Current research suggests that water-based therapy is effective in the management of knee osteoarthritis and lower limb deconditioning.

The buoyancy of the water reduces the impact through your joints, deceasing pain levels and allowing a higher intensity of activity and exercise. This means that water-based treatment can help to limit stiffness, improve your movement and strengthen your muscles. As well as this, the increased pressure on your body in the water can help to reduce swelling and improve circulation. This can all lead to increased confidence and function, which is why water-based therapy has been found to be as beneficial as exercises on land.

Attached is an exercise sheet including the exercises which have been found to be most beneficial for people with knee osteoarthritis. Completing these exercises for 45 minutes at least once a week in your local swimming pool may help to reduce your symptoms.

**Marching on the spot**

Stand holding on to the wall/rail  
Lift one knee towards the surface  
Repeat on the other leg.

Continue for ............. minutes.

**Heel flicks**

Place an armband around your ankle (Can do the exercise without an armband).  
Stand holding on to the wall/rail  
Bend your knee towards your bottom  
Repeat 10 times x3 sets.
Side kicks

Stand holding on to the wall/rail
Keeping your knee straight lift your leg out to the side away from your body
Return to the middle and repeat
Repeat 10 times x3 sets.

Lunges

Step one leg forwards with the foot flat on the floor
Bend your front knee and lower your back knee towards the floor as shown in the picture
Stand back up and repeat on other leg
Keep your back straight
Repeat 10 times x3 sets.

Step ups

Place your bad leg on a step in the pool
Keeping your back straight, step up pushing through your heel
Then step back down
Keep your back straight
Repeat stepping up and down
Repeat 10 times x3 sets.
Step downs

Standing at the top of a step
Slowly lower your good leg to the floor by bending your bad leg
Keep your back straight
Return to starting position keeping your bad leg on the step
Repeat 10 times x3 sets

Squats

Stand with your back against the wall feet hip width apart
Bend your knees keeping your back against the wall
Stand back up
Repeat 10 times x3 sets.

Cycling in the corner

In the corner of the pool hold on to the sides
Let your legs slowly lift off the floor keeping your bottom down
Cycle your legs as if you are pedalling a bike
Keep your back straight and your bottom in the corner
Continue for 2 minutes
Warm up and cool down

Stand with the leg to be stretched on a footstool.

Flex your ankle and push the heel towards the footstool keeping your knee straight. Hold approx. 30 secs. - relax. Then bend your upper body forwards from your hips keeping your back straight. You should feel the stretching behind your knee and thigh.

Repeat 3 times.

Stand with your feet together facing a wall, leaning against it with your arms and back straight.

Let your body drop towards the wall keeping heels on the floor. You should feel the stretching in your calves. Hold approx. 30 secs. - relax.

Repeat 3 times.

Walk forwards and backwards in the water for 2 minutes.
Turn to the side, side step up and down for 2 minutes.

References

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