Effectiveness of Acharya Technique in Reducing Back Pain among Industrial Workers: A Pre-Experimental Study

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ABSTRACT

Background: Back pain is one of the most common musculoskeletal complaints globally, significantly affecting quality of life and work productivity. Among industrial workers, prolonged standing, repetitive movements, and poor ergonomics contribute to the prevalence of back pain.

Objective: This study aimed to evaluate the effectiveness of the Acharya technique—a nature cure method involving internal and external foot rotations, flexion, and extension—in reducing back pain among industrial workers.

Methods: A pre-experimental one-group pretest-posttest design was employed. A total of 50 industrial workers experiencing back pain were selected using purposive sampling. Participants were assessed using the Visual Analogue Scale (VAS) for pain. The Acharya technique was demonstrated and practiced for 3 to 5 minutes daily over seven consecutive days. Post-intervention pain levels were reassessed on the seventh day.

Results: Statistical analysis using paired 't'-test revealed a significant reduction in back pain scores post-intervention (t = 18.03, p < 0.001), indicating that the Acharya technique was effective in alleviating back pain among the participants.

Conclusion: The Acharya technique shows promising results in reducing back pain and can be adopted as a simple, cost-effective intervention for industrial workers. Further studies with larger sample sizes and control groups are recommended.

INTRODUCTION

Pain is not only a physical response it also involve mind to play an important role in how oneself perceive the pain. One of the world's leading organizations in the area of pain research the International Association for the study of pain has defined pain as, 'An unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage'. In this definition it shows that pain is not only a signal that the body sends out in response to a certain trigger a sensory experience but also an emotional experience. In other words, how the mind responds to pain is an important aspect of how one perceives pain.

Back pain is not only the pain in the back, but it is also an emotional process we may have heard of people overcoming great pain when their mind was focused on something else. This is a great example of how the mind or emotions can influence the pain experience. Secondly the definition of the International Association for the study of pain, shows that pain could be, necessarily associated with tissue damage. This refers to the difference, explained above, between acute pain and persistent or chronic pain.

Back pain is a too familiar problem that can range from a dull, constant pain to a sudden, sharp pain that leaves people incapacitated. It can come on suddenly from an accident, a fall, or lifting some thing heavy or it can develop slowly, perhaps as the result of age related changes to the spine.

Back pain is pain felt in the back that usually originates from the Muscles, Nerves, bones, Joints or other structures in the Spine. According to times of India Back pain is one of the most common complaints among people of all classes, affecting both men and women, earlier it was only for old age but back pain has now become a major cause for concern for the late 20's to 40's age group, back pain affects any of the 26 bones connected by muscles ligaments and discs that constitute the spine. Back Pain was highly prevalent with an annual prevalence varying from 73% to 76%. A large percentage (38%) indicated the same intensity of back pain.

A research was conducted by Cecil. G, (2006) at university of north Carolina in chapel hill, United states to find the prevalence of chronic, impairing back pain in the state, the results showed that the pain was increased from 3.9 to 10.2 percent from 1992 to 2006 thus the study concluded that back pain increases promptly each year in both the sexes, across all ages, racial and ethnics.

Nearly 5 million working days were lost as a result of back pain in 2003 to 2004. This means that on any one day 1% of the working population are on sickness leave due to a back problem, back pain is the number two reason for long term sickness in much of the United states. In manual labor jobs, back pain is the number one reason. the changing nature of the state's workforce with a decline in the percentage of manufacturing jobs and an increase in construction and service Automobile industry jobs over the time span concerned may be another possible factor. Back pain is a very common problem in their lives. It results in the losses of millions of man

hours and billions of dollars worth of productivity annually worldwide. Patients are advised bed rest and light work. Painkillers, ointments or massages provide only temporary relief. The damage to the spinal area continues to result in a slow and steady degeneration of the affected area of the spine and the back.

A survey to elicit information on factors related to the causes of back pain in industrial workers was made. Questionnaire was sent to 1000 workers in various industrial occupations among that 509 industrial workers responded well. In this population, back injuries were more frequent among women. Most employees sustaining back injury subsequently returned to their original job.

