

A guide for training pregnant & post-natal students

With a growing number of women joining our organisation, it's concerning to me to have spoken to many instructors who are not confident with how to coach a pregnant woman, or how to encourage a postnatal mother back into activity. It's hardly the first thing that most people think of when they become a martial arts instructor and often they won't think about it until the time comes and then, it's met with a couple of common responses:

- * Too dangerous, student will have to sit the majority of class out – This will often end up with the student feeling left out and becoming bored and not valued as a member.
- * She'll just have to keep up with what she can do, and manage what she is not comfortable doing on her own (she will know her own limits/capabilities etc). - This assumption of innate knowledge is flawed. Especially with a first time mother to whom the experience is completely novel. Resulting in the student either taking part in unsafe activities for both her and or her baby, or not taking part because she is unsure of what is appropriate.

Both of these responses may end up with you losing this student (and her future family!) but more importantly, it will deprive the student of their opportunity to take part in an activity that will help them stay fit, strong and flexible during their pregnancy. This is a real negative pregnancy is one of the most important times that a woman needs to be all three of these things!

This guide can be used by both coach and student/athlete alike and will cover not only things relating to Taekwon-Do but exercise in general as well.

As a general rule, pregnant woman can do more than a lot of people (including them sometimes) think they can do. Some questions to ask in the do jang before I get into specifics are:

Is she likely to be hit?

Is there a chance that she could fall over?





Is there repetitive jumping involved?

Generally if the answer to those questions is no, then she will be fine and can participate!

General Principals & Risk Factors

Trauma to the baby

This can be caused if the student takes impact on her stomach. When the pregnancy is in its very early stages, there is a lot of protection and it would take a pretty big knock to cause some damage, but the chance is not worth taking. As the pregnancy progresses and the mother begins to show, it's not that hard to knock the poor wee thing about in there!




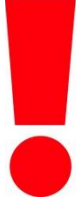
<p>Things to avoid:</p> <ul style="list-style-type: none">• Pad/Board holding• Sparring• Jumping or stepping to a height – risk of falling*• Self-defence*		<p>Instead:</p> <ul style="list-style-type: none">• Just don't do it. If working in pairs, the instructor should sub in for this student when it is her turn to hold.• Sparring drills techniques without a partner (shadow sparring), practising for speed & coordination on her own.• Jump (in early pregnancy only) or step to a low height and aim to do more reps instead.• Stick to basic releasing movements if the student is comfortable with that. Having her be the attacker isn't the safest thing to do unless she really trusts her partner to stick to A responses, otherwise just don't do it. It's not worth it.	
<p>Signs & Symptoms of Trauma:</p> <ul style="list-style-type: none">• Bleeding• Bruising• Sharp pain in the abdomen• Generally a woman will know she's been hit in the stomach!		<p>Emergency Plan:</p> <p>Call the students midwife right away, and have her taken to the nearest medical centre with obstetric facilities available so that the baby can be checked out.</p>	

* The risk of falling is an underestimated one. Pregnant women are making more blood throughout their pregnancy to supply the placenta and increase oxygen supply to both mother and baby. The circulation expands and the blood vessels dilate leading to a lowering of blood pressure. Common symptoms of low blood pressure are dizzy spells or even fainting. This happening when your student is standing on top of something they could fall off is a risk that you and your student should ultimately avoid.

* It may seem a bit harsh to take Self Defence out of the picture completely, but in reality, it's the one aspect of training that we can't really dial down if we are actually training it for use in a real situation (which we should always be!). As an instructor, I played the defender for teaching and demonstration/teaching purposes only, and would only demonstrate with a couple of trusted people. It's the area where we tend to get carried away in the moment and it's just not safe to do when you are pregnant. It has been suggested to me that training self-defence the same way that you'd train sparring, with shadow drills etc could be a good substitute for this. But that will depend on your stance on how you teach self-defence as to whether you find this appropriate or not.

Pelvic Floor Prolapse

During pregnancy, labour & birth the student's pelvic floor muscles will stretch considerably to allow the baby to make their entrance. In this weakened state, pregnant women and new mothers are at risk for a prolapse of the pelvic floor which is when the muscles aren't strong enough to hold all the pelvic organs up anymore and they slip down.





