

Effect of Acharya Technique upon Back Pain among Industrial Workers

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Abstract

Back pain is a universal problem affecting people from all regions of the world. Since relief using modern systems of medicine is hardly forthcoming, the efficacy of indigenously developed Acharya Technique was assessed. Using purposive sampling, data was collected from 30 industrial workers from Erode (TN). It was found that while 36.7 percent participants had complete discomfort in back pain before resorting to Acharya Technique, after its administration, 40 percent had only mild discomfort in back pain, thus showing the effectiveness of this technique. It is suggested to include Acharya Technique in continuing educational programmes on wider scale.

"FEW MINUTES A DAY KEEPS THE DOCTOR AWAY"

Frequent and repeated attacks of common backaches are the single biggest cause of absenteeism from productive work all over the world. More of sedentary workers and executives at all levels suffer from these nagging backaches. This results in the loss of millions of man hours and millions of dollars worth of production world wide annually. As many as 8 out of 10 adults will experience back pain in their lifetime, and most of them will feel it in their lower back. The Acharya technique is simple, easy to implement and most acceptable cultural medium to tackle back pain among industrial workers.

Review of Literature

The Indian Express (Oct. 24, 1998) reported that in last three years alone more than 5,000 persons suffering from incurable backaches have been cured by the indigenously developed Acharya Technique. Dr Chitte KV (1998) expressed that this technique gives him great pleasure and noted that the Bulchand Charitable Trust has taken Acharya's project seriously to relieve pain and suffering from nagging backaches. Acharya Technique has helped several people in and around Pune in relief from backaches and spinal problems. Dr Akhil Mishra also had the same experience. To Ms Rajeswari, Acharaya Technique was a god's gift for problem of slip disc and back pain. She was cured in 20 to 25

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days. Now she can manage all difficult activities.

Many others having benefitted using Acharya Technique include: a consulting physician of Apollo Hospital, Delhi; a senior gynaecologist of Command Hospital; senior surgeon professor of surgery at a renowned medical college, whose spinal operation had failed and was bed-ridden for 3 years started working again using Acharya Technique.

This simple exercise appears to activate various yogic chakras effortlessly without having to do scores of yogic exercise which are time consuming, tiring and require hours of daily practice for months if not years. Once you learn the Acharya technique and get all the details of do's & don'ts including some simple precautions, it can be practiced in the comfort of your home. You can then look forward to the start of a healthy, active and kicking lifestyle (endorsed by Times of India, Pune, 3 Oct 2000).

Health of the spine is the key to good health, both physical and mental, or else, man is called spineless. The burden of chronic low back pain on society is enormous in terms of both patient's suffering and cost. Numerous treatments for low Back Pain have been advocated, but not may have been proven to be effective. These treatments are quite costly, which the industrial workers cannot afford.

The literature clearly suggested that the effect of exercises upon back pain needs to be taken care of when they are suffering from the back pain. It is also observed that less attention is paid upon back pain especially among industrial workers. These factors prompted the researcher to select the prob-

lem of the study. The modern medicine system has replaced almost all the traditional systems of medicine, hence, it is needed to gather evidence if Acharya technique has the effect up on back pain reduction among industrial workers.

Objectives

The objectives of the study were to:

1. Assess the (a) level of back pain before and after application of Acharya technique, (b) effectiveness of Acharya technique upon back pain among industrial workers.
2. Find out the association between the selected demographic variables and the level of back pain before and after application of Acharya technique.

Hypothesis

H1 – There will be no significant difference between back pain before and after application of Acharya technique among Industrial workers

H2 – There will be no significant association between selected demographic variables and level of back pain before and after application of Acharya technique among industrial workers.

Steps in Acharya Technique

Step I

- 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 sideways: left foot to the left side and the right one to the right side
- Bring your feet together in a circular motion towards the centre
- Straighten your legs holding your feet together
- Relax in that position for a few seconds
- Repeat this ten times

Step II

- 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

Step III

- 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 reassurance and straighten the legs and come to the original position
- Do the exercise 10-15 times

Step IV

- 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

Step V

- 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

Do's and Don'ts

While it is not possible to list exhaustively all the do's and don'ts, we can cite a few important ones.

- Avoid constipation as it worsens backaches.
- Don't lift heavy items or push or pull them in an unscientific manner.
- Bend your knees, instead of bending your body from waist downwards, while taking up

something from the ground.

- Do not get up from the bed suddenly with a jerk as it may trigger or worsen a backache.
- Always turn sideways and support yourself with your palms when rising from or coming to a sitting position.
- Then get up straight, putting your palms on the thighs above the knees using them as levers to help you get up.
- Hold yourself erect while walking.

Methodology

The conceptual framework of the study was developed on the basis of modified Roy's Adaptation Model. The study variables were demographic and clinical variables. Hypothesis was formulated. The level of selected significant was $p < 0.05$. By using the purposive sampling technique, data was collected from 30 industrial workers, who were working in the Sakthi Sugars Pvt Ltd, Erode (TN). An extensive review of literature and guidance by experts formed the foundation to development of proforma and pain rating scale. The instruments used for data collection were: demographic variable proforma, clinical variable proforma, Oswestry back pain scale (see Appendix). The standardised tools were translated into Tamil and their reliability ($r=0.82$) was established by test-retest technique.

A pilot study was conducted among 10 industrial workers and the data for the main study was collected. The level of back pain was assessed before and after the Acharya technique for seven consecutive days. The collected data was analysed using descriptive and inferential statistics.