Physical exercise can be a very effective method to reduce the back pain and discomfort that long term pain sufferer's experience, alternative therapies can help to release muscle tension, correct posture, relieves pain, and prevent long term back problems by improving muscle strength and joint stability. Many people find pain relief by using hot and cold packs on the sore area. Special exercises, such as ones designed of the specific problem by a physical therapist, can help to strengthen the core abdominal muscles and back muscles, to reduce back pain and making the back stronger.

Since 4 out of 5 persons suffer from back pain the founder of Acharya technique for back pain and Spinal & Nervous rejuvenation, found a simple 3 to 5 minute relaxation exercise for a week which cured back pain completely without medicines or surgery which were recommended by top orthopedics.

The Nature Cure Save India Association has been working in this field to revive those natural instincts and behavioral patterns to mitigate common ailments, and pains and other health problems without any medicines, yoga and other therapies. It has succeeded in doing that to a large extent by helping to cure patients with acute pains in the back, and other spinal problems. Health of the spine is the key to good health, both physical and mental, or else, a man is called spineless.

Those natural instincts and behavioral patterns are now codified into Acharya technique for back pain and Spinal & Nervous rejuvenation. The Save India association is also holding free weekly camps so that all those who are suffering from Back pains and other health problems can learn them and help themselves to enjoy perfect health and that too, without any depressions, fatigues or tension. Those persons who are needy and are tired of running from pillar to post and have spent a lot in treating back pain, can now hope to enjoy optimum health through this nature cure therapy which can rightly be called a therapy beyond all therapies.

After many years of suffering from debilitating back pain, Mr. Acharya set his mind and energy towards finding a natural cure as an alternative to painkillers, medications and surgery. The result of many years of personal trial end error was born in the form of Acharya Technique for Back pain and Spinal & Nervous rejuvenation. Over the last seven years, through the Nature Cure Cell of the Save India Association, he has taught the technique to thousands of people who have improved their quality of life by eliminating back pain caused by various factors.

OBJECTIVES

To associate the pre intervention and post intervention level of back pain among the industrial workers with their demographic variables.

METHODOLOGY

For every piece of research work, the methodology of investigation of vital importance. The success of any research depends largely upon the suitability of the tool and the techniques that the researcher follows together adequate data. Research methodology involves systematic procedures, which the researcher starts from initial identification of the problem to its final conclusion. The role of methodology consists of procedure and technique for conducting a study.

This chapter deals with the description of methodology adopted for the study, which includes research design, population, sample, sampling techniques, sample size for sample selection, description of the instrument, data collection procedure and plan for data analysis.

RESEARCH DESIGN

The research design used for the study was pre experimental one group pre test post test research design. This design was used to assess the effectiveness of Acharya technique on reduction of back pain among the industrial workers.

SETTING OF STUDY

The study was conducted in Dept of Physiotherapy Gurugram University Gurugram.

POPULATION

The population selected for the study was all the industrial workers who had back pain, working in Automobile Automobile industry,Manesar,Gurgaon.

SAMPLE

The study sample comprised of the industrial workers who had back pain and who fulfilled the inclusion criteria in Automobile Automobile industry, Manesar, Gurgaon.

SAMPLE SIZE

The sample size was 50, within the age group of 25 to 45 years.

SAMPLE TECHNIQUE

Purposive sampling technique was used to select the samples among the population.

CRITERIA FOR SAMPLE SELECTION
Inclusion Criteria

Industrial workers within the age of 25 to 45 years.

Industrial workers who were females.

Industrial workers who were willing to participate in the study.

Exclusion Criteria

Industrial workers who were pregnant.

Industrial workers with restricted leg movement and surgical intervention in the knee, other orthopedic problems.

Industrial workers who had any problems like heart disease, spinal injury and hypertension

Industrial workers who had dysmenorrhea.

DESCRIPTION OF THE INSTRUMENT

The instrument was developed after the literature review of guidance from the experts, this consist of three parts

PART – I

Demographic variables such as age, marital status, educational status, type of family, natural of working areas and duration of pain experience.

PART II

Wewers and Lowe's (1990) Visual Analogue Scale is a horizontal line, 10mm in length anchored by words descriptors at each end, The patient marks on the line the point that they feel represents their perception of their current state, the score is determined by measuring in millimeters from the left hand end of the line to the point to the patient marks.