<p>Things to avoid:</p> <ul style="list-style-type: none">• Jumping/Bouncing exercises• Sprinting• Super heavy lifting (unless previously conditioned for this)• Deep squats (unless previously conditioned for this)*• Abdominal curls, sit ups or crunches• Long arduous sessions where the muscles will tire 	<p>Instead:</p> <ul style="list-style-type: none">• Steps Ups• Walking and light jogging• Light resistance training (unless previously conditioned for heavier lifting)• Half depth or box squats• Static Holds (prone holds*, hammie holds, sitting position against a wall etc)• Have frequent rest periods in a session.• Include pelvic floor (kegal) exercises 
<p>Signs & Symptoms of Pelvic Floor Prolapse:</p> <p><i>This is not often an acute issue and depending on the severity of the prolapse, there may not be many outward symptoms, however some signs are:</i></p> <ul style="list-style-type: none">• Bouts of incontinence, either bladder or bowel• Feeling very "full" in your lower belly• Noticing a bulge in your pelvic region that doesn't belong there• A feeling that something is "falling out" 	<p>Emergency Plan:</p> <ul style="list-style-type: none">• Stop exercise and lie down to take all the pressure off the pelvic floor region• Once the pressure has eased, get the student home where she can relax• Have the student get in touch with her GP or midwife to confirm whether or not a prolapse has occurred and if so, then to provide advice on when she can continue physical activity 

Squatting is fantastic for pregnancy. Squatting with a bit of weight is even better! It increases pelvic floor strength, prevents back & pelvic pain, helps prepare for labour, gives stronger positions for labour, just to name a few benefits! However if your student hasn't done a lot of full depth squatting, then it's not the time to try and train your hips and pelvis to hit this position as they are becoming very loose due to the Relaxin. You may find that after doing some half depth and/or box squats, that your student can get a bit stronger and more flexible through the hips to be able to work down to this depth but unless well-conditioned for deep squats, you should not ask them to do fast repetitions at full depth or lift heavy weights at full depth either. If you are working with a conditioned student, then ask them to let you know when squatting to full depth stops being as comfortable, as that is a sign that the shape of the pelvis is altering and they need to start pulling back a bit.

*Prone holds are a debated exercise in pregnancy training circles. Some people advocate them for great core & TvA strength during pregnancy, but there is also a link to diastasis recti (discussed later) to worry about. I would advise that if a student already has a fairly strong core, then they can do full prone holds up to 16-20 weeks, depending on their belly. And then they may need to drop to knees. For someone unconditioned to this exercise, they could work on their knees until it became uncomfortable, and then this exercise should be discarded.

Tendon & Ligament Injuries

During pregnancy a hormone called Relaxin is released more into the body. This provides increased elasticity for the muscles & tendons so that the child birth process is possible. However this hormone does not just affect the areas of the body needing to stretch during childbirth, it affects every joint in the body including ankles, knees, fingers etc.

<p>Things to avoid:</p> <ul style="list-style-type: none">• Training on uneven surfaces• Agility training, particular involving lateral movement.• Excessive jumping (heavy jumping/flying, or long two foot take off leaps)• PNF Stretching – Can lead to hypermobility		<p>Instead:</p> <ul style="list-style-type: none">• If venturing outside the do jang, make sure the surface is well maintained.• Find exercises that are in straight lines forward and back.• Stepping up or short versions of jumping motion (such as mvmt 26 in Yul Gok).• Just have the mother stretch normally to a point that is comfortable for her to maintain her flexibility	
<p>Signs & Symptoms of Tendon/Ligament Injury:</p> <ul style="list-style-type: none">• Acute pain in the affected area• Falling Down• Swelling & redness in the affected area		<p>Emergency Plan:</p> <ul style="list-style-type: none">• Stop exercise• RICE treatment• Seek medical attention if symptoms are still noticeable after 24 hours.	

