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Research Article

ADVICE TO STAY ACTIVE VERSUS ADVICE TO TAKE REST IN BED FOR LOW BACK PAIN AND SCIATICA

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Abstract:

Title: Advice to stay active versus advice to take rest in low back pain and sciatica.

Aim / Purpose of study: This paper is a report of study conducted to explain effectiveness of interventions, advice to stay active versus advice to take rest for low back pain and sciatica to improve health conditions.

Background: Common reason for consulting a general practitioner is Low back pain and the primary care management of low back pain is advice on daily activities constitutes an important part. The comparative effectiveness of advice on staying active and bed rest is the part of controversial debate. The current management is causing increasing dissatisfaction, but the treatment recommendations are based on orthopedic teaching. What constitutes effective advice confuse many general practitioners (GPs).

Method: CT was conducted via Dallas pain questionnaire. History was taken from patients in physiotherapy department of Jinnah Memorial Trust Hospital (GRW). These patients fall among the age group between 20-60 years. The span of this study was 3 weeks.

Results: 80% of participants ranging between 20-40 years old age who stayed Active showed the greatest improvement, which could be due to several factors primarily the physical activity and secondarily because of healing occurring faster in younger population as compared to the older individuals. The 41-50 years old participants showed moderate improvement. The 51-60 years old participants showed the least improvement. 40% of participants who were designated in the Rest group showed improvement whereas the rest 60% of participants in this group didn't show any improvement, in fact their condition got worse day by day. This may be because the patients in this group mainly focused on taking rest and not performing any kind of physical activity.

Conclusion: The results of this study imply that staying active have a better effect on improving pain and disability over a longer period than traditionally take rest. However, the younger age group showed marked improvement with posture re-education and exercise. These results are clinically significant. Further longitudinal studies in this area are called for with a recommendation that participants are followed up for at least one year post-intervention in order to find out which approach has better long-term outcomes.

Key Words: low back pain, sciatica, rest, activity.

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INTRODUCTION:

Most common painful conditions experienced by human throughout their life is low back pain. Heavy material handling which is an occupational risk factor contributes to the low back pain. It is estimated that low back pain is the most common occupational disorder worldwide due to manual material handling. (1)The management of back pain has been associated with increased expense and disability, over the last several decades. (2, 3)

Low back pain defined as discomfort localized to the anatomic area below the posterior ribs and above the lower margins of the buttock which may be acute, sub-acute, or chronic (4)

Back pain is classified into **four major classes** according to Western medicine:

- Rheumatoid spondylitis, spinal osteoarthritis, ankylosing spondylitis, hypertrophic arthritis, hyperosteoegeny and other spinal disorders.
- Muscle strain and other soft tissue disorders.
- Spinal nerve compression, or a deformity of the spinal column.
- Systemic causes such as liver, heart, stomach, and gallbladder disorders(5)

Red flags included are fever, tenderness, cancer and compression fracture, sensory and motor deficit, abnormal neurologic exam of the lower extremities, nerve root irritation(6),Positive slump test(7).

Most people will experience at least one episode of low back pain during their adult lifetime. Mostly these episodes are of short duration, lasting from days to a few weeks, and resolve little if any therapeutic intervention is provided(8).Back pain is extremely common. Population data indicates an incidence (number of new cases per year) in the order of 1–4%. The prevalence of back pain (number of people in the community at any given time) is 5–10%, with a lifetime prevalence of 80%.(9). Acute sciatica is low back pain with radiculopathy below the knee and symptoms lasting up to six weeks. Sciatica is a common and costly problem, caused by a variety of conditions such as disc herniation, lumbar spinal stenosis, facet joint osteoarthritis or other arthropathies, spinal cord infection, tumor and spondylolisthesis(10).

Indicators for sciatica are unilateral leg pain greater than low back pain. The pain radiates to foot or toes

along with numbness and paresthesia in the same distribution whereas straight leg raising (SLR) test induces more leg pains, localized neurology that is limited to one nerve root.