Score	Description
0-2	no pain
3-4	Uncomfortable
5-6	Dreadful
1-2	Annoying
7-8	Horrible
9-10	Agonizing

PART III

Acharya Technique

It consists of internal rotation, external rotation, flexion and extension of foot for 3 to 5 minutes for a week to reduce the back pain.

VALIDITY

The content of the instrument was validated by experts from the field of Community Health.

RELIABILITY

Reliability was assessed by using inter rater method. The 'r' value was 0.8 hence the tool was considered reliable to conduct this study.

PILOT STUDY

The pilot study period was 18.4.2011 to 24.4.2011. The investigator went to the A. V. Thomas leather Automobile industry for selecting the industrial workers. A formal consent was obtained from the executive manager of Automobile Automobile industry at manesar, Gurgaon. The study was carried out with 5 industrial workers who fulfilled the inclusion criteria. The investigator introduced herself to the industrial workers and purpose of the study was explained to them to ensure better co-operation. Written consent was obtained from them, purposive sampling technique was used for selecting the industrial workers.

Visual Analogue Scale was used to assess the pre intervention level of back pain among the industrial workers. Acharya technique which consist of internal rotation, external rotation, flexion, extension was demonstrated for 3 to 5 minutes to the industrial workers and they were asked to perform the same technique for seven days for 3 to 5 minutes. By the end of the seventh day the post intervention level of back pain was assessed by using the same scale. The collected data were tabulated and analyzed, the instrument used for the study was reliable and appropriate. The 'r' value was 0.8. This trial revealed that clarity, feasibility, reliability, practicability in all aspect to conduct the main study.

DATA COLLECTION PROCEDURE

Self introduction was given and followed by adequate information and explanation given to the industrial workers, regarding the importance of Acharya technique on reduction of Back Pain. The study was carried out with 50 industrial workers who fulfilled the inclusion Criteria, The data were collected for the period of 4 weeks from 1.6.2023 to 30.6.2023 every wednesday the investigator collected data from 11 to 13 participants by using Visual Analogue Scale to assess the pre intervention level of back pain. Acharya technique which consist of internal rotation, external rotation, flexion, extension was demonstrated for 3 to 5 minutes to the industrial workers and they were asked to perform the same technique for 3 to 5 minutes for seven days. At the end of the seventh day to assess the post intervention level of back pain among the industrial workers was assessed.

DATA ANALYSIS

Demographic variables were computed by using descriptive and inferential statistics. Frequency and percentage distribution was used to determine demographic variables. Mean and standard deviation was used to assess the pre intervention and post intervention level of back pain among the industrial workers. Paired 't' test was used to evaluate the effectiveness of Acharya technique among the industrial workers. Chi square test was used to associate effectiveness of Acharya technique among the industrial workers with their demographic variables.