It does pay to keep in mind that the Relaxin hormone starts being slowly released into the body early in pregnancy and doesn't really leave the body fully until at least 9 months most natal or longer, depending on a number of factors, including whether the mother is still breastfeeding. While the mother is post-natal (the 12 months following birth), you need to be mindful of really working for higher kicks, and doing the required strength training to improve this. The strength training is really good for the muscles, however often the tendons & ligaments still have too much elasticity to properly support the hips during these exercises and once they start to tighten/strengthen up again, the student will experience varying degrees (depending on the person as always) of joint pain in the hip/pelvic area.

Dehydration & Heat Stress

During pregnancy, keeping up fluids during exercise is imperative. A woman almost double's her blood volume during this time and needs lots of extra fluid anyway to build this and maintain good blood pressure. After pregnancy, a breast feeding mother will need to drink approximately 4 litres of water a day to help maintain her milk supply. When exercising, double what she would normally need to drink as she has to provide for twice as much as previously. As the milk supply needs decrease, the need for extra water will also; however until breastfeeding completely stops, the student will become dehydrated easily so you will need to be mindful of this. Allow the student to quietly step out and have a drink when necessary.

Signs & Symptoms of Dehydration:

- Dry, sticky mouth
- Sleepiness or tiredness (pregnant & post-natal women will be experiencing this anyway!)
- Dry Skin
- Headache
- Dizziness or light headedness
- Muscle Cramps



Emergency Plan:

Mild/moderate dehydration is not an emergency and can be remedied by drinking often during the session, then once the session has ended ensuring that at least 2l of water is taken on over the next 4 hours. If your student is breastfeeding however this may affect the milk supply for baby which will create stress in the home.



If your student has reached the point of severe dehydration, you will notice that they are extremely thirsty, irritable or confused, they may have dry skin that doesn't bounce back when it's pinched, rapid (not heavy) breathing, rapid heartbeat. In serious cases, delirium or unconsciousness can occur. Call an ambulance, or get to the nearest medical facility as fast as you can. In a lot of cases IV fluids will be administered but if the student is conscious then you should have them sipping at water or a sports drink while waiting for medical attention.

Heat Stress

Another risk during pregnancy is heat stress. This is more of an issue in the first trimester when the baby is developing on a cellular level. Overly hot baths, hot tubs, saunas etc should be avoided, as there is a higher risk of developing a neural tube defect. High intensity workouts can be a source of heat stress but from experience, it would have to be pretty seriously intensive to raise the body temperature into the danger zone of 39° or higher. Pregnant women are more at risk of heat exhaustion due to the body having to work harder to cool both her and the baby. The signs & symptoms of heat exhaustion are very similar to those of dehydration so follow the same emergency plan if you suspect heat stress is affecting this student and ensure she contacts her lead maternity carer (midwife or such) for proper medical advice and to have the baby checked out.

Diastasis Recti

This is a separation of the right and left side of the rectus abdominus (6 pack muscles). This reduces the integrity and functionality of the abdominal wall and can aggravate lower back pain and pelvic instability. If this has occurred for your pregnant student the following will apply. This is not an acute condition so these recommendations do not have signs of occurrence or an emergency plan. This should have been picked up by the midwife or GP in post-natal check-ups and they will likely have been referred to a physio who specialises in these types of conditions for recommendations.

Avoid:

- Movements where the upper body twists and the arm on that side extends away from the body (such as triangle pose)
- Exercises which require lying backward over a large exercise ball
- Lifting and carrying very heavy objects
- Movements performing only upper spine flexion
- Straight leg raises
- Prone holds when the belly is large enough to shift the pressure further up the abdominal area.



Instead:

- Exercises which work more of the Transverse Abdominus (TvA).
- These will be movements which are initiated through the lower spine rather than the upper spine.



A good rule of thumb for abdominal exercises is that if you see the belly creating a peak in the middle, instead of being nicely rounded, then there is too much pressure on the rectus abdominus and an easier version of that exercise should be used, or the exercise discarded completely.