Low back ache is neither a disorder nor a symptomatic element of any kind. The rate of low back ache reported is 23.09% and has 60-85% of lifetime prevalence.(11)

There are many etiological factors of lumber pain constituting idiopathic, degenerative, traumatic, inflammatory, inherent, neoplastic, metabolic, postural, gynecological and rectal or rectal fundamental pathologies.(12)

Disc herniation is commonly seen in people aged from 33-55years old. Local displacement of disc when it crosses from its normal covering and hurt the pain sensitive structures like ligaments then it causes pain, muscular weakness as well as numbness in Dermatomes and Myotomes.(13)

Some evidences showed that herniation of lumber disc, protruded lumber disc and damage to annulus fibrosis present with radiculopathy in 50% of patients but sometimes present with no radicular symptoms.(14)

Sciatic radiculopathy is mostly as a result of disc pathologies that apply direct pressure on the nerve, and poor biomechanics are another cause of irritation as well as inflaming the nerve, leads to produce the sign and symptoms of sciatica. Causes of nerve irritation include vertebral structural damage, malignancy, muscular issue, internal bleeding disorder, infectious disease, mechanical injuries to lower back, and other factors(15)

Sciatic nerve radiculopathy causes shooting pain, sense of burning, numbness of supplied area. Symptoms of sciatic radiculopathy are aggravated by movement of lower limb and bending at the lumber region, usually relieved by making spine weight free or by lying down.(16)

Sciatica affects many people. The most important symptoms are radiating leg pain and related disabilities. Patients are commonly treated in primary care but a small proportion is referred to secondary care and may eventually have surgery. Many synonyms for sciatica appear in the literature such as lumbosacral radicular syndrome, ischia's nerve root

pain and nerve root entrapment. In about 90% of cases, sciatica is caused by herniated disc with nerve root compression, but lumbar stenosis and (less often) tumors are possible causes. The diagnosis of sciatica and its management varies considerably. (17)

Most common direction of herniation of lumbar disc is posterior and lateral, it causes nerve compression of same side which leaves at level of dural sac that mainly cause problem in L4-L5 segment and L5-S1 root level. It may cause Radiculopathy or may present as localized symptoms.(17)

Lumbar plate herniation with radiculopathy might be characterized as restricted uprooting pain of disc and the typical edges of the intervertebral disc space bringing about low back sharp pain, or potentially shortcoming, paresthesia or deadness in Myotomes or then again dermatomal distribution.(18)

LITERATURE REVIEW:

An evidence based review conducted in 2006 on “outcomes of non-invasive treatment modalities on back pain” by Van Tulder MW said that evidence-based health care becomes an increasing international trend at present. It was found that advice to stay active significantly reduced sick leave compared with bed rest (52% with advice to stay active vs. 86% with advice to rest in bed) up to day 5. This study also reported significant differences in sick leave in favor of staying active. There is strong evidence that advice to rest in bed is less effective than advice to stay active for reducing pain and improving functional status and speeding-up return to work.(19)

Markova T et al conducted evidence based research in 2007 and elaborate that the management of Low Back Pain differ somewhat from the management of acute sciatica. There is little or no difference in clinical outcomes and patient’s perceived improvement between those who were advised to rest and those advised to stay active (based on pain and functional status at three-to-four-week and 12-week intervals) involving sciatica patients based on three systematic reviews of studies(10).

Most common reason for consulting a primary physician in industrialized countries is low back pain. According to an article published in New England Journal of Medicine by Malmivaara A et al on “Treatment of Acute Low Back Pain” in 1995 only a few controlled trials have assessed effectiveness of

bed rest for acute low back pain, which is most commonly prescribed by physician. According to the study back-extension exercises were superior to education about back care in low back pain as compared to rest. Among patients with acute low back pain, continuing ordinary activities within the limits permitted by the pain leads to more rapid recovery than either bed rest or back-mobilizing exercises. (20)

RCT was conducted on “advice to rest in bed v/s advice to stay active” by Dahm KT et al in 2010. This study concluded that moderate quality evidence shows that patients with low back pain may experience benefits in pain relief and functional improvement, whereas patients with sciatica experience little difference. Low quality evidence suggests that little or no difference between those who received physiotherapy.(22)

According to the study conducted by PENGEL LHM in 2003, it was concluded that only studies that recruited inception of participants with low back pain or sciatica for less than three weeks. Inclusion of participants with low back pain for up to six weeks seems unjustified. Participants had already improved significantly by six weeks. Rapid improvements in pain and disability within one-month data show that study participants had. By six weeks, typically pain and disability were only a third of initial values. Moreover, many people no longer had back pain at six weeks, so those recruited with back pain for six weeks cannot be representative of all people who have back pain. We therefore believe it is justifiable to restrict our review to participants with low back pain for three weeks or less. (21)

