mundell

In my experience, they're not, they want to move, they want to be active. They want it to just feel nice to get their body moving, to get them out of sort of a certain slumped position, especially if they're seated in an office all day. Definitely, shortly after the baby's been born it's really nice because you end up sitting in an egg shape the whole time if you do breast feeding or bottle feeding, so I don't find they really are nervous and there's no risks to being in those positions at all, you're supported either by the floor if you're on your hands and knees or by the chair or you could just do the same movement seated. So for mobility, not nervous at all.

Steven Bruce

What are the NHS resources for pregnant women? Is there advice around exercise provided by their midwives or their nurses?

Zoe Mundell

I think it can be, depend on which area you're based in, mine was not very useful. General guidelines is to make sure you hydrate, wear thin layers, don't let your heart rate go over 140, don't lift anything heavy over your head. Yeah, don't do any really high-level intervals. It's quite generic really. They do tend to recommend to do things like Pilates, I think because they know it is gentle, it can be adaptive, if you're, you know, got a good teacher, adapted for pregnant women.

Steven Bruce

Okay, sorry, I interrupted you.

Zoe Mundell

So we'll go into some hip mobility. Now this is great again, for someone that's pregnant or not pregnant, it could be done kneeling, but I'm just gonna give you the option of a chair. And then I can probably show you at kneeling as well, really good for any patients, we're gonna look at some three-dimensional movements of the hip now. So I'm going to have a wide base of support. So when I put my foot upon the chair, I'm not on a tight rope. Okay, so make sure you've got a really nice wide base of support, as if you've got tram lines, and each leg has its own tram line. So I'm going to take the foot up, and that gives me some space for the bump as well. And we're going to come forward until we're feeling a little bit of a stretch in that rear leg, toes are facing forward. And first of all, we're just going to go into extension. So just lengthening up, we can use one arm or two, I'm using one to hold on, and then just moving gently backwards. So we're getting a bit of hip flexion. Reaching up, there's plenty of room here for the baby bump, I should have done this when I was pregnant, shouldn't I, and back. And I aim for about 10 to 15 repetitions with long breaths in each of these ranges, so we're just moving forward and backwards in the sagittal plane, using our breath, next, I'm going to come into the hip stretch. And this time, we're going to add rotation, so we can open out, I'm going deeper into my stretch. So really opening up into the external rotators and then come back and gently across the body. Reach again, you get a lovely calf stretch as well, open and release. If you want to make it more dynamic, you can come forward as you open and ease off. And again, the same thing, nice deep breaths. So working through the hip in three dimensions. This can be really nice if someone has pelvic pain, it also could be very aggravating. So you'd really have to do it on an individual basis. If they have pubic symphysis dysfunction. Then the last one is lateral stretching. So we're going to shift the hips basically, from side to side. Okay, so you get some work through the abductor as well as through psoas. So my foot is going to be up on the chair. Again, I'm already in my hip stretch, and I'm going to reach over, pushing my hips towards the camera, easing away. Really great if you find somebody has hip problems, but you can't quite get a good stretch in one range of movement, change your direction and you might find they are the tighter fibres. So three dimensions of hip stretching there. I'm just gonna repeat exactly the same thing before we go on to the floor with adductor stretching. So foot up, toes face towards the ceiling, standing leg, toes face forward and my hips off forward, don't be tempted to rotate in towards the chair, we've got the chair for balance, and we're firstly going to move forward and backwards in the sagittal plane. So just taking a little bow. And gently standing back up, if you want to use arms to make it more dynamic, you can have a little bit of flexion reaching back. Extension, lifts up. Again, about 10 to 15 repetitions, we're not holding a static stretch, we're keeping it moving, then changing into rotation. So I'm going to turn my upper body away from my hip now, away from my extended leg, sorry, nice long breath. And release it. You can really feel that going down into your adductors. So there's our rotation and then we're going to move again in the transversal plane, coronal plane even. I got the baby brain. Reaching over, this one's quite strong and you feel this right down into facilis, all the way down, at least I do, towards the knee. So three dimensions adductors' work, three dimensions of psoas work and some spinal mobility. Let's just bring it now into some strengthening exercises, a lot of people think Pilates has to be done lying on the floor. And therefore, they're like, how do we strengthen the glutes and lower back when we're not on the floor. So I'm going to use a band for this. You don't have to, you could do it without a band. But let's look at some back strengthening exercises first. And this kind of crosses over into general rehab. But we can use it in Pilates. And you'll see it more when I come to kneeling. So previously, we went back into our kind of a deadlift stretch, hamstring stretch, we're going to replicate this, but without the chair. So drawing the shoulders back, take the lock just gently off your knees, and we're going to slide the hips back and slide