My Experience

I've been writing this from the perspective of a Taekwon-Do instructor, qualified Personal Trainer (who specialised in studying about pregnant & post-natal women), and a mother of two small children, born only 18 months apart. There is plenty of information that an instructor, coach or pregnant woman can find on the internet about training and risk factors, but I've chosen to learn through the study that I had in my PT qualification, and my own experiences of trial and error in preparing for a major grading at the same time as starting my family. So the rest of this essay is going to be a mixture of my experiences and observations given my personal circumstances.

Baby No 1 (Chloe)

When I fell pregnant with Chloe, I was studying to be a Personal Trainer. I was very interested in the training of pregnant & post-natal women because my husband and I had been trying for a baby for a long time, so I planned to be in that special population group myself as soon as possible so it seemed a logical theme to do my special population case study on. But even after that study and working with post-natal clients to practise my skills and test my knowledge I still had NO idea what it was really like until I was about half way through my own pregnancy.

I was training 4-5 days a week (when you study to be a PT you spent A LOT of time in the gym ☺) and teaching Taekwon-Do at the time, and saw no reason why this had to stop any of this. Unfortunately, the baby had a different opinion from me. I was crippled with horrific morning sickness from weeks 6-14. I wasn't one of the unfortunate souls that are throwing up constantly thank goodness but I was constantly suffering from very strong nausea and was completely exhausted. This resulted in me spending the last 5 weeks of my course only going to class for exams, and only going to Taekwon-Do if I was needed. (I lived in what we affectionately referred to as "my nest" on our couch for almost this entire time!) Thankfully my husband was completely qualified to take on the classes for me so our students still had a teacher!

The reason that I'm putting this in here is because the debilitating effect of morning sickness, whether you are vomiting or not, is often underestimated by people who have not experienced it (not just men!). At the outset my husband even dared to say, "Isn't morning sickness is all psychosomatic anyway?"). He soon revised this opinion after seeing its effects for himself!

Morning sickness does not just strike in the morning; it can get you any time of day. Why they call it morning sickness is a mystery. It is most common during the first trimester of pregnancy, so strikes during the time that women are often not telling people yet that they are pregnant. If they are training in your TKD club though, they have an obligation to tell you so that you can help keep them safe, so hopefully you'll be in the know. This may mean that your student will not come to class if they are prone to vomiting suddenly as it's pretty hard to hide that you are pregnant when you are running out of the session to the bathroom all the time. I chose to tell our club so that they understood why I wasn't around as much (especially leading up to end of year grading) and why when I was there, I was a bit off my game. You need to have some genuine empathy in this situation and be accepting of any choices regarding attendance that your student makes during this time.

Luckily for me my morning sickness went away almost overnight when I hit the 14 week mark. I got myself back into the gym immediately as I didn't want to lose any more strength & conditioning. I had recently joined a new crossfit gym so no one knew me well or had any expectations of me which was great as I could start going to classes and work at my own pace. I found that after I'd gotten back into things I could do almost everything that I could do before. I could lift weights, I could do burpees, and I could do double unders (skipping where the rope passes twice under your feet). Basically, as long as I was comfortable, I could do it. So for the first 20 odd weeks I was absolutely fine. The only thing that I didn't do much of was running as the impact made my pelvis hurt. During this time, I did something pretty silly and attempted a record on my back squat. It was a day that our regular coach wasn't there. I was very excited to try though as I was feeling very strong and

thought I could do it. Turns out I couldn't quite and the couple of girls that were spotting me didn't grab the bar evenly to help me up when I said I wasn't going to be able to make it. I ended up hurting my back, which caused me trouble almost right up to the end of my pregnancy. Not worth it for the glory of saying I set a PB at 18 weeks pregnant! Between this and getting the flu shortly after, my time in the gym came to an end as by the time I was recovered I wasn't really comfortable doing that kind of exercise anymore, so I spent the second half of my pregnancy doing a lot of walking and concentrating on my Taekwon-Do training to keep fit instead.

