

Science of Birth Cluster Exercise Webinar - Responses from Presenters

Tara Wilson Responses:

Please mention what is the pre and postnatal certificate you have got?

I have taken online courses through CSEP for pre and postnatal exercise as well as for Diastasis Recti. In addition, I am certified in pilates and have had done some self study specific to pre and post natal pilates.

What are the course that we can undergo for getting trained in pre-natal and postnatal exercises.

There are numerous courses out there. In Canada - CSEP offers specialized training and certifications in Pre/postnatal exercise, as well as a specialization certification <https://store.csep.ca/>. Diane Lee also has great training: <https://learnwithdianelee.com/> If you teach pilates, there are also a number of options through the various schools, two that recommend are Balanced Body (<https://www.pilates.com/education/pilates-instructor-training/>), and STOTT (<https://www.merrithew.com/instructor-training/stott-pilates>)

Does anyone have any experience using Diane Lee's methodology where core curl ups are encouraged in pregnancy as long as tension is maintained through TA? Was it successful if so? I am also interested on shadowing a session as a kin!

Although I have yet to study with Diane Lee, I am familiar with some of her methodology though discussion with co-workers who have trained with her and seeking out information about her techniques online. With curl ups, I definitely focus on TVA activation in conjunction with the other abdominal muscles. However, this is something I focus more on in postnatal exercise. And especially when there is Diastasis Recti In prenatal exercise, instead of curl-ups, I use the time as an opportunity to focus on the deeper core (including engagement and relaxation of the deeper core abdominals and pelvic floor muscles), breath work, and on maintaining strength and functional capacity in other areas of the body. I do not have a spot for shadowing at the moment, however, I am happy to get your contact information for when I am able to have you.

Hi, I am a physiotherapist and midwife one of the things that impacts on type of birth is position of baby - I have noticed over the years that a tight core (eg runners) results often in posterior babies - do you teach learning to let go of the core in pregnancy and do you do specific exercises to help babies into a anterior position?

Hello. Great question, and what a great combination (physiotherapist and midwife)! I do teach releasing/ letting go of the core in pregnancy. I am interested about the specific exercises to

help babies into an anterior position, however, no, I do not teach such exercises. As a CEP/ Kin, I would also be curious if this would fit into my scope of practice or not (though I believe that any exercises with this specific intention would be out of our scope of practice). Dana may have more to add here as a physiotherapist.

As a kin, is CSEP for pre and post natal exercise a good certification to be taking?

Yes, CSEP is the gold standard in Canada and I would say their pre and post natal certification is a good one to take.

Dana Elliott Responses:

When relative contraindications for exercise are identified, what factors would you consider to help determine exercise dosage/prescription that would be safe for the pregnant person?

- Physios, Kinesiologists, and Clinical Exercise Physiologists can monitor BP/HR during exercise if that is a concern and make guidelines based on that
- monitoring symptoms of cramping, dizziness, nausea, heaviness in the pelvic floor, shortness of breath, changes in heart rate all key signs to look for
- sets throughout the day vs all at one time can be helpful for patients to limit risk of too high of load
- best to start with no load, low reps and build reps from there and then load
- unfortunately this is an area the research is very much lacking, few studies looking at exercise in this population

Postpartum - how long should one wait to start exercising again? Including light stretches

- Good research and parameters to look into are by physios Emma Brockwell and Grainne Donnelly from the UK.
- Avoid plank, crunch, sit up, V-sit positions until ideally assessed by a pelvic floor/postpartum physiotherapist to assess DRA and pelvic floor for prolapse
- basic stretching can start right away depending on what feels tight or uncomfortable
- pelvic floor exercises (previously assessed and trained by internal assessment by pelvic floor physio) and diaphragmatic breathing should start right away 24hrs after birthing
- focus on technique of ADLs: alignment, positioning of sit to stand, stairs, lifting, squat; should be a focus from the start postpartum. Encourage patients to think about their day to day movements as exercise and be in the same good positions they would be if doing these tasks as an exercise
- calf raises, toe lifts, body weight squats are great to be starting 2-4wks postpartum because they are very functional and a basis for all other exercise
- walking outside of the home starting around 2weeks with 10min, aiming to get to 30min intervals by 6wks; without load of baby is better to start with when possible
- 12wks for EARLIEST return to run programming (see Brockwell and Donnelly) if all parameters met

Wondering what the specific advice is regarding avoiding supine positions ie. what week would you avoid it from? I've read as early as 16 weeks, but also that supine until 28 weeks also ok. Keen to know where you land on that.

- recommendations vary between research, country, association, etc. Below is a good paper regarding this.

- if the physician/midwife do not have concerns about assessment in supine then exercise for a couple minutes at a time in supine is usually ok
- supine positions for bridges is very functional for bed mobility during pregnancy and keeping strong that way can help prevent discomforts turning over in bed
- supine core training positions are also DRA safer than other positions such as planks
- monitoring for symptoms of shortness of breath, dizziness, sweating, nausea, cramping, change in HR and BP (you can monitor) will be signs to stop
- if prescribing in supine have them change position after each set so they are not in supine for more than a minute or two
- https://pogp.csp.org.uk/sites/default/files/journal/2018-08/15_14301043.pdf

What type of certificates do you have for doing pre and post natal exercises with patients? Do you find it is something that could be done in a clinical setting or would be better done in a gym setting.

