



Is a Modified Package of Exercise Training Useful on Low Back Pain in Nursing?

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Dear Editor-in-Chief

Nursing is one of the professions with the highest prevalence of Low Back Pain (LBP). The prevalence of LBP in nursing is about 70% and in a year and 35 to 80% in their lifetime (1). Nurses require much physical activity, such as turning, bending, standing, handling patients during their works and these conditions make them prone to LBP (2, 3). It is essential to design a practical and feasible program for reducing the prevalence of LBP in nurses.

Most studies have only focused on designing a package for office workers with full-time sitting position to reduce the prevalence of LBP (4-7).

In nursing, ergonomic devices, training of ergonomic and manual handling principles are used for reducing the prevalence of LBP (1). Recently,

Noormohammadpour et al have used the Multi-Step Core Stability Exercise Program for treatment of LBP in nurses (2).

The packages of Shariat et al and Noormohammadpour et al had several limitations such as package of Shariat et al just has focused on sitting position, it is general for the neck, shoulder and back pain, as well as the package of Noormohammadpour et al needed a special device like Swiss ball. Then we are going to modify these packages for nurses at work. Our suggested package of exercise training modified included nine exercises from Shariat's package and five exercises from, Noormohammadpour's program (2, 4). The details of this package is presented in Table 1.

Table 1: Package of exercise training modified for nurses at work

<i>Exercise number</i>	<i>Details</i>
1.	1. Stand 2. Stretch both hands over your head 3. Keep for 30 sec
2.	1. Stand 2. Put both hands on the armrest 3. Rotate the upper body 180 degrees to the left 4. Keep for 30 sec 5. perform with another side



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3.
 1. Stand
 2. Put the ankle of one leg on top of the other leg
 3. Keep for 30 sec
 4. Perform with another side
 4.
 1. Stand
 2. Lift one leg up in a line of floor
 3. Keep for 30 sec
 4. Perform with another side
 5.
 1. Put both hands on the backrest of the chair
 2. Curve your upper body in the line of the floor
 3. Stretch your back muscles
 4. Hold for 30 sec
 6.
 1. Put both hands on the backrest of the chair
 2. Curve your upper body in the line of the floor
 3. Move one hand to inside and outside
 4. Perform 10 times
 5. Perform with another side
 7.
 1. Put both hands on the backrest of the chair
 2. Separate two feet apart
 3. Lower the body till the front knee at approximately 90 degrees
 4. Keep the leg behind straight
 5. Keep for 30 sec
 6. Perform with another side
 8.
 1. Lean on the wall
 2. Keep your hands in alignment with the ground
 3. Do a squat with both knees at 60-90 degrees
 4. perform 10 times
 9.
 1. Sit on chair
 2. Straight one leg in the line of floor
 3. Reach both your hand to your leg as far as possible and keep for 30 sec
 4. Perform with another leg
 10.
 1. Stand
 2. Walk while contracting your lumbar paraspinal muscles and abdominal muscles lightly
 3. Perform for 20 min
 4. Perform jogging a few minutes later
 11.
 1. Straight your body and Stand
 2. Lift one of your legs off the floor while contracting your lumbar paraspinal muscles. Keep for 30 sec
 3. Rest
 4. Perform 10 times
 12.
 1. Straight your body and Stand
 2. Lift your right leg off the floor, then bend the left knee and reach right arm to the body while contracting your lumbar paraspinal muscles. Keep for 30 sec.
 3. Rest
 4. Perform with the other side
 5. Perform 10 times
 13.
 1. Straight your body and Stand
 2. Gait backward with jumping form of left leg while contracting your lumbar paraspinal muscles and keep for 30 sec
 3. Perform with the other side
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4. Perform 10 times.
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14.
 1. Straight your body and Stand
 2. Gait backward with a jumping form of the left leg, then lift your left leg off the floor and reach your arms in front of your body while contracting your lumbar paraspinal muscles. Keep for 30 sec Rest
 3. Perform with the other side
 4. Perform 10 times.
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Conflict of interest

The authors declare that there is no conflict of interest.

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