A study to assess the effectiveness of Acharya technique on reduction of back pain among the industrial workers in Automobile Automobile industry,Manesar,Gurgaon**.**
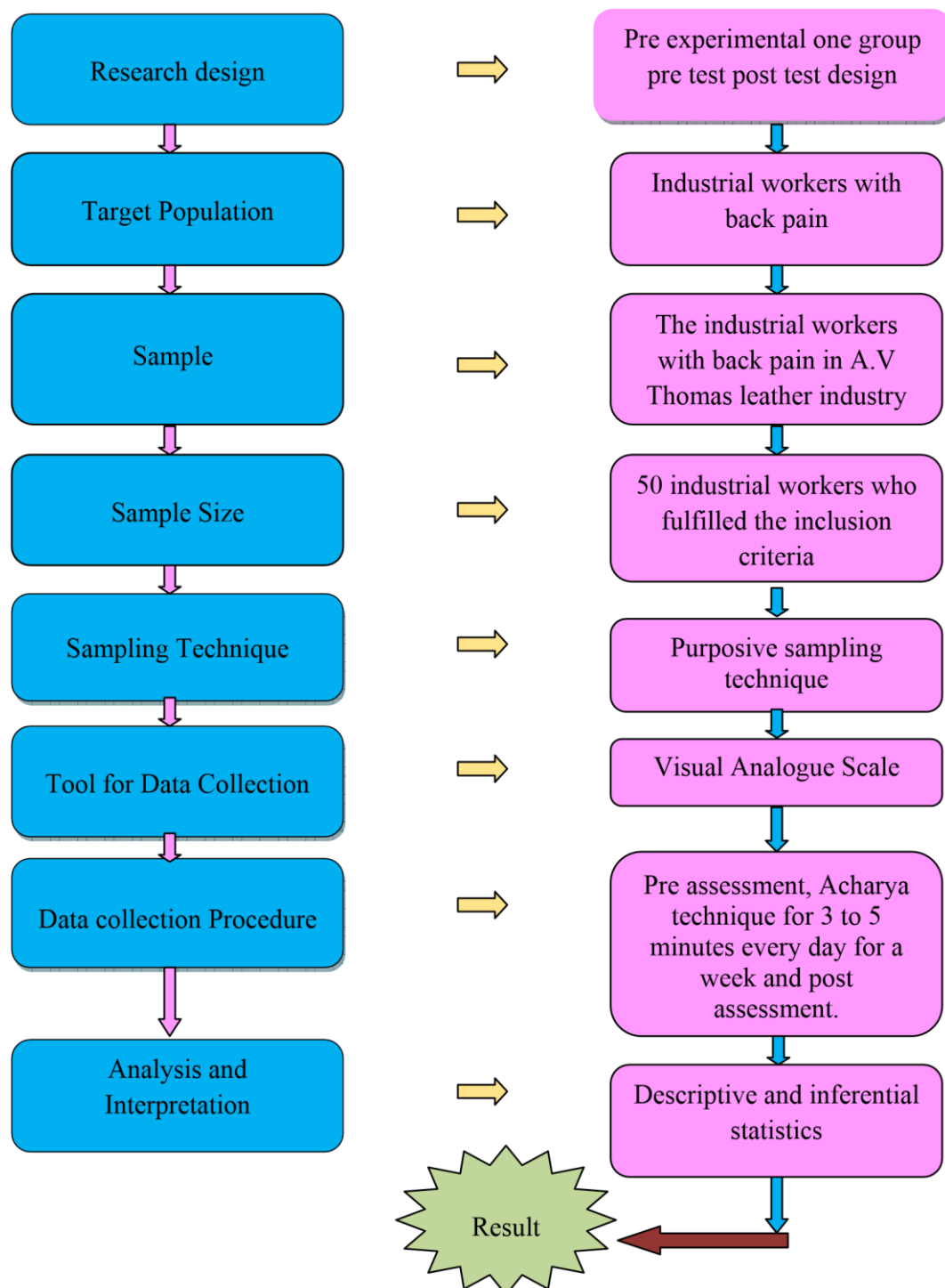

Figure 1: Schematic representation of research methodology adapted in this study**.**

Table 1: Frequency and percentage distribution of demographic variables among the industrial workers with back pain

S.No.	Demographic variables	Frequency	Percentage
1.	**Age**		
	25-30 years	11	22
	31-35 years	9	18
	35-40 years	18	36
	41-45years	12	24
2.	**Type of Family**		
	Nuclear Family	30	60
	Joint Family	20	40
3.	**Marital Status**		
	Married	48	96
	Unmarried	2	4
4.	**Educational Status**		
	No Formal Education	6	12
	Higher Secondary	44	88
5.	**Nature of working area**		
	Tailoring	11	22
	Cutting	11	22
	Packing	28	56
6.	**Monthly Income**		
	Below Rs. 3000	5	10
	Rs.3001 to Rs.4000	7	14
	Rs.4001 to Rs.5000	15	30
	Above Rs. 5000	23	46
7.	**Duration of back Pain Experience**		
	6 months to 1 year	26	52.0
	2-3 years	19	38.0
	4-5 years	3	6.0
	>5 years	2	4.0

Table 1 represents the frequency and percentage distribution of demographic variables of the industrial workers.

With respect to the age of industrial workers, majority 18 (36%) were in the age group of 35 to 40 years, 12 (24%) were in the age group of 41 to 45 years. Considering the age at back pain among the industrial workers 11 (22%) of 25 to 30 years, 9 (18%) of 31 to 35 years.

Related to type of family of the industrial workers 30 (60%) of them were in joint family, 20 (40%) of them were in nuclear family. In accordance with martial status of the industrial workers majority 48 (96.0%) were married where as 2 (4%) were unmarried.