your hands down your body to the floor, as far as you can comfortably go. Again, by pushing the hips back, you are making space for the baby bump. Back up, so you're wanting to maintain your lordosis but with the baby coming towards you. And I've got a wide base, you can see here, my feet are nice and wide, sliding down, maintaining that lordosis. Back up. If we want to challenge it further, a general stretchy band, pop it under your feet and do the same things. I'm pulling back my shoulders, I'm working hard to keep them retracted, gently down, my arms are just hanging still, there not doing anything at all, but keeping hold of the band. And I draw my hips forward, squeezing through the buttocks. Remember, for a strong back, it all comes through your glutes, you need powerful glutes, so this is a great glute hamstring, and lower back strengthener. If you want to include rows, you can stay down here and work a little bit harder. So there's one of our back strengthening exercises that you can add in for pregnant women. Next, squats, we all know squats are going to be great for firing up the glutes, you want a wide base of support, again, a band either tied around the legs, or I've got a mini band here. So I can just scoot my feet in this. If I'm cueing a pregnant woman or anyone for squats, I will always place my hands quite firmly on the outside of their knees or thighs and ask them to push and apply pressure throughout the whole of their squat. Because a lot of people go a bit limp in the knees when they squat. Or even if they say neutral, they're not really active. So when I'm cueing it, I'll put my hands there. So that replicates what I'm now getting the band to do, wide base of support, you might find them more comfortable knees and toes turned outwards. Or it might be more comfortable in neutral. That depends on the individual, but you want to apply the abduction to work through glute medius. If they need to hold on for support, that's fine. And again, we're sitting back, pressing outwards, driving up. Quite a simple one that you've probably done with most of your other patients. But let's bring it on to the kneeling position in a moment and see how you can use this in other ranges. Also, if you're doing something else, maybe you're giving them arm exercises or spinal exercises, you can still have this abduction going on. So that you're working through glute medius in particular throughout that, which will help stabilise their pelvis, which will help towards SI problems and potentially any pelvic symphysis dysfunction as well during pregnancy. So there are standing ones, we're going to come on to the floor and look how we can use it in a kneeling position. But just before we do, just to recap very quickly seated. Just very briefly, all of those exercises you can do in the seated position. So you've got spinal curls, coming up and down. You've got obviously your rotations, you can twist and reach just to have that movement through the spine there, side bends, obviously quite simple. You can even add to it and had a bit of rotation and a side bend together, give it a bit of a challenge. And your hip stretches may need to be done on the floor but you can do your adductor one, I would come to the corner of the chair and stick your leg out. And again, you can do the forward movement and back, you may want another chair in front for support. But that could be done in this position. What I wanted to add before I came off the chair, which is really good if people are quite stiff in one SI joint or the lumbar and that is to actually come to the tip end of the chair, make sure it's stable, and to lift your buttock and rotate it backwards, and then pull it back down again. And then the other one, walk backwards. So I'm just on my tippy toes, and I'm lifting my buttock up and walking back in the seat, and then rotating and walking forwards. This is great to do, generally, people with back pain, they can do it in an office desk, they can do it on an aeroplane if the back's getting stiff, you just need the movement in the chair and sit up nice and tall.

Steven Bruce

Just had a comment from Olivia, who says that, I think these exercises benefit not only pregnant patients, but also anyone working in sedentary occupations, which of course is true. I mean, exercise is exercise,

isn't it? What we're doing here is finding ways that pregnant women can do these exercises without feeling they're gonna fall over or hurt themselves or whatever else.

Zoe Mundell

Absolutely, absolutely. We delivered during lockdown, absolutely loads of classes like this for people sitting at their desk. And it was really nice, because it was possible for people to do that perhaps are wheelchair bound, people who were just at the desk, who were pregnant, or who couldn't get onto the floor. So there's absolutely loads of things that you can still do seated, which will be really beneficial. So that's a really nice one to get the mobility in the hips. And you can also, if you've got a broad enough chair or a bed, you can actually get people to go side to side. And you get to note some really funky things in people, especially if they're coming in with back pain. But actually, it's a hip issue, dysfunction in the hip. So that's quite a good one to do laterally, as well as forward and back.