- I have certificates in prenatal and postpartum physiotherapy and work mainly clinically as a physiotherapist. In the clinic you can assess the pelvic floor and DRA properly along with movement patterns, hip/lumbar/thoracic mobility, etc and prescribe a very personalised program for each patient with you pre/postpartum exercise program
- the below tend to be the most used courses for physios in Canada
- in Canada a physiotherapist cannot call themselves an “exercise specialist” even if the course certificate states that. We can only call ourselves physiotherapists/PTs. So many of us have the same certifications or more than fitness trainers but cannot use that terminology.
- <https://www.burrelleducation.com>
- <https://www.coreexercisolutions.com>
- <https://www.girlsgonestrong.com>
- <https://www.vaginacoach.com>
- <https://physiodetective.com/courses/female-athlete-tfa/> (offers courses out of multiple education programs such as PHS, APTA, PelvicGuru, etc)
- <https://www.briannabattles.com>
- <https://courses.pelvichealthsolutions.ca/collections/all-courses> (multiple courses, more specialised topics)
- <https://embodiaapp.com/h/continuing-education> (multiple courses, all virtual)
- <https://thepogp.co.uk/events> (physio courses, specific topics)
- <https://www.aptapelvichealth.org> (physio courses, specific topics)

Are there specific pelvic floor exercises that physios give for the levator ani relaxation/contraction that would be good for “labour mimicking”?

- specific is the key word. Ideally the exercises are given to a patient through internal assessment to determine if the patient has any pre-existing tightness (lev ani, obturator internus, etc) and prescribe specific exercise for that. Working the exercises into pelvic safe birthing positions (4-point, side lying, deep squat...) is the best way “mimic”
- diaphragmatic breathing is important to teach
- happy baby, 4-point in an internally rotated hip position opens the pelvic outlet, wide leg happy baby, deep squat/crouch (watch for foot position), hip internal rotator stretching, z-lying are common exercises; but often it is finding CNS down regulating activities for the patient also

Does anyone have any experience using Diane Lee's methodology where core curl ups are encouraged in pregnancy as long as tension is maintained through TA? Was it successful if so? I am also interested on shadowing a session as a kin!

- I have Diane Lee training and I can't actually recall discussing curl ups during pregnancy being, it was postpartum that we discussed it the most
- Functionally we want patients to be able to move as well as possible during pregnancy so I always teach how to activate core and move in to a good quality curl up to prevent doming, if someone can't do it then really encourage them to be cautious in and out of bed/etc

One of the things that impacts on type of birth is position of baby - I have noticed over the years that a tight core (eg runners) results often in posterior babies - do you teach learning to let go of the core in pregnancy and do you do specific exercises to help babies into a anterior position?

- In BC it is considered out of our scope of practice to try to turn a baby or state we can help do that
- teaching letting go through breathing/down-regulating, oblique/RA stretching is very important for all aspects of pelvic floor training, DRA training, for lev ani relaxation so it should always be taught with pregnant populations
- if you google it you can find some exercises that are recommended to try to turn baby. If they make sense to your practice and what you are seeing with the core, it is in our scope of practice to prescribe them for other reasons (ie abdominal tension)

Carly Little Responses:

What are some examples of the LIIT exercises?

Anything! Any increased effort is good. The moral of the story for labor intensity interval training is in regards to the work to rest ratio. Working from 30-70s at high intensity that is pregnancy safe (low impact, but heart rate is elevated), and then resting for 3-5min to feel recovered before starting again. For example, an incline speed walk on a treadmill for 30-90seconds, with a 3-5min rest, to mimic contractions during labor. Doing that for 8-10 rounds, getting your mind and body used to this type of effort.

Postpartum - how long should one wait to start exercising again? Including light stretches

This is so personal! What is important is that the body feels pain free, and that there has been approval from a healthcare provider such as a physician, pelvic floor physiotherapist, etc. Light stretches are encouraged at any point if this feels good for YOUR body. I have seen people return to exercising from as early as 6 weeks, to a few months.

So LIIT is a 1:1 work to rest ratio, rating from intervals that are 10 to 3min - is that correct?

The ratio for LIIT is around 30-70seconds of higher intensity work, followed by 3-5min of rest. There should be multiple sets, to mimic the amount of contractions you may go through during labor. The goal is to mentally prepare you for this work to rest ratio! Not 1:1. Labor is the big event, and you are training for it :)

What are the course that we can undergo for getting trained in pre-natal and postnatal exercises.

Some examples are:

1. Pro natal fitness
2. PCES certification
3. CSEP Pre & Post Natal Exercise Specialization
4. AFPA fitness

What type of certificates do you have for doing pre and post natal exercises with patients? Do you find it is something that could be done in a clinical setting or would be better done in a gym setting.

I personally have the ACSM-CPT, Pre/post natal training certificates, and a BSc. In Kinesiology. This has helped with my understanding of the human body, and then my deeper understanding of the physiological changes that occur throughout pregnancy and post partum. Having a personal training certificate or coaching certificate is also an asset to be able to program fitness plans and deliver fitness classes.

The particular certificate depends on the facility or organization you work for as well as what your clients are wanting from you as their trainer. I personally think the best part about guided pre/post natal fitness is that you can exercise under the expertise of a specialist, while integrating into a community of other expecting parents, so a gym setting is ideal for this.

Another positive is that the expecting parent or new parent will be able to return to a sense of normalcy perhaps before falling pregnant or becoming a parent. Attending a gym like everyone around them provides comfort. However, if the client is looking for a more personal and private session, a clinical setting would be just fine.