Related to educational status of industrial workers majority of 44 (88%) were with qualification of Higher Secondary, and 6 (12.0%) were no formal education, none of them were graduates and others.

In Accordance with nature of working area of the industrial workers majority 28 (56%) were in packing area where as 11 (22%) were in tailoring area and 11 (22%) were in cutting area. In concern with monthly income of the industrial workers, majority of them 23 (46%) belong to the income group of above Rs. 5000, 15 (30%) of them belongs to the income group of Rs. 4000 to Rs. 5000 and 7 (14 %) of them belong to the least income group of Rs. 3000 to Rs. 4000 and 5 (10%) of them belongs to the income group of Rs .3000.

Regarding duration of back Pain experience of the industrial workers, majority 26 (52%) had 6 month to 1 year back pain experience, 19 (38%) had 2 to 3 years back pain experience , 3 (6%) had 4 to 5 years back pain experience and 2 (4%) had more than 5 years back pain experience.

Table 2: Frequency and percentage distribution of pre intervention level of back pain among the industrial workers
N=50

Level of back Pain	Pre intervention	
	Frequency	Percentage
No back Pain	0	0
Mild back Pain	2	4
Moderate back Pain	9	18
Severe back pain	39	78

Table 2 represents, the frequency and percentage distribution of pre intervention level of back pain among the industrial workers, in pre intervention level 2 (4%) of the industrial workers had mild back pain and 9 (18%) of them had moderate back pain, 39 (78%) of them had severe back pain and none of the industrial workers had no back pain.

Table 3: Frequency and percentage distribution of post intervention level of back pain among the industrial workers

N = 50

Level of back pain	Post intervention	
	Frequency	Percentage
No back Pain	0	0
Mild back Pain	38	76
Moderate back Pain	10	20
Severe back pain	2	4

Table 3 represents the frequency and percentage distribution of post intervention level of back pain among the industrial workers. In post intervention level 38 (76%) of the industrial workers had mild back pain and 10 (20%) of them had moderate back pain, 2 (4%) of them had severe back pain and none of them had no back pain.

Table 4: Frequency and percentage distribution of pre intervention and post intervention level of back pain among the industrial workers

N = 50

Level of back pain	Pre intervention		Post intervention	
	Frequency	Percentage	Frequency	Percentage
No back pain	0	0	0	0
Mild back pain	2	4	38	76
Moderate back pain	9	18	10	20
Severe back pain	39	78	2	4

Table 4 represents the frequency and percentage distribution of pre intervention and post intervention level of back pain after Acharya technique among the industrial workers. With respect to the pre intervention level of back pain among the industrial workers, 2 (4%) had mild back pain and 9 (18%) of them had moderate back pain, 39 (78%) of them had severe back pain and none of the industrial workers had no back pain. Regarding the post intervention level of back pain among the industrial workers, 38 (76%) of the industrial workers had mild back pain and 10 (20%) of them experienced moderate back pain, 2 (4%) of them had severe back pain and none of them had no back pain.

Table 5 represents the comparison of mean and standard deviation between pre intervention and post intervention level of back pain among the industrial workers. The mean value of pain score was reduced from

7.10 to 3.14 which showed a marked difference of 3.96 respectively and the standard deviation was reduced from

1.19 to 1.20 after administration of Acharya technique. The paired' test value of 18.03 was highly significant at p<0.001 level. It indicates that Acharya technique was more effective among the industrial workers with back pain.

Table 5: Comparison of mean and standard deviation between pre intervention and post intervention level of back pain after Acharya technique among the industrial workers

N = 50

Assessment	Mean	Standard Deviation	Paired 't' value
Pre intervention	7.10	1.19	18.03***
Post intervention	3.14	1.20	

p<0.001

Table 5 represents the comparison of mean and standard deviation between pre intervention and post intervention level of back pain among the industrial workers. The mean value of pain score was reduced from 7.10 to 3.14 which showed a marked difference of 3.96 respectively and the standard deviation was reduced from 1.19 to 1.20 after administration of Acharya technique. The paired' test value of 18.03 was highly significant at p<0.001 level. It indicates that Acharya technique was more effective among the industrial workers with back pain.