Vroomen PCAJ found no evidence that bed rest is an effective treatment for patients with sciatica in his study on “Lack of Effectiveness of Bed Rest for Sciatica in 1999”. Slight imbalances in the distribution of characteristics that might have affected prognosis were accounted for in the statistical analysis. The rate of loss to follow-up was less than 8 percent and was similar in the two groups. The patients in the bed-rest group were out of bed about 3 hours a day, and the patients in the control group were out of bed for about 14 hours a day. Within the groups, the number of hours of bed rest was not related to the likelihood of improvement. (23)

Systematic review had done by Stephenson et al in 2015 and found no differences in pain relief and

functional status in patients with low back pain and sciatica who were advised to take rest vs. stay active on the topic of research in Clinical Inquiries (Treatments for sciatica).(24)

RCT was done by Patricia Olaya-Contreras et al in 2015 stated that patients who were advised to stay active showed a more active behavior compared to patients advised to adjust their activity to the pain. Thus, the stay active advice is appropriate for the early treatment of LBP and to promote additional physical activity for more health benefits among workers in risk for suffer from LBP. (25)

G Waddell et al stated that a simple but fundamental change from the traditional prescription of bed rest to positive advice about staying active could improve clinical outcomes and reduce the personal and social impact of back pain.(26)

METHODOLOGY:

We had conducted a randomized control trial by using Visual analogue scale & Dallas pain questionnaire.

- Data was collected in two steps. First part consists of pre-treatment assessment and measurements and second part consists of post-treatment assessment and measurements.
- 40 patients were selected and recruited for this study based on inclusion and exclusion criteria subjects were randomly allocated in to Group A (staying active) and Group B (stay in rest) by administrative staff who were not involved in the study.
- The second part was follow-up reassessment of the outcome measures after 3 weeks' period.
- Total time duration of treatment for both groups was 30 minutes.

Group A

- Participants were assessed individually on their first visit to the department.
- All the individuals were given Home Exercise Plan (Stretching, Strengthening and Nerve Gliding Techniques) and therapeutic intervention (heating modalities, T.E.N.S) along with pharmacotherapy (NSAIDS, Vitamin Supplements).

Group B

- All the participants were advised to take rest primarily for the whole 3 weeks duration and were given the therapeutic intervention (heating modalities, T.E.N.S) and were prescribed with

pharmacotherapy (NSAIDS, Vitamin Supplements).

DATA COLLECTION:

- The outcome measures used in this study were the DALLAS PAIN Questionnaire (DPQ) and the Visual Analogue Scale (VAS) both of which were scored by all participants who completed the 3 weeks course before and after the treatment.
- The DPQ was used to assess the severity of spinal pain that effects four aspects (daily and work-leisure activities, anxiety, depression and social interest of patient's lives).
- The DPQ is valid, reproducible and sensitive to change in Low back Pain.
- The VAS is a valid and reliable tool to rate pain intensities along a 10cm line. The patient is asked to put a mark along this line to reflect the intensity of the pain. The score is measured from the zero anchor to the patient's line.

Hypothesis: Advice to exercise showed more reduction in low back pain and sciatica.

Null hypothesis's: There is no difference in advice to take rest versus advice stay active in low back pain and sciatica.

Study design: Randomized Control Trial.

Sample size: 40 (20 group A and 20 group B)

Sampling technique: Simple stratified sampling technique.

Setting: Jinnah Memorial Trust Hospital Gujranwala.

Inclusion criteria:

- 20-60 years old
- VAS*score greater than 3

Exclusion criteria:

- Neurological dysfunction
- Recent surgery and child birth

Measurements:

Data collection procedure: Pretreatment and post treatment questionnaire.

(DPQ) and (VAS).

Data was collected two times (pretreatment) and (post treatment) via closed ended questionnaire.

Data collection tool: Dallas Pain Questionnaire and Visual Analogue Scale.

	Mar 2018	Apr 2018	May 2018	June 2018	July 2018	Aug 2018	Sep 2018	Oct 2018
Preparation of project								
Data Collection								
Data Analysis & Report writing								
Submission								

Timeline:

Statistical Analysis: All the data was demonstrated as Mean and percentage. Data was analyzed using SPSS (Statistical package for social sciences) in the form of charts, graphs.

RESULTS:

Participant's characteristics:

Majority of participants were female and age range was between 20-60 years old. The greater ratio of participant's age was ranging from 31-40 years old.