I was aware that I wanted to grade to 4th dan in 2016 and that I'd have to make sure that if I couldn't do the more contact based aspects of my training that I'd better make sure I learned all my patterns well and was getting some constructive feedback on them right from the beginning so that I had one area where I didn't have to make up time. This way of thinking was a great motivation to keep active and engaged during my pregnancy where I was definitely limited in the do-jang. Again, with it being my first pregnancy I did underestimate some risks. I was holding a pad for one of my junior students getting ready for his red belt grading, a focus pad at arm's length away from my body (because I'm not silly right? Arm's length is perfectly safe surely!) He very seriously misjudged his aim and flying back kicked me in the stomach. Needless to say my midwife gave me a very stern telling off and I spent a couple of hours in the obstetric unit at the hospital monitoring Chloe to make sure she hadn't been harmed in anyway (she hadn't). Hence my warning that holding pads needs to be a hard no. Just never do it. It's not worth it.

After Chloe's birth (which was long and arduous), I felt pretty good all things considered. I was looking forward to getting active again. At 6 weeks I started taking long walks to visit a friend who lived about 6 km's from my house just to get moving again and shortly after that I was back in my home gym. I soon realised that my post-natal body couldn't do things that even my pregnant body was ok with. Step ups were painful, as were lunges so these quickly got put on the back burner until I'd recovered more. Anything that involved my pelvis not being in a straight line caused me pain so I just didn't do it until I was stronger. And that didn't take long. By 3 months post-natal I was doing full squats again and was able to increase to heavier loads. I was running and I was able to jump and kick at Taekwon-Do without a problem. It was nice to be able to hold a pad when demonstrating as well! I was also lucky enough to have a baby that slept through the night from 7 weeks old so apart from the very beginning I wasn't dealing with lack of sleep issues either. I needed to drink bucket loads as I was breastfeeding and make sure I was eating enough. Having a snack at with me that I could take a bite out of when having a drink break was vital. I was the instructor though, and it was my do-jang so this was easy for me. A student might be very conscious that this is not generally allowed so as an instructor the reassurance to the student that she will be allowed to do what she needs to do to keep herself healthy to look after that baby is paramount to her comfort in coming back to the do-jang.

I avoided jumping movements in the do-jang for the first month or so (I came back to training at 6 weeks post-natal) and also power breaking until I felt more stable in my joints, which was probably 2-3 months after. I had put on a whopping 17 kilos in this pregnancy, so I had to be very careful to go easy on my joints while getting this weight off because it's a heck of a big load for your skeletal system to manage especially while there are Relaxin hormones still present in the body affecting your joint stability for up to 9 months after giving birth.

Basically training wise, this was a very good experience, and I felt like I'd handled it well and was very confident in my ability to bounce back from having a baby. Enough so that my husband and I decided to try and fit another in before I had to start seriously training for my next grading....

Baby No 2 (Dominic)

Cue the morning sickness again. Thankfully for me by this time I had a fabulous assistant instructor who helped out so that I didn't have to send my husband off to class leaving me exhausted, sick and looking after a toddler all evening on my own! For some reason, even after the 14 week mark I still felt completely exhausted and had no idea why. Yes I was looking after a toddler, growing a new baby and had a bit much on my plate with TKD planning, but even that didn't explain how I was feeling. I was about to go for some tests to see if I had glandular fever but after a visit to help out from my mother in law, a very nice long walk in the sunshine and a bit of the pressure taken off I realised I was suffering from depression. Ante natal depression is not uncommon, especially for busy women who find themselves unable to be as organised or cope with being as gung ho as usual. This made me a prime candidate! I was very lucky to have figured this out early on my own as I was able to manage this through having a really good diet, and spending a lot of time in the gym or out in the fresh air.

So the lesson from this for instructors is to be watchful. If that dreaded 14 weeks of sickness has passed, and you are still not seeing much of your student due to tiredness/illness, pay them a visit. See if they are ok. Ask the hard questions. It's really not uncommon for women in this situation to isolate themselves because they are just so tired and miserable! In most cases getting them back into some exercise (gently if necessary!) and helping with their eating habits will be enough to sort this out. If not, suggest that they speak to their midwife or obstetrician who may refer them back to their GP to look at some medication to help them manage. Keep in mind that a woman who has suffered from ante natal depression is almost certainly likely to suffer from post-natal depression.

