

## THE ACHARYA TECHNIQUE AS HEALTH CARE MEASURE FOR LOWER BACK PAIN

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### ABSTRACT

Health is the state of complete physical, social, mental and spiritual well being, not merely the absence of disease or deformity. (WHO) But any fluctuation in these states may originate and trigger irritation, lack of interest in work or an obstruction in day to day life practices. Pain is an unpleasant sensory, emotional and subjective experience associated with actual or potential tissue damage. Lower Back Pain (LBP) is defined as discomfort in the spinal area below the level of 12th rib and above the gluteal folds experienced at least once a month, with or without radiation into the leg. The nurses working in ICU and OT experience lower back pain more frequently due to bending forward for long durations, over-forcing /over-loading some body parts while repositioning patients and sparing more time for patient care. From the above risk factors the nurses become less efficient, receive medical leave/retire early. Lower back pain can be treated by medications, mobilization, stretching exercise, stabilization exercise, ergonomic advice and postural advice and home remedies. Exercise plays an important role in preventing and reducing lower back pain by strengthening the back muscles and improving flexibility. Acharya Technique is a simple natural stretching exercises consisting of 5 steps each with half a minute duration to strengthen the lower back muscles and to reduce lower back pain. This exercise can be practiced by nurses for 15 minutes daily for 15 days to strengthen lower back muscles and to reduce lower back pain. Literature reviews proved that stretching exercise were effective in reduction of lower back pain. Acharya Technique is a simple stretching exercises consisting of 5 steps each with half a minute duration to strengthen lower back muscles and to reduce low back pain. This exercise can be practiced by nurses for 3-5 minutes daily for 15 days to strengthen lower back muscles and to reduce low back pain.

**KEYWORDS:** LBP (Lower Back Pain), Acharya Technique, Ergonomic.

### INTRODUCTION

All age group people from children to the elderly were affected with lower back pain, and are a very frequent reason for medical consultations. The Global Burden of Disease study determined that low back pain is among the top 10 diseases and injuries that account for the highest number of DALYs worldwide. Over all the lower back pain is the main cause of limit activity and working absenteeism, imposing a high economic burden on individuals, families, communities, industry, and governments. Lower back pain was identified as the most common cause of disability in young adults, with more than 100 million workdays lost per year In the United Kingdom.

The lower back pain may arise from pathological and non-specific causes. The pathological cause includes

degenerative diseases of spine, inflammatory arthropathy metabolic bone conditions, fracture. Nonspecific or common lower back pain is aggravated by static loading of spine (prolonged sitting or standing) by lever activities such as vacuuming or working with the arms elevated away from the body and levered postures (bending forward). This type of non-specific lower back pain reduces when the spine is balanced by multidirectional forces such as walking, constantly changing the positions and stretching exercises.”

### Acharya Technique

The Acharya Technique was introduced by Dr. S M Acharya, Neurosurgeon, member of Nature Cure Cell of the Pune –based Save India Association (SIA) has been working in this Acharya Technique to revive the people by natural instincts and behavioural patterns to mitigate from aches and pains. This Acharya Technique is a

simple, natural, self-cure, stretching exercise which involves flexor, extensor and oblique muscle consists of five steps each of half minute duration to reduce low back pain. As compared to allopathic medicines, this nature cure exercise has many benefits.

Acharya Technique is a simple stretching exercises consisting of 5 steps each with half a minute duration to strengthen lower back muscles and to reduce low back pain. This exercise can be practiced by nurses for 3-5 minutes daily for 15 days to strengthen lower back muscles and to reduce low back pain.

#### **Benefits of Acharya Technique**

- Relief from backache, headache and migraines
- Improvement in sleeping patterns
- Warding off or reducing prostate problems
- Reduction in varicose veins
- Minimize premenstrual tensions and muscle cramps

Thus, even healthy people can benefit from this Acharya Technique to maintain a healthier, balanced and active life style. Since it reduces the low back pain within few weeks without medicines and without any surgical procedure it was recommended by orthopaedicians.