Table 6: Association of pre intervention level of back pain among the industrial workers with their demographical variables

N=50

S.No.	Demographic Variables	Pre intervention Level of back Pain						Chi-square χ^2
		Mild		Moderate		Severe		
		n	%	n	%	n	%	
1.	**Age** 25-30 years 31-40 years 41-45 years	0 1 1	0.0 3.7 8.3	1 7 1	9.1 25.9 8.3	10 19 10	90.9 70.4 83.3	χ^2 = 3.54 d.f=4 NS

S.No.	Demographic Variables	Mild n	%	Moderate n	%	Severe n	%	Chi-square χ²
2.	**Type of Family** Nuclear Family Joint Family	2 0	6.7 0.0	5 4	16.7 20.0	23 16	76.7 80.0	χ² = 1.42 d.f=2 NS
3.	**Marital Status** Married Unmarried	2 0	4.2 0.0	9 0	18.8 0.0	37 2	77.1 100.0	χ² = 0.58 d.f=2 NS
4.	**Educational Status** No Formal Education Higher Secondary	0 2	0.0 4.5	0 9	0.0 20.5	6 33	100.0 75.0	χ² = 1.92 d.f=2 NS
5.	**Nature of working area** Tailoring Cutting Packing	0 0 2	0.0 0.0 7.1	3 2 4	27.3 18.2 14.3	8 9 22	72.7 81.8 78.6	χ² = 2.37 d.f=4 NS
6.	**Monthly Income** Below Rs. 3000 Rs.3001 to Rs.5000 Above Rs. 5000	0 1 1	0.0 4.5 4.3	1 3 5	20.0 13.6 21.7	4 18 17	80.0 81.8 73.9	χ² = 0.73 d.f=4 NS
7.	**Duration of back Pain Experience** 6 months to 1 year 2-3 years >3years	1 1 0	3.8 5.3 0.0	8 1 0	30.8 5.3 0.0	17 17 5	65.4 89.5 100.0	χ² = 6.41 d.f=4 NS

NS - Non Significant

Table 6 shows the association between pre intervention levels of back pain among the industrial worker with the demographic variables. None of the demographic variables were significantly associated with their pre intervention level of back pain. Statistical significance was calculated by using Pearson chi square test.

Table 7: Association of post intervention level of back pain among the industrial workers with their demographic variables

N=50

S.No.	Demographic Variables	Post intervention Level of back Pain						Chi-square χ²
		Mild		Moderate		Severe		
		n	%	n	%	n	%	
1.	**Age** 25-30 years 31-40 years	11 21	100.0 77.8	0 6	0.0 22.2	0 0	0.0 0.0	χ² =11.57 d.f=4

No.	Variable	n	%	n	%	n	%	Chi-square
	41-45 years	6	50.0	4	33.3	2	16.7	**S***
2.	**Type of Family**							χ² = 3.15 d.f=2 NS
	Nuclear Family	24	80.0	4	13.3	2	6.7	
	Joint Family	14	70.0	6	30.3	0	0.0	
3.	**Marital Status**							χ² = 0.65 d.f=2 NS
	Married	36	75.0	10	20.8	2	4.2	
	Unmarried	2	100.0	0	0.0	0	0.0	
4.	**Educational Status**							χ² = 0.35 d.f=2 NS
	No Formal Education	5	83.3	1	16.7	0	0.0	
	Higher Secondary	33	75.0	9	20.5	2	4.5	
5.	**Nature of working area**							**χ² = 20.51 d.f=4 S***
	Tailoring	3	27.3	6	54.5	2	18.2	
	Cutting	9	81.8	2	18.2	0	0.0	
	Packing	26	92.8	2	7.2	0	0.0	
6.	**Monthly Income**							χ² = 0.44 d.f=4 NS
	Below Rs. 3000	4	80.0	1	20.0	0	0.0	
	Rs.3001 to Rs.5000	16	72.7	5	22.7	1	4.5	
	Above Rs. 5000	18	78.3	4	17.4	1	4.3	
7.	**Duration of back Pain Experience**							**χ² =18.97 d.f=4 S***
	6 months to 1 year	21	80.8	5	19.2	0	0.0	
	2-3 years	15	78.9	4	21.1	0	0.0	
	>3years	2	40.0	1	20.0	2	40.0	

NS - Non Significant S-Significant

Table 7 shows the association of post intervention level of back pain among the industrial workers with their demographic variables.