This pregnancy was completely different from my first. This pregnancy was much more active and healthy; however I was very conscious of my limitations having been pregnant twice in the space of two years. My body had not fully recovered from the first pregnancy so staying strong and stable were my main priorities.

In hindsight I realised that I'd suffered from the depression in my last pregnancy as well, but that being at work during that time and around friends and work colleagues daily made it a little less full on and much easier to manage. I was also very determined not to put on as much weight this time around. I had already put on a lot of weight in my first trimester with being so tired, inactive and not bothering with what I was putting in my mouth as long as it was easy. I went on a mission to rectify this. In my second trimester I lost around 6kg. The total amount that I'd put on during my first 16 weeks. Now that may sound horribly unhealthy and not safe for the baby to some people, but if you are carrying plenty of excess body fat and your lifestyle isn't great, then losing weight up to the 3rd trimester is absolutely fine. I was certainly growing a baby. You could see that! But I was eating very well, with lots of vegetables and good fats and I was in the gym 3-4 days a week as well as Taekwon-Do training. My body and mind hadn't felt this good in ages, and Dominic would always have a nice healthy kick around after I'd finished my session.

My gym work consisted of lifting fairly heavy weights (using barbells, kettlebells and sandbags), not going anywhere near maximal lifting but certainly making things slightly challenging and making sure I maintained my cardiovascular conditioning. I also made sure that I had a trustworthy spotter if I was lifting anything that was more than ½ of my maximum. After about 22 weeks running was out so I used my rowing machine almost daily. I also made sure to avoid almost any variation of lunges from quite early on as my hips and pelvis were quite unstable from pretty early on. I would do some static lunges from time to time but if I felt any pelvic discomfort I stopped immediately.

In my Taekwon-Do training I continued to do a lot of technical training, sending video's away to my supervisor from a very early point (18 months before I was hoping to grade) so that I could ensure that the work was done in that area and then when I was able to get back into contact work and breaking again that I could concentrate on these areas more specifically. I continued to break until my centre of gravity made it feel too uncomfortable and I would have to severely change my

technique. Then I just stopped. This way I didn't train my body into doing something completely different and then have to re-train it after having Dominic. I avoided self-defence of any kind apart from when teaching and demonstrating in slow motion. I would never be the attacker that someone else needed to hit and I never allowed anyone to grab me for demonstration purposes below the shoulders. It goes without saying that I didn't once hold a pad, not even for a kid, not even at arm's length! If I trained any step sparring or self-defence I would only do this with my assistant instructor or husband whom I trust implicitly as my training partners to be aware of my situation and behave accordingly. It's great to have these people in your life when you are limited in this way with your training so that you can do things enough to at least keep the muscle memory going.

I continued to train in this manner, and lifted pretty heavy weights right up to about 32 weeks. At this point my pelvis started to feel quite unstable if I was squatting to full depth with heavy weights so I started only going to about half depth or using a box to sit on and then stand up. Not long after this, my midwife told me that my little boy was quite low down, might want to make an early entrance and that I should cease any training that was any more than a short quiet walk for a little while. This was just before Christmas and right after TKD had ceased for the year so pretty good timing although it left me a bit sad at not being able to spend lots of time in the gym over the Christmas break! My son was born at the end of January, at 38 weeks. My labour was much shorter and I was much stronger for it this time around. Keeping up that training to such a late stage made a huge difference.

I was confident that since I'd trained so hard to stay strong and fit and had only put on a meagre 7.5kg in this pregnancy that I'd be able to get back into things just the same way I had with my first. But this was not to be. Two pregnancies in the space of 2.5 years really take a toll on your body. I had underestimated this.

At about 4 or 5 weeks our new little family took a walk from home to a local wildlife reserve (not far, only about 3 km's from home). It took me nearly a week to recover. My hips and pelvis were so sore that I could barely walk for the next 4 days. This was my first clue that this time was going to be very different.