Steven Bruce

Jules has asked, what does or doesn't work for pelvic girdle pain or symphysis pubis disorder, any recommendations?

Zoe Mundell

Well, usually it's aggravated either or from forward moving, scissoring movements or lateral movements, some people can be fine with one and not good with the other. So it's really working on stability of the pelvis. So again, going back to pelvic floor exercises, some of the glute exercises that I'm going to add in in a moment, but you also need to be quite narrow usually in your stance for it. And I think I said previously, I usually find one SI joint is not moving as well as the other. Sometimes I can only pick up that subtlety when I look at it from a cranial and BLT point of view, but there's usually one that's really mobile, I find and one that's just not moving quite as well. So I tend to loosen that off manually or with some MET stretches and then work to stabilise it, which would be the stability exercise that we'll look into in a second.

Steven Bruce

Okay, thank you, sorry, I was apologising for interrupting you.

Zoe Mundell

Right. Sometimes in the short term, if you have stabilised it, I sometimes use a bit of sports tape just to help, again get that feeling of stability to continue on whilst they do their strengthening work, just to give you that temporary help. I'll go on to kneeling exercises, going to put the chair away, I might just take the camera down a tiny bit because you won't see the mat otherwise. So I'll add in some of the stability exercise, but I think I had them in the other video. So we've already just said about the spinal mobility, we've said before, just very briefly, the cat curl in this position, side bending either walking around to the side, or you can rock your feet, these are all in the previous videos and the rotation one, so they're really simple ones to do. So hip mobility, again, cushion under the knee, wide base, and you can use your extension, if you don't need to hold on, you can use two hands. If you want to hold on, you can use one. So you've got your flexion, extension, we've got rotation. And we've got the side bend where we shift laterally in and out. So there's your hip mobility, and again, your adductor exercises can be done with foot outside. So that's just changing your angle. Let's look at some strengthening, again for lower back and glutes which are your powerhouse to protect your whole area. So, we can do our deadlift, our

standing deadlift from the kneeling position. Again, a nice wide base of support and cushion under your knees if you need it. And we're just going to sort of sit backwards and reach down towards the floor. Now, thinking about it, most mums, although you have these fantastic changing tables with tripod, I've never used it. You always end up changing your baby pretty much on the floor. So you're going to be kneeling over them in this position, changing their nappies. So make your exercises nice and functional. You're going to be over the bath doing the same sort of thing. So this is really great. Coming down towards the floor, make it more challenging, reach the lever outwards, come back and extend, you're squeezing through the glutes. You're maintaining your core control through your stomach muscles as you go. And you're taking nice long breaths as you do the exercise.

Steven Bruce

Interesting, you mention the core there, because Carrie says, when you're doing the bow stretch for adductors, or any stretches, should patients be trying to engage their core muscles.

Zoe Mundell

I wouldn't really engage their core for a stretch, I would make sure that they are breathing. And generally, when you're exhaling, you're recruiting more through those muscles anyway, but I wouldn't be consciously directing them to pull in their core muscles during a stretch unless it's more about balance, and you're using your core muscles because you're off balance.

Steven Bruce

And would you ever do any of these exercises with, say dumbbells?

Zoe Mundell

Yes, again, you can make this harder. So the wonderful thing about Pilates is you can reverse it or any exercise really, you can make it as simple as you want, or as hard as you want, by basically extending the lever and extending the load or extending the duration that you're there for. So one of the big exercises you do rehabbing for lower back is lying on your stomach, doing back extensions, this is basically the same thing. So I can come down, lengthen my lever, I'm in extension, and if I want to work harder, I can reach my hands back into what's called swimmer. But my aim is to remain stable. So I'm not jiggling around all over the place. If I wanted to hold something in my hand, I could do so also to make that harder, holding a small dumbbell, holding a bar holding a pole, you could do any of those exercises. Similar kneeling position again, if your knees are fine. Having your hands up gently in front of you, we're squeezing through our glutes, it works like a squat, you also get a good stretch in the front of your tummy, hinging back as far as you can manage, avoiding popping the ribcage. So you're drawing the baby in towards you, squeeze your glutes and draw yourself forward. This one's quite challenging, especially if you have tight quads, you can make this harder, you could have reached one arm up in this position. Back down with a long breath, you can reach the other hand up and stay here, return back, I can make it harder again, come back, take both hands into the air. I'm not even adding weights yet. I could return back. I could do the exercise with my hands in the air. So I don't have that forward support. Much harder, return back and that's even without adding any load. But there you're working glutes, you're working hamstrings, you're working your core because anything where your legs and arms are moving, it's always in the core. Next, let's look at strengthening through the glutes. Again, we've got our hip bridges. Now, there's only a certain time in pregnancy that you'll want to be lying on your back. And one of the exercises