The chi square value of 11.57 showed that p<0.05 there was a significant association of age and post intervention level of back pain after Acharya technique among the industrial workers with back pain.

With regards to nature of working area the chi square value 20.51 was highly significant at the level of p< 0.001. In concern with duration of back pain experience the chi square value 18.97 was highly significant at the level of P < 0.001.

There was no statically significant association found with other demographic variables, such as age, nature of working area, and duration of back pain experience.

DISCUSSION

This chapter describes the result with respect to the objectives of the study and also compare the similar study with the present findings. The study aimed to assess the effectiveness of Acharya technique on reduction of back pain among the industrial workers in A. V. Thomas leather Automobile industry, Chennai.

The formulated hypothesis of this study was there is no significant relationship between the Acharya Technique and reduction of back pain among the industrial workers. The review of literature included was related researches which provide a strong foundation for the study including the basis for conceptual frame work and formation of tool.

The conceptual frame work for this study was developed based on Wiedenbach's helping art of clinical nursing theory. The research design used for this study was pre experimental one group pretest post test research design .It was carried out with 50 industrial workers who fulfilled the inclusion criteria. Purposive sampling technique was used to select the industrial workers. Written consent was obtained from the industrial workers.

Every wednesday the investigator collected data from 11 to 13 participants by using Visual Analogue Scale to assess the pre intervention level of back pain among the industrial workers. Acharya technique which consists of internal rotation, external rotation, flexion, extension was demonstrated for 3 to 5 minutes to the industrial workers and they were asked to perform the same technique for 3 to 5 minutes for seven days. At the end of the seventh day to assess the post intervention level of back pain among the industrial workers was assessed.

The data collected was analyzed with descriptive and inferential statistics. The frequency and demographic variables of the industrial workers with respect to the age of industrial workers, majority 18 (36%) were in the age group of 35 to 40 years, 12 (24%) were in the age group of 41to 45 years. Considering the age at back pain among the industrial workers 11 (22%) of 25 to 30 years 9(18%) of 31 to 35 years.

Related to type of family of the industrial workers 30 (60%) of them were in joint family, 20 (40%) of them were in nuclear family. In accordance with martial status of the industrial workers majority 48 (96.0%) were married where as 2 (4%) were unmarried.

Related to educational status of industrial workers majority of 44 (88%) were with qualification of Higher Secondary, and 6 (12.0%) were no formal education, none of them were graduates and others.

In Accordance with nature of working area of the industrial workers majority 28 (56%) were in packing where as 11 (22%) were in tailoring and 11 (22%) were in cutting area. In concern with monthly income of the industrial workers, majority of them 23 (46%) belong to the income group of above Rs. 5000, 15 (30%) of them belong to the income group Rs. 4000 to Rs. 5000 and 7 (14 %) of them belong to the least income group of Rs. 3000, to Rs. 4000 and 5 (10%) of them belong to the income group of Rs.3000.

Regarding duration of back Pain experience of the industrial workers, majority 26 (52%) had 6 month to 1 year back pain experience, 19 (38%) had 2 to 3 years back pain experience , 3 (6%) had 4 to 5 years back pain experience and 2 (4%) had more than 5 years back pain experience.

The analysis revealed The mean value of pain score was reduced from 7.10 to 3.14 which showed a marked difference of 3.96 respectively and the standard deviation was reduced from 1.19 to 1.20 after administration of Acharya technique. the paired 't' test of 18.03 was highly significant at $p < 0.001$ level. It indicates that Acharya Technique was more effective among the industrial workers with back pain.

The pre intervention level of back pain among the industrial workers was assessed by Visual Analogue Scale which showed the results that 39 (78%) had severe pain, and 9 (18.0%) had moderate pain and 2 (4.0%) had mild pain none of them had no pain.

The study findings are consistent with the results of Maras's, described about the effect of psychosocial factors on low back pain among 4500 industrial workers, Iran. The Result showed that 85% participants reported current back pain a total of 52 new episodes of disabling back pain was also reported.