Group A:

Male = 12.5%

Female = 37.5%

Group B:

Male = 27.5%

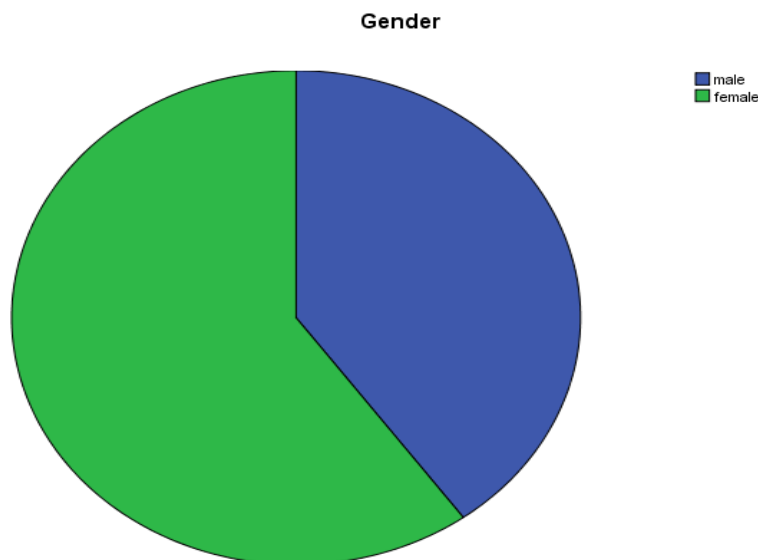
Female = 22.5%

Total percentage:

Male = 40%

Female = 60%

Figure 1: Participant's characteristics (Gender)



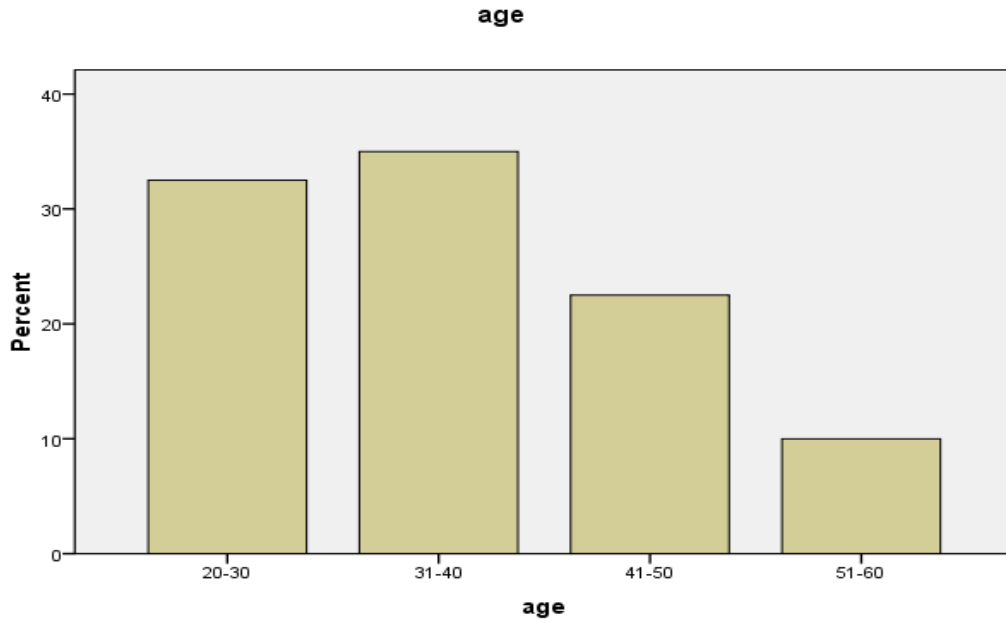


Figure: 2 Participant's characteristics (Age).

- 20-30 years old=32.50%
- 31-40 years old=35%
- 41-50 years old=22.50%
- 51-60 years old=10%