to avoid or advice to avoid in pregnancy is inversion. So anything where your hips are higher than your head. I would say for some people who've been practising a long while you have no medical complications, they may feel quite comfortable with that exercise. But as the pregnancy goes on, it's advised less so to lift the hips higher than the heart. So in the early stage of the pregnancy, you do a lovely glute bridge. Very simple, again, slightly wider base of support, pressing down through the hole of the foot, squeezing the buttocks, drawing the abdominal muscles inwards, and as you exhale, you're going to lift gently up, squeezing through the glutes, again, avoiding popping the ribs and then gently back down. So this could be classed as an inversion because your hips are going slightly higher than your heart but it's not a huge distance. And you might find quite a few women are very comfortable with this. But if you wanted to change that, so that they're not lifting as high but you still wanted to work the glutes. Come back onto the hands. Make sure you've got lots of lift through the chest and do the same thing here. Push through the glute, squeeze the bump, look for that length in the hips, and then gently lower down. Repeat. Squeeze through the bum, push through the feet, lengthen through the hips and gently lower.

Steven Bruce

So you said earlier on, I think possibly before we came on air, that when you were pregnant, when you lay down on your back. Now, you also said that pregnant women are often told not to raise their hips above the level of their head, not to invert. So if someone were to take a recommendation like this and try the exercise, and then find that something like that happened, let's say they fainted. Is there any comeback on the person who's advised that exercise do you think?

Zoe Mundell

I think if I was advising any exercise, the first thing you want to do, obviously, is start with the most simplest of exercises that have no contraindications or side effects. And as you know your patients, you'll know what they're capable of, and what they're comfortable doing. But it's really important with any exercise you give to anyone, but particularly pregnant women, you empower them to know their body, and to know what feels comfortable, and anything that doesn't feel comfortable at all, or makes them just, they're not happy with it, it just doesn't sit quite well with them then take that exercise out. And I think you'll find that they're very cautious anyway, the fainting that I had came on just sitting in a chair, I didn't have to be lying on my back, it would just be anything sitting. But yeah, I would make sure that they're very, very comfortable with any exercise that you give them, always give them that caveat, if it doesn't feel right for them, if they're not practised in Pilates, they've not been doing it for ages, then I certainly wouldn't add in a new exercise like that one, but there's only really two exercises I would think where you do lift your hips higher than your heart, one is that bridge and the other would be a downward dog. So it will be up to you whether you choose to give that person that exercise.

Steven Bruce

Okay, thank you. Got a few other questions for you, while we're pausing. Vlad has said, is that the locomotion dance you were doing earlier on but with your butt on a chair? Vlad, you must be showing your age and taking us back to the days of disco there. Jason says, isn't the point of the stabilising muscles that they work throughout the whole movement to achieve the stabilising effect.

Zoe Mundell

Sorry, can you say that again?

Steven Bruce

Isn't the point of the stabilising muscles that they work throughout the whole of the movement to achieve their stabilising effect?

Zoe Mundell

Yes, when did they not?

Steven Bruce

I'm not quite sure why Jason thinks that's not what you're suggesting. Jason, come back to us and just clarify what it is that you think we missed out from there. But yeah, stabilisers stabilise, don't they?

Zoe Mundell

Yeah, I'm not sure, I've just done some exercises. I can't think which one? I agree with you in principle, I can't think which one he's thinking of specifically.

Steven Bruce

So let's move on. We've only got about 10 minutes left.

Zoe Mundell

Okay.

Steven Bruce

We were just doing bridges.