The next clue was that 7 weeks, then 10 weeks, then 12 weeks came and went and still Dominic didn't sleep through the night. I was perpetually exhausted and just waiting for the sleep to sort itself out so that I could get back into my gym and get my training on track for the grading I was hoping would be confirmed for the end of the year. This little guy didn't properly start sleeping through the night until nearly 7 months of age (and even then it wasn't consistent)!

I tried to take some control over the situation though, and at 8 weeks post-natal I entered patterns in a local round robin tournament. The organiser was really great in that he instructed the jury president not to select patterns with jumping movements in them when I was up. The JP advised they would do their very best, however they were a coloured belt so no guarantees could be made! I was very pleased with the day, even though I performed Choong Moo, Gae Beck and Toi Gye, all with jumping in them! And although my body was definitely sore the next day, it was manageable and this gave me the confidence that I'd be able to get back to training.

So from then on I started attending one class a week, as a student, with not much instructing so that I could get myself back into a decent condition before having to take on the teaching role again. I also would get along to most of our weekend self-directed sessions to start making progress on my breaking which I'd had to stop during my pregnancy.

The post-natal depression reared its ugly head about 3 or 4 months after Dominic was born. I tried all my usual tactics to manage this but with a toddler and an infant, it was just not doable. I got referred to a post-natal adjustment programme and put on some medication in July of this year nearly 6 months after my son was born. There was quite a big adjustment period to go through in

going on medication. I had planned to be teaching again by mid-July but side effects and just feeling a little off balance made this a bit of an unrealistic expectation and thankfully my assistant was hugely supportive and told me to take all the time I needed. It did affect my training as well and I wasn't able to do as much fitness work as I'd hoped. Some of my numbers were going in the wrong direction which was a bit demoralising.

In this situation, again, I was the instructor so I allowed myself what I needed to get through and get as much out of my training as I could. You as an instructor/coach need to be mindful of these situations. The question "are you doing ok?" is a very important one to keep asking post-natal students, especially those with multiple children, and especially if these children are close together. In just giving myself an extra few weeks to get back on track, I felt 100% better, was able to come back to teaching my class full time so that my assistant could start getting some more training in and really feel of value to everyone because I was properly capable instead of not quite able to do my best.

I did come to realise that big gym workouts to try and better my fitness test scores were not practical for my circumstances. I had to lower my expectations. Breaking some body weight work down into small sets to do numerous times over the day when I have 5 minutes while the children are occupied was much more realistic and it will be interesting to see if it has a positive effect on my last fitness test scores. If you are a mum with high expectations of yourself, and you keep letting yourself down, you need to lower your expectations and break it into something manageable. You need to be able to keep seeing small improvements that are achievable for you rather than trying to attain huge leaps when what it requires to get there is just not realistic or mentally healthy for you to be trying to fit in to your already difficult enough life!

There has been a new and unpleasant development to my post-natal training just in the last week (at 37-38 weeks post-natal). I have recently weaned my son (mostly) onto a bottle, so my body is recognising that I am no longer nursing my son and I am now finally realising what it feels like when the Relaxin hormone leaves the body. After a bit of research and asking questions of some health professionals, it would appear that the hormone often stays present in the body to some extent until breastfeeding ceases. By the time I had stopped feeding my daughter, I was already pregnant with my son, so the Relaxin didn't really go away. But this time it has and I can definitely feel it. As mentioned earlier, the job of the Relaxin hormone is to loosen up the tendons and ligaments in the body to prepare for child birth. My muscles are still relatively flexible; however my connective tissues are tightening up big time. This means that although I'm still flexible in my muscles, my joints are not able to reach the range of motion that I want without some pain. It also means that impact from breaking and running causes me pain while my body re-stabilises itself to adjust to the new shape of my pelvis as well. I had not anticipated this because it didn't happen last time! I started to notice it when I started taking on longer training sessions of 3-4 hours at a time. I found myself needing almost a week for my hip area to recover from these sessions. And then when I had a full day training, I really felt it and starting doing the research and asking questions. It's not the best timing, having to spend a bit of my precious training time so close to my grading (I am now 7 weeks out!) taking it easy, resting my lower body and just letting this process happen. I have already started practising a back-up foot break, just in case my hips and pelvis are still protesting by the end of next month for me to perform the one that I've been working on all year. I've spent a lot of time working quietly on little things, and technical fixes for my upper body movements so that the time isn't completely lost. This essay must be handed in before I'll be able to report on how this has gone closer to grading date but I will add to it afterwards with some recommendations for managing this stage of recovery.