#### **Steps in Acharya Technique**

##### **First Step**

- Lie with your palms under your head looking at the ceiling
- Pull your feet towards you with a jerk keeping the heels firmly in the bed
- Remain in that position for a few seconds
- Take the feet side ways: left foot to the left side and the right one to the right side.
- Bring your feet together in a circular motion towards the center.
- Straighten your legs holding your feet together
- Relax in that position for a few seconds
- Repeat this ten times

##### **Second Step**

- Lie with your palms under your head
- Pull your feet towards you with a slight jerk holding the feet together
- Take both the feet straight downwards with a similar jerk
- Take the feet side ways: right foot to the right side and left one to the left
- Bring your feet together in a circular motion
- Straighten the legs and relax for sometime
- Repeat this 10 -15 times

##### **Third Step**

- Lie with your palms under your head looking at the ceiling
- Pull both the feet towards you in a sudden jerk

- Hold them together tightly for a few seconds
- Slowly release the reassure and straighten the legs and come to the legs and come to the original position
- Do the exercise 10-15 times

##### **Fourth Step**

- Lie on your back with your palms under your head
- Part your feet (4-6 inches)
- Pull your feet towards you half way
- Suddenly pull both your feet upwards
- Strike the knees gently in a sudden motion
- Hold that position for a few seconds
- Release the pressure by separating the knees
- Straighten the legs down to the original position

##### **Fifth Step**

- Adjust your position in the bed in such a way that your feet touches the wall or the wooden plank or rod of the cot
- Close your eyes
- Imagine you are stretching and becoming longer and longer
- Continue to push against the plank or wall which will push you half an inch or so backward
- Point your toes downwards as if the entire body is in a straight line
- Turn on to the side and raise yourself up to the sitting position supporting yourself with your hands. (V. Hemavathy et al, 2014).

**Do and Don't of Acharya Technique.**

Do	Don't
<ul style="list-style-type: none"> <li>Put your palms on your thighs above the knees to give you firm support before getting up to stand from the sitting position on the bed or the sofa</li> </ul>	<ul style="list-style-type: none"> <li>Do not lift heavy weights or heavy objects. If you must, do take some one's help who may be nearby at hand.</li> </ul>
<ul style="list-style-type: none"> <li>While climbing up the stairs, hold the side railing by hand, taking some of the exertion on the hand. If the steps are too high, climb gently by putting the hand on above the knee for support.</li> </ul>	<ul style="list-style-type: none"> <li>Do not bend your back to lift anything lying on the floor. Instead, bend your knees and reach out to grab the things, so also while gardening or watering the plants. If you have to do some digging to put a plant, better sit down and do it, instead of leaning to do it. As, that puts a lot of pressure on the lower back.</li> </ul>
<ul style="list-style-type: none"> <li>Do keep your bowel movements free and regular. Eat more of foods having adequate dietary fiber and adequate nutrients. More of vegetables and fruits of the seasonal variety that may suit you (and less of sticky and starchy foods) should be eaten. In other words, whenever you eat, try to eat more and more things "made by God", like fresh fruits and vegetables and less and less "food made by man" and tampered by overcooking just to tickle your tongue.</li> </ul>	<ul style="list-style-type: none"> <li>Never try to run up the stairs or jump up two steps at a time</li> <li>Do not get up from the bed after sleep or after resting a while with a sudden jerk. Instead, turn to the side and use your other free hand as a lever or support and then get up cautiously.</li> <li>Do not push heavy tables, furniture, gas cylinders, etc. If you have to move such things, then better push or pull them slowly without bending yourself at the back by putting your one foot forward before trying to pull or push things.</li> </ul>
<ul style="list-style-type: none"> <li>Adequate exercise that suits your state of health is a must. Simple walking 3 to 5 kilometer a day is recommended. Instead of waiting in a queue for a bus on busy roads, better walk down to the nearest bus station or junction where more people get down. That would save you money, give you some extra exercise and help you to keep your weight under control.</li> </ul>	<ul style="list-style-type: none"> <li>Do not keep standing for long while working at the table shifting or searching papers. Better sit down and do that work; even while reading newspapers.</li> </ul>
<ul style="list-style-type: none"> <li>Drink plenty of water to generate about two liters of urine per day. It would help keep your internal system well flushed, avoiding even the formation of kidney stones in most cases. In summer, you may have to drink more water to make up for perspiration losses. Avoid soft drinks or fruit juices. Instead eat whole fruits as that would give you the much needed fiber and extra nutrients.</li> </ul>	<ul style="list-style-type: none"> <li>Do not sit in inconvenient or uncomfortable postures for longer time.</li> </ul>
<ul style="list-style-type: none"> <li>Do hold on to something firmly or at least put your hands firmly on the thighs or waist, as the case may be, before sneezing to prevent back breaking jerks.</li> </ul>	<ul style="list-style-type: none"> <li>Do not allow indigestion or flatulence (gas) as both can give you trouble.</li> </ul>
<ul style="list-style-type: none"> <li>While changing trousers or tying shoelaces, better sit down on the bed, sofa or a stool nearby and do that as losing you balance might hurt your back.</li> </ul>	<ul style="list-style-type: none"> <li>Do not hold on or delay going to the toilet when needed as it could put undue pressure on the spine, ligaments, kidneys, bladder or the large intestines.</li> <li>Do not do any other exercises of a strenuous nature.</li> <li>Do avoid eating too much of the so-called "white poisons such as sugar, salt, fats, refined flours, eggs (meaning non-vegetarian foods and even too much of milk or milk products).</li> </ul>

