Pregnancy and Pilates

"Pilates develops the body uniformly, corrects wrong postures, restores physical vitality, invigorates the mind and elevates the spirit"

Joseph Pilates

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September 24th 2006
Pacific Palisades, CA
ABSTRACT

In this paper, we will explore the benefits of Pilates during pregnancy. Pilates is great for strengthening the pelvic floor which helps with childbirth and bladder control. The deep abdominal conditioning of the transverse abdominal muscles helps with pushing during labor and regaining abdominal strength post natal. Learning the breathing and relaxation techniques of Pilates teaches the pregnant woman to feel centered throughout pregnancy and in the delivery room. Posture assessment and strengthening keeps pregnant women stronger and taller as their belly grows and their center of gravity changes. The overall body conditioning and toning of Pilates keeps pregnant women stronger during labor, it helps them maintain a positive body-image before and after birth and it aids in a speedier recovery.
ANATOMICAL DESCRIPTION

In this paper, we will focus on the prenatal effects on a woman’s body and the benefits of Pilates. Emphasis will be placed on the following body parts: transverse abdominal muscles, the pelvic floor and the cervical, thoracic and lumbar spine.

The anatomical structures of pregnancy
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EXPLORING THE BENEFITS OF PILATES DURING PREGNANCY

Being pregnant is a unique and meaningful time in a woman's life. No two women's bodies are the same, and this is especially true during pregnancy. There are workouts that are appropriate for some people during pregnancy and not for others. During a normal, healthy pregnancy, moderate exercise is safe for the fetus. Exercise is also said to help alleviate low back pain, boost self esteem, and prepare the body for the physical demands of motherhood. We will explore how Pilates workouts build strength, flexibility and overall wellness during pregnancy.

Major physiological and anatomical changes occur during pregnancy. In addition to the obvious changes such as weight gain, and fluid retention, there are also less obvious changes that occur such as hormonal fluctuations, loosening of the ligaments, and postural deviations. Workouts and schedules have to be adjusted over the course of the pregnancy to take into account all the changes that take place over the course of pregnancy. The beauty of Pilates is that it can be individualized for anyone's ability. As a woman progresses in her pregnancy, prenatal Pilates offers her a gentle yet powerful full body workout and will help her to stay connected to her shifting center of gravity.

A pre-natal exercise program would not be complete without including exercises that focus on good posture, abdominal strength and pelvic floor strengthening. It is also important to emphasize breath, focus, balance, control and awareness. All of these factors are an integral part of the Pilates workout.
and they are also very helpful during pregnancy and childbirth. Pilates is well suited as a fitness option for pregnant women throughout their pregnancy.

It is important to design a workout regimen that is appropriate and effective for a woman during each phase of pregnancy. The client should always listen to her body and the Pilates instructor needs to listen to the client. The client should also have written consent from her doctor before beginning the Pilates workout.

There are a few key things to avoid when dealing with pregnancy in the second and third trimester:

- Heart Rates exceeding 140 BPM (client should always be able to talk while exercising)
- Over Heating (temperature should not exceed 100.4 degrees Fahrenheit or 38 degrees Celsius)
- Client should not lie supine for extended periods of time because it can disrupt venous return and decrease cardio output to the fetus
- Exercises should not involve inversion or demand a lot of balance

As long as the necessary precautions take place and the client listens to her body, the strength and awareness gained from Pilates can help a woman have a more comfortable pregnancy, an easier birthing experience and a quicker recovery.
CASE STUDY

This case study is based on a 32 year-old woman in her third trimester of pregnancy. She has been practicing Pilates on and off for two years. She has remained active throughout her pregnancy with yoga, low impact cardio, lifting light weights and an occasional Pilates session. As she enters into her 7th month, she feels like Pilates is one of the better exercise options for herself. She knows that it will help her focus on good posture, maintain strength in her pelvic floor, abdominals and hip adductors and will keep her strong and flexible without overexertion.

After my client received a written consent from her doctor that she could practice Pilates, we began working out together. I designed workouts that incorporated her goals and yet kept her within the safety guidelines of doing Pilates when Pregnant.