Results and Interpretation

As for the level of back pain, many of the study participants (36.7%) had complete discomfort during back pain before Acharya technique, whereas after administration of Acharya technique 40 percent of the study participants had only mild discomfort during back pain. The results were attributed to the effectiveness of the Acharya technique.

The mean and standard deviation of level of back pain among industrial workers was high before ($M=26.63$, $SD=10.18$), in comparison with mean and standard deviation after applying Acharya technique ($M=21.70$, $SD=9.71$). The result was statistically significant at $p < 0.01$, which proved the effectiveness of the Acharya technique upon back pain among

industrial workers.

There was no significant association between the demographic variables and the level of back pain among industrial workers before the Acharya technique. Significant association was found in the age and education of industrial workers at $p < 0.001$ level, which showed partial association between the demographic variables and the level of back pain among industrial workers after Acharya technique.

Recommendations

The study can be conducted (a) on a larger sample to generalise the results, (b) in different settings, (c) using true experimental design.

A comparative study can be done (a) with any other technique, and (b) between industrial and other employees

Conclusion

Back pain is a universal experience which needs pharmacological and nursing intervention. Based on holistic approach nurses should create awareness among industrial workers and family members about Acharya technique for reducing back pain. They should take the initiative in organising continuing educational programmes on Acharya technique with modern technological aids.

Appendix: Oswestry Low Back Pain Scale

Please rate the severity of your pain by circling a number below:

Sample No:

Date :

Section 1 – Pain Intensity

0. The pain comes and goes and is very mild.
1. The pain is mild and does not vary much.
2. The pain comes and goes and is moderate.
3. The pain is moderate and does not vary much.
4. The pain comes and goes and is severe.
5. The pain is severe and does not vary much.

Section 2 – Personal Care (Washing, Dressing etc.)

0. I would not have to change my way of washing or dressing in order to avoid pain.
1. I do not normally change my way of washing or dressing even though it causes some pain.
2. Washing and dressing increase the pain but I manage not to change my way of doing it.
3. Washing and dressing increase the pain and I find it necessary to change my way of doing it.
4. Because of the pain I am unable to do some washing and dressing without help.
5. Because of the pain I am unable to do any washing

and dressing without help.

Section 3 – Lifting

0. I can lift heavy weights without extra pain.
1. I can lift heavy weights but it gives extra pain.
2. Pain prevents me lifting heavy weights off the floor.
3. Pain prevents me lifting heavy weights off the floor, but I can manage if they are conveniently positioned, e.g. on a table.
4. Pain prevents me lifting heavy weights but I can manage light to medium weights if they are conveniently positioned.
5. I can only lift very light weights at most.

Section 4 – Walking

0. I have no pain on walking.
1. I have some pain on walking but it does not increase with distance.
2. I cannot walk more than 1 mile without increasing pain.
3. I cannot walk more than ½ mile without increasing pain.
4. I cannot walk more than ¼ mile without increasing pain.
5. I cannot walk at all without increasing pain.

Section 5 – Sitting

0. I can sit in any chair as long as I like.
1. I can sit only in my favourite chair as long as I like.
2. Pain prevents me from sitting more than 1 hour.
3. Pain prevents me from sitting more than ½ hour.
4. Pain prevents me from sitting more than 10 minutes.
5. I avoid sitting because it increases pain immediately.

Section 6 – Standing

0. I can stand as long as I want without pain.
1. I have some pain on standing but it does not increase with time.
2. I cannot stand for longer than 1 hour without increasing pain.
3. I cannot stand for longer than ½ hour without increasing pain.
4. I cannot stand for longer than 10 minutes without increasing pain.
5. I avoid standing because it increases the pain immediately.

Section 7 – Sleeping

0. I get no pain in bed.
1. I get pain in bed but it does not prevent me from sleeping well.
2. Because of pain my normal night's sleep is reduced by less than one-quarter.
3. Because of pain my normal night's sleep is reduced by less than one-half.
4. Because of pain my normal night's sleep is reduced by less than three-quarters.
5. Pain prevents me from sleeping at all.

Section 8 – Social Life

0. My social life is normal and gives me no pain.

1. My social life is normal but it increases the degree of pain.
2. Pain has no significant effect on my social life apart from limiting my more energetic interests, e.g., dancing, etc.
3. Pain has restricted my social life and I do not go out very often.
4. Pain has restricted my social life to my home.
5. I have hardly any social life because of the pain.

Section 9 – Travelling

0. I get no pain when travelling.
1. I get some pain when traveling but none of my usual forms of travel make it any worse.
2. I get extra pain while travelling but it does not compel me to seek alternate forms of travel.
3. I get extra pain while travelling which compels to seek alternative forms of travel.
4. Pain restricts me to short necessary journeys under ½ hour.
5. Pain restricts all forms of travel.

Section 10 – Changing Degree of Pain

0. My pain is rapidly getting better.
1. My pain fluctuates but is definitely getting better.
2. My pain seems to be getting better but improvement is slow.
3. My pain is neither getting better or worse.
4. My pain is gradually worsening.
5. My pain is rapidly worsening.

Scoring interpretation

Category	Scores
1. No back pain	0-4
2. Mild back pain	5-14
3. Moderate back pain	15-24
4. Severe back pain	25-34
5. Completely severe back pain	Above 34

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