Zoe Mundell

Yeah, we've just done some bridges. So if we're in this position, this is where you wouldn't be going higher than the heart, you're going level with the heart, that will make it easier working through the glutes. We did back extensions. We could do some abdominal work, we did some abdominal work previously on all fours, which is quite easy to do in pregnancy. If any risk problems, you could go into neutral, onto your knuckles or place your hand on some dumbbells for support. But here, we want to draw the tummy in, without holding the breath. And on the exhale, we could do some hovers. So you can either have your feet flat on the floor, which makes you work much harder through your spine or toes gently curled underneath you. And from here, pushing through the hands making a nice strong upper back, you can just hover the knees off the floor, I normally get patients to count their breath cycles, rather than minutes to make sure they're not holding their breath. So they might want to start off with just maybe three breath cycles. And then lower down and loosen off the wrists obviously to stop any wrist's aggravation. The higher the knees are off the floor, the easier this is and if the toes are curled under, they can use their legs a lot. So it's really good if they don't cramp in their feet. And then they get a really good core exercise there. And then another one that they can do in this position, I think on one of the other courses is to let the stomach really below down, letting the baby almost swing without the back dropping into an arch. And then as they exhale, draw the baby up into the spine. Again, hold for three breath cycles, maybe up

even to 10 breath cycles. Just to be clear, breath cycle is one in breath and one out breath. And then just to release and again let the baby just hang down. This gets quite challenging, but really effective as obviously the pregnancy develops. Another way of working the abdominal muscles, working the obliques, can be in side lying. We can come all the way down, I think I'm still on camera, can't see you but I think you can see me. Lying on your side, slightly banana shaped because that will help with your balance, giving your head some support, and the hips are stacked, knees are stacked, feet are stacked, top hand just lightly on the floor in front of you. And then as you exhale, you can just lift up, so I'm squeezing through the side of my waist and slide back down again, if they need the support, they can use this top hand just as a little bit of a push, but you're really drawing in, pulling in from this underside arm and working through your obliques. If you want to work harder, you can lift the top leg at the same time and lengthen. If you wanted to work really hard, you can lift both legs. And you could just do it just with the legs, lifting the leg up and down, or lifting both legs up and down. So got much longer lever working from the legs. So there's some nice strengthening exercises through the stomach, through the back. Glutes, we've just looked at from squatting, from bridging. You can obviously also do abduction work in the kneeling position. Obviously, most people will know your clams, you can make it work harder by lifting the feet and then working your clam movement. And of course, you've got the option of using bands around the thighs, just to make it harder. And again, another wise one with a band, for glute work in prone, skimming through loads of exercises, just to give you some ideas. And I haven't talked loads and loads about the breath work because again, we've done that in the previous ones. But this is all done following a foundation and really using your exhalation to give people the time to really work through these exercises. But I've just hooked the bands around my feet. And from here, I can kick back and down, really working through the glutes, going into this position and kick up, this band's really tight actually, a really hard one, I would do in that position. But I've actually picked up a really hard band that makes it really tough.

Steven Bruce

Were you abducting your hip while you were doing that, or was that straight back?

Zoe Mundell

That was straight back. But you can, again, a really nice one for abduction when you've got the bands around your thighs, so if I had this up around my thighs, if you push away, outwards, so not that kind of hinge back, if I show you square on, you can see if I do it incorrectly, I'll spin my hips, but instead just draw the knee out into abduction, you get a really nice external rotation work, which of course can be done also sitting in the chair as well.

Steven Bruce

That's taken us the better part of 40 minutes to run through that. So realistically, I imagine without the chatter and the questions it would take 30 minutes for a patient, is that reasonable for a pregnant woman?

Zoe Mundell

I mean, yeah, depends what they're coming in for, whether you're talking about a Pilates exercise class, or whether you're giving them rehab, or exercises to do in a clinic setting. What are they coming to you for? Are they wanting a little bit more mobility in their spine or in their hips? And are you looking for some strengthening, again, of the hip and pelvis. So I would only ever give somebody, I think to begin with

three mobility exercises and three strengthening exercises at max to realistically do it. And I would probably introduce those over two sessions. If, once they'd got used to those exercises, they wanted more variety or they needed more challenges, or perhaps adding another one or adding another two once they've been practising it for a couple of weeks.

Steven Bruce

Jason's come back with a follow up on his question. He said that when you said earlier on, you shouldn't focus on transversus abdominus. But Keith says people with poor proprioception will probably need to focus on TA in order to ensure that they're firing.