**Some studies related to Acharya Technique**

Back pain is frequent complaint. It is the commonest cause of work-related absence in the world. Although back pain may be painful and uncomfortable, it is not usually serious. Even though back pain can affect people of any age, it is significantly more common among adults aged between 25 and 55 years. Low back pain (LBP) is experienced in 60%–80% of adults at some point in their lifetime. Hoy D *et al* (2014) estimated the

annual worldwide LBP incidence in adults to be 15% and the point prevalence to be 30%. Freburger JK *et al* (2009) stated that at least 50% of adults would have experienced an LBP episode. Ganasegeran K *et al* (2014) demonstrated that LBP is one of the most common causes of visits to a physician and those men and women are equally affected by LBP. Various studies found that LBP is a very common problem among adolescents, with an incidence that is the highest in the third decade of life

(These MS *et al.*, 2014). Some authors proposed that LBP in young adults and children may occur because of growth spurts and increased physical activity (Ozgular A, 2000). In contrast, Plenet A *et al.* (2010) revealed that students with back pain were more likely to be sports avoiders than their counterparts who were involved in sports. Young adults who experienced LBP at the age of 14 years had an increased incidence 25 years later compared with those who did not experience LBP at age 14 years (Abolfotouh S *et al.*, 2015). Therefore, preventing and avoiding LBP during early adolescence can prevent LBP progression, and thus, can decrease the associated morbidities. However, to prevent LBP, the associated modifiable and non-modifiable risk factors must be identified. Previous studies have demonstrated that high body mass index (BMI) is associated with an increased LBP incidence (Marras WS *et al.*, 2010). In addition, Marras WS *et al.* (2010) revealed that hereditary plays a vital role in LBP occurrence and that a positive family history has a strong correlation with LBP incidence (Lu M *et al.*, 2014). Risk factors for LBP are not limited to physical factors; psychosocial factors such as stress, anxiety, depression, and monotony are also potential risk factors for LBP. These risk factors can result in the progression from an acute LBP episode to a chronic problem.