The study findings are consistent with the result of Elders. L, described the natural history of back pain by its prevalence, incidence, and reoccurrence among 288 scaffolders at Department of Public Health, Netherland. The results showed that prevalence rate was 22%, incidence rate was 20% to 28%, and reoccurrence rate were 64% to77% .The study concluded that the incidence and reoccurrence of back pain was related to the work related physical and psychosocial factors of the workers.

The study findings are consistent with the results of Jones. R, describes the prevalence of back pain back pain and investigated risk factors back pain among 254 seafood processing factory workers in Thailand. A cross sectional study was carried out with a self-administered questionnaire. The Results showed that the Prevalence of. The point prevalence of back pain was 28.5 %. Risk factors for back pain were age over 40 year, poor health status, history of back injury, twisting posture at work, and slipping on wet floors. The study suggests that health promotion should focus on working conditions of industrial workers rather than individual life style in order to prevent back pain.

The post intervention level of back pain among the industrial workers after Acharya technique was collected by visual analogue scale showed the results that 38 (76.0%) had mild back pain 10 (20.0%) had moderate back pain 2 (4.0%) had severe back pain and none of them had no back pain.

The study finding is consistent with a result of Press.Y, conducted a cross sectional study to characterize patients visiting the complementary medicine clinic for back pain among 395 patients aged 18years and older in Israel. The results showed that 50.9% patients with back pain claimed that complementary medicine result in better physical strength, 31.3% better mental state, 22.7% patients hoping that complementary medicine will prevent invasive procedure.

The study finding is consistent with a result of Davis. R, conducted a study to determine the effectiveness of complementary and alternative medicine to treat back pain among 6% of United State population. The results showed that benefits of yoga, taichi, acupuncture were 95% benefit for back pain. The study concluded that complementary and alternative medicine was more effective to treat back pain.

The comparison of pre intervention and post intervention level of reduction of back pain among the industrial workers after Acharya technique was done by using Paired 't' test .There is a marked decrease in the mean value 7.10 in pre intervention level to 3.14 in post intervention level, the standard deviation is increased from 1.19 in pre intervention level to 1.20 in post intervention level and thus it indicates the effectiveness of Acharya technique on reduction back pain.

The study findings are consistent with a result of Indira. R, had published her own experience as an article in The Indian Express on September 20. 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 aliments 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.

In pre intervention level of back pain there was no significant association found with the demographic variables such as age, type of family, marital status, educational status, nature of working area, monthly income, and duration of back pain experience.

In post intervention level of back pain the analysis revealed that statistically significant association was established with their demographic variables such as type of family, marital status, educational status, and monthly income. By associating the study results in accordance with sex the female are more prone to get back pain in all condition when compare to that of male.

The study findings are consistent with a result of Baxter. G, conducted a study to investigate current management of back pain by reflexologist among 500 members from the international institute of reflexology, united kingdom .The results showed that response rate was 50%, majority respondents were female (95%). The respondents perceive reflexology to have positive effects on relieving 94% of back pain. The study concluded that reflexology to be an effective therapy for back pain.

The study findings are consistent with a result of Mostafa. G, conducted a cross sectional study to determine the prevalence of back pain among 18,031 Iranian industrial workers at Iran. Standardized Nordic Questionnaire method was used to collect the data. The results showed that 78% participated in the study population young males, female < 30 years, the prevalence of back pain among males 20% and female 27%. The study concluded that the low back pain was more prevalent among womens related to their physical and psychosocial factors.

The study findings are consistent with a result of   Kwiad. K**,** conducted a study on incidence of low back pain among 10% of population of age group of 35 and 55 years in European countries. Questionnaire Method was used to collect the data. The result shows that 15 to 40% of Population experience low back pain every year. The study concluded that back pain and spinal deformities resulting from long lasting overload with their typical presentation.

The study findings are consistent with a result of Leboeuf. C, conducted a cross sectional study to assess the occurrence of back pain was related to age and gender among 34,076 twins in Danish. The study result shows that   86% responded well according to the age 70% of people were positively seen, related to gender 80% of people were responded to back pain, The study concluded that back pain had equal chance for both age and gender.

CONCLUSION

The Acharya technique shows promising results in reducing back pain and can be adopted as a simple, cost-effective intervention for industrial workers. Further studies with larger sample sizes and control groups are recommended.

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