Zoe Mundell

Yes, but I mean, I've said before, I haven't gone through loads about the setup of Pilates, of doing the breath work, of doing finding their centre and things like that. But yeah, if he was talking about in stretching, I wouldn't be too concerned about it, I think during a stretch, but yeah, if I started Pilates with someone right from scratch, I would start the first session on the breath work, on using exhale to help work on the pelvic floor and engaging that TA and that's one of the first principles that you start with before you even come on to the movement as well.

Steven Bruce

Okay, I think you answered one of my questions as well because I was thinking is this a routine that you would give just as a general routine to all pregnant women coming through your clinic as guidance to keep them healthy throughout their pregnancy. But you are adapting this to suit whatever might be going on with them, of course, as any practitioner would.

Zoe Mundell

Absolutely. I think to be honest, anyone that comes in with back pain, I nearly always give them, I know you had to Tim Allardyce on who does, rehab my patient, I use that a lot. And I always have a little programme that I've preset up that I can give out to new patients, just so it makes them feel like they're getting more for their money, that's stuff that they can use, it's a great resource to be able to use, but I always give my patients cat curls, rotations, maybe a glute stretch, you know, I've got a little routine that I tend to give people to do, just to get mobility into their backs if they're really stiff to begin with. So there's always things that I will always give to pregnant women. And they will always include either standing mobility exercises first, if they're not hyper mobile or suffering with anything really specific. But I will always give them those exercises first, and I will always give them pelvic floor exercise on day one.

Steven Bruce

Right. Okay. And we had a question, I think in one of the last broadcasts about whether strengthening the pelvic floor actually might make the delivery of the baby more difficult and challenging.

Zoe Mundell

No, no, if it's tight, if you did have a very tight pelvic floor and overactive pelvic floor that can cause problems. And this can be also relevant after pregnancy, that can also be down to anxiety and stress, as well as lots of other underlying conditions. That goes a bit more into women's health. But what you want to do is, if you can strengthen something, part of the breath work is also to help you relax it. So between

contractions, you're working to use your breath to lengthen and contract. If you don't train, it could just stay in that sort of spasm state, as it were. So it's something I'd recommend, it's hugely important for post pregnancy, it's holding all of your organs in place to avoid any risk of prolapse after labour.

Steven Bruce

Yes. Last question for you, this one from Jules. Jules says, what number of repetitions are you recommending for strengthening? And of course, I'm thinking about the shows we've done with Claire Minshull, who says five reps to failure is what you need to increase strength efficiently. But that might not be feasible when you're pregnant.

Zoe Mundell

Exactly. The guidelines around that when it comes to pregnancy aren't as clear, I would say, agree with Claire when someone's coming for strength training for my clients that aren't pregnant. In pregnancy, because we're working a little bit more towards endurance, I would push that more. Especially, if you think about a labour can go on for hours, hours. You know, the inactive part of labour can be two hours long, if not the whole contraction part of it. Women can be in really weird position, they can be squatting, they can be kneeling. You need to build up endurance in those muscles more than anything else, so I would be looking for more repetitions. I'd be going higher towards 50 in repetition mark.

Steven Bruce

Okay, Super, thank you. Carmela is not the only one to have said this. But she's actually sent in a comment to this effect. She's saying she's seen many pregnant patients, but this is brilliant, and she said, you're a great presenter, Zoe. And I would second that, this has been wonderful and a lovely backdrop of course, even the squirrel went across the fence while you were talking earlier on. Your puppy's behaving himself.

Zoe Mundell

Yeah, she's asleep over there.

Steven Bruce

Zoe, it's been brilliant. Thank you very much for the third session from you, giving up your time like that. And it's nice to know that you now have the opportunity to prove that what you say does work, having gone through it yourself.

Zoe Mundell

Yeah.

Steven Bruce

Your son is doing well, I hope.

Zoe Mundell

Yeah, he's good. He's asleep up there.

Steven Bruce

Brilliant. We've got 281 people watching this lunchtime, which is, I mean, that's pretty good for a hot lunchtime like this. So hopefully there'll be lots of pregnant patients who are benefiting from your advice. And of course, I hope we can get you on the show again at some point in the future.

Zoe Mundell

Thank you.