Summary:

- NO contact (during pregnancy and up to about 6 ish weeks postnatal)
- Avoid sprinting (after about 16 weeks, for some even earlier)
- Avoid full depth squats (unless previously well-conditioned for this).
- No maximal lifting or doing any movement to muscle failure.
- No PNF stretching or any other stretching that will push beyond pre-pregnancy range of motion.
- Prone holds after about 16ish weeks (on knees is ok almost all the way through depending on the persons pre-pregnancy strength)
- ABSOLUTELY NO PAD HOLDING
- ABSOLUTELY NO SELF DEFENCE
- Avoid uneven surfaces
- Avoid sit ups or crunches (or anything else that involves laying on the back)
- Be supportive
- Encourage her to achieve her goals, even if they may seem far reaching to you!
- Do let her kick pads as hard as she likes
- Do let her take part in all the fitness training that you do and sub in exercises that are suitable for her if you have unsuitable ones (such as sprints, lunges or sit ups).
- Concentrate on aspects of training that she CAN do, especially as the pregnancy progresses. If this means taking a bit of extra time during class to do technical work with her while others are sparring, then do it!

I know this should go without saying, but even if you think it's just a friendly joke

- DO NOT make comments about her body. You might be best friends with this woman but it's still inappropriate and can make her feel self-conscious.

Coaching pregnant & post-natal women is about engaging with them on a mental & emotional level as well as working with their physical abilities. If you aren't up for the task, then be willing to direct them to someone who is, so that they don't give up on themselves, and are in a supportive and progressive environment where their goals are just as important as anyone else's. Depending on your location, this may mean that ITKD loses a student to a different organisation or martial art, but that student really is more important than our numbers, so be prepared to make the hard call if you are not the person for the job.

Physically, a lot of us have probably heard the phrase "it takes 9-10 months to grow a baby, and it takes that long for your body to recover as well". This is reasonably accurate although there is some new research that states that it's closer to a year for full recovery including having all your joint stability return (especially in your pelvic region). If you throw another pregnancy into this equation before this full recovery time is up... You're looking at closer to 18 months to fully recover to your pre-pregnancy stability. The shape of your pelvis completely changes after the birth of each child so you do have to be aware that your body is different and will take some time to be able to do certain activities again. I am currently 39 weeks post-natal and I will still not do lunges. I will not do overly long sessions of repetitive flying techniques. I have built up my prone hold very slowly as getting back into this too fast can lead to abdominal separation. But there is plenty that I can do. Pretty much everything else in fact! Don't kick me in the chest though or I'll be very cross indeed!

If you are coaching a new mum, who has some big goals for herself, especially if these goals are deep seeded and very important to her; please don't try and tell her that she can't. Or even that she shouldn't. Instead, work with her to find a path to that achievement that she can manage. Support her plans and aspirations because she's a person in her own right. Not just a carrier and carer for this new little person/people in the world. This woman's life has already changed so much. She has given up a number of things in her old life that she will likely be grieving for so if her Taekwon-Do goals are what help her to retain her sense of self, don't be the person that tries to take that from her. She needs it. Taking this kind of holistic approach to your students training/recovery will help

you retain your member, will help her have a strong and healthy pregnancy and will definitely strengthen your student/instructor relationship. If you can support your new Mum students through the most important job they ever have to do and the time of their life of the most change and upheaval, you'll find have a supportive and loyal member for many years ahead.

My hope is that instructors have been able to take away some advice and physical information with regards to their students, and that women who are planning their family have gotten some valuable insight from my experiences (bearing in mind that every experience is different in its own way). I am happy to be contacted by any instructors or students if you have any questions or would like some support with training/supporting members through pregnancy and post pregnancy. My contact details are listed on the ITKD website under Pulse Taekwon-Do in the South Island.