Sudhir Ganesan *et al.* (2017) revealed that Indian youth are prone to developing LBP. Various modifiable and non-modifiable risk factors for LBP in young adults. Following factors are associated with LBP in young adults: marital status, previous history of spine problems, strenuous exercise, job satisfaction, monotony, stress, daily number of studying hours, and family history of spine problems. However, age, sex, smoking, alcoholism, coffee intake, mode and duration of travel, diet, frequency of weightlifting, wearing heels, studying posture, and frequency and type of sports activities are not associated with LBP. Identification of these risk factors at an early stage will prevent the progression of acute LBP to chronic LBP. As chronic LBP has the potential to curb individual quality of life and increase economic burden, creating awareness about the modifiable risk factors in young adult populations may lead to lifestyle modifications, thereby improving their quality of life and increasing productivity.

Davis, G.K. & Kotowski, E.S. (2015) conducted the comprehensive study to assess the prevalence of musculoskeletal disorders in long term care facilities and home health care among 132 nurses. The study results revealed that lower back pain for nurses was highest followed by shoulder and neck pain. This study also concluded that 90% of the nurses develop lower back pain as major musculoskeletal disorder.

Some studies related to Acharya Technique on lower back pain will prove that this is an effective natural, health care technique for Low Back Pain, some studies are-

Priyanka, V. (2015) conducted the study to assess the incidence of lower back pain among nurses at 21 health care facilities in Mumbai and Thane. It revealed that nearly 90% of nurses working in ICU have complaints of lower back pain. The study also revealed physical straining; long duty timing and deprivation of planned break were the contributing factors of lower back pain among nurses.

Amany, M. *et al.* (2015) conducted the epidemiological study at Kolkatta to assess the prevalence of lower back pain among nurses working in ICU. The study shown that prevalence of lower back pain among nurses was 79.3%. The specialty ICU nurses had maximum incidence like nurses who work in pediatric ICU, and nephro ICU. A higher incidence of lower back pain was associated with lifting heavy weights, followed by twisting, prolonged standing, walking for long distance and bending forward.

Anand, M & Tamizkodi (2014) conducted the study to assess the efficacy of Acharya Technique on lower back pain among 30 industrial workers at Erode using purposive sampling technique. The study results shown that 36.7% participants had complete discomfort by lower back pain during pretest "After administration of Acharya Technique", 40% of participants had only mild discomfort due to lower back pain, results showing the impact of the technique. The study also suggested including Acharya Technique in continuing educational programme on wider scale and accepting it as a measure followed to get rid of lower back pain.

Mirajkar, S. (2000) had shared about the experience of the Ex Honorable Prime Minister Atal Bihari Vajpayee's, Complaints of Back Pain. As he was 70 years, surgery has been planned to cure his back ache then he came to know about Acharya technique. By practicing Acharya technique, he was cured from Back Pain.

Herald, M. (1996) had assessed that in an Institute of Orthopedics in Pune, only surgeries is been carried out for severe back pain, when nothing else can be done. Later they have realized that self cure of Acharya technique has helped nearly 600 patients to cure themselves within 5 minutes for every day.

Shrivastan, B. (1996) had observed that from the Army Wives Warfare Association members had the problem of back pain from the college days to the age of 60. Then they have found the effectiveness of Acharya technique on reducing back pain. They started practicing Acharya technique and got relieved from the back pain.

Lassen, C, *et al.*, (2002) conducted a study to find the occurrence of non specific low back pain among adolescents of age group 14-16 years the study was conducted in Bispebjerg hospital Kobenhavn. The results showed that minimal physical activity, intensive sports,

genetics, psychosocial factors are with high Impact towards Back Pain. The study conducted that the casual relations are not clear for the morbidity related to Back Pain in adolescents.

Indra. R, (1996) had published her own experience as an article in The Indian Express on September. She was suffering from Backache since 2 years. Through Save India Association she underwent, Acharya technique for about one month. She had cured from back pain and many other ailments by the same nature cure technique. This made her to share her experience to publish the article to make others know about the effectiveness of Acharya technique in reduction of back pain.

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