PILATES CONDITIONING PROGRAM:

WARM-UP:

The warm up was done on a C - cushion so that she had proper support and was not in a supine position. On the C – cushion we did:

Pelvic Curl, Chest lift, Chest lift with slight rotation and single leg lifts.
FOOTWORK: Performed on the Wunda Chair

Parallel Heels, Parallel Toes, V Position Toes, Open V Heels, Open V Toes, Calf Raisers, Single Leg Heel and Single Leg Toes. Footwork on the Wunda Chair is also beneficial for strengthening the back extensors. Another option was footwork on the reformer, as long as we used a C - cushion for support and my client felt comfortable.

ABDOMINAL WORK

Standing Pike - Wunda Chair was an option for abdominal work, as long as it didn’t make my client feel dizzy. We also used the C - cushion for hundreds prep on the mat.

HIP WORK

Since hip work on the Reformer and Cadillac was awkward on the C cushion, I liked to incorporate hip work into the additional leg work block. This way I was able to work her hamstrings, hip adductors and hip extensors and yet keep her comfortable and safe.

SPINAL ARTICULATION

For Spinal Articulation we didn’t have a lot of options so we usually did a Cat Stretch on the mat which she enjoyed because it loosened up her back, articulated her spine and worked her abdominals.
STRETCHES

For Stretches, we had many options; Shoulder Stretch Lying Side – on the Step Barrel; Pole Exercises – Standing Series: Shoulder Stretch, Overhead Stretch, Side Stretch, and Spine Twist Standing. Standing Lunge on the Reformer was also an option.

FULL BODY INTEGRATION 1

For FBI 1 we usually did Side Reach on the Cadillac because it worked her obliques and it was a good stretch. We also did Thigh Stretch with the Roll Up Bar because it was a great abdominal and quadriceps workout. Other options were Sitting Forward, Cat Stretch and Saw on the Cadillac or the Stomach Massage Series on the Reformer – Round Back, Flat Back and Reaching.

ARM WORK

We had many options for Arm Work and we liked to mix it up. We would do one arm series per session and we usually rotated between the Reformer, Cadillac, Ped-o-Pul, the Magic Circle and a few exercises on the Wunda Chair. We did the Sitting Series on the Reformer – Chest Expansion, Biceps, Rhomboids, Hug-a-Tree and Salute. We did the Arm Standing Series on The Cadillac – Chest Expansion, Hug-a-Tree, Circles (Up, Down), Punches, Biceps and Butterfly. We did the Ped-o-Pul exercises – Arms Standing, Extension, Adduction, Circles (Up, Down) and Triceps. We used the Magic Circle for the Arm Work – Standing
Series – Arms Bent, Arms Straight, Arms Overhead, Single Arm Side Press and Single Arm Bicep. We would sometimes mix in Shrugs, Triceps Press Sit and Side Kneeling Arm on the Wunda Chair.

FULL BODY INTEGRATION 2

Since FBI 2 exercises are advanced and require a lot of balance, muscle control and could potentially be too dangerous for my client, we skipped this block.

ADDITIONAL LEG WORK

On the Cadillac we did the Single Leg Side Series – Changes, Scissors, Forward Circles, Back Circles. These exercises were a great workout for her hip adductors, which makes up for the hip work that we had to skip. I also incorporated Leg Press Standing on the Wunda Chair because it works her Hamstrings, which is another muscle group that we missed by not doing hip work. Other alternatives for the Additional Leg Work were: Magic Circle Sitting Series, - Ankles, Below Knees and Above Knees. We also did the Gluteal Side Lying Series and the Gluteals Kneeling Box Series.

LATERAL FLEXION/ROTATION

We did Side Kneeling Stretch on the Wunda Chair because it provided her with a great lateral stretch and she loved the way it felt.
BACK EXTENSION

We usually ended with Cat Stretch on the mat, emphasizing the back extension part of the exercise.

CONCLUSION

In Conclusion, my client was very happy with her Pilates workouts. She felt like they were extremely beneficial for her body and they helped her to have a comfortable 3rd trimester. Through Pilates she was able to avoid rounding shoulders and low back pain. She attributes her successful child birthing experience to the pelvic floor strength, the breathing techniques and the overall body conditioning that she gained from her Pilates workouts. She had a beautiful, healthy baby and she is excited to return to Pilates after 6-8 weeks of recovery. I am looking forward to working with her again, postnatal. We will have many more exercise options as we strengthen her body and help her to get back in touch with her new center of gravity. Pilates will continue to be a part of my client’s life.
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