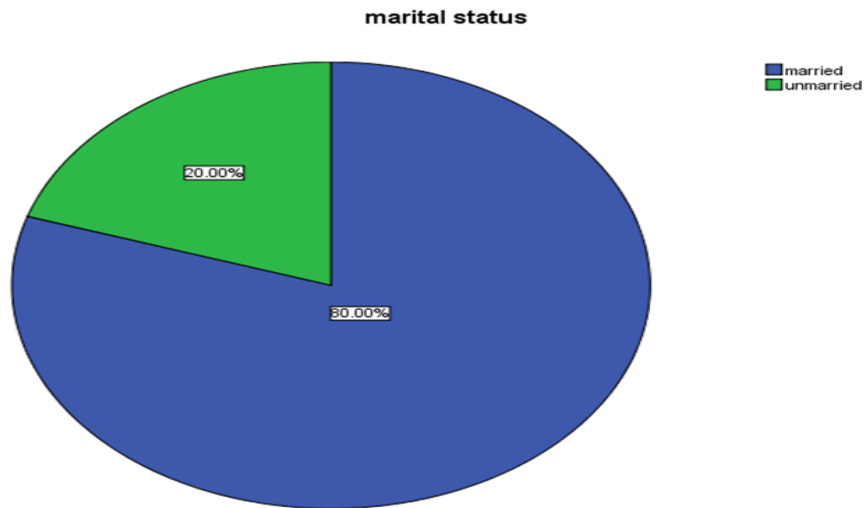


Figure 3: Participants marital status

- Married Participants=80%
- Unmarried
- Participants=20%

T TEST: Pre-treatment and post-treatment means of Pain intensity (VAS scores) were calculated to compare the difference in pain intensity, displayed in table 4.1

Equality of variances is analyzed by application of Levene's Test. (table 4.2)

In independent sample t-test, the group-A's mean pre-treatment VAS pain score was 6.2(SD= 1.8, t-test value = .658) and post-treatment VAS pain score was 2.8(SD=1.3, T= -3.7).

Group-B's mean pre-treatment VAS pain score was 5.8(SD= 1.9, t= -3.7).

Mean post treatment pain score was 4.8(SD= 1.9, -3.7).

According to Leven's test for equality of variances, P value is less than 0.05 so variances are not equal.

T-Test Significant Value is also less than 0.05 so null-hypothesis is not accepted.

Table 4.1: Mean VAS score Group Statistics

	group	N	Mean	Std. Deviation	Std. Error Mean
pre-treatment VAS score	GROUP A	20	6.2500	1.86025	.41596
	GROUP B	20	5.8500	1.98083	.44293
post-treatment VAS score	GROUP A	20	2.8000	1.28145	.28654
	GROUP B	20	4.8000	1.98945	.44485

Table 4.2: LEVENE'S TEST

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
pre-treatment VAS score	Equal variances assumed	.087	.769	.658	38	.514
	Equal variances not assumed			.658	37.851	.514
post-treatment VAS score	Equal variances assumed	6.018	.019	-3.780	38	.001
	Equal variances not assumed			-3.780	32.451	.001

All the means of group A and group B, pre-treatment and post-treatment, were analyzed by using independent t-test by comparing the groups. (Table no. 4.3, 4.4). Post-treatment scores were reduced in both groups A & B as compared to pre-treatment scores, in general. When post-treatment results compared in between groups A & B, group A showed greater reduction in pain intensity while performing different activities i.e. Lifting, sitting, walking etc.

Table 4.3: pre-treatment Group Statistics

group	N	Mean	Std. Deviation	Std. Error Mean
To what degree do you rely on medicines or pain relieving substances for you to be comfortable?	group a 20	2.4000	.59824	.13377
	group b 20	2.5500	.51042	.11413
How much does pain interfere with your personal care?	group a 20	2.6000	.50262	.11239
	group b 20	2.1000	.85224	.19057
How much limitation do you notice in lifting?	group a 20	2.6000	.50262	.11239
	group b 20	2.6000	.50262	.11239
Compare to how far you could walk before your injury or back trouble, how much does pain restrict walking now?	group a 20	2.5500	.51042	.11413
	group b 20	2.4000	.59824	.13377
Does pain limit your sitting in a chair?	group a 20	2.2500	.55012	.12301
	group b 20	2.0000	.56195	.12566
How much does pain interfere with your tolerance to stand for long period?	group a 20	2.7500	.44426	.09934
	group b 20	2.7000	.57124	.12773
How much does pain interfere with your sleeping?	group a 20	2.3500	.67082	.15000
	group b 20	2.2000	.61559	.13765
How much does pain interfere with your social life?	group a 20	2.3500	.67082	.15000
	group b 20	2.2000	.69585	.15560
How much does pain interfere with travelling in a car?	group a 20	2.4000	.59824	.13377
	group b 20	2.2500	.71635	.16018
How much does pain interfere with your job?	group a 20	2.5500	.51042	.11413
	group b 20	2.3000	.57124	.12773
How much control do you feel that you have over demands made on you?	group a 20	2.6500	.48936	.10942
	group b 20	2.1000	.64072	.14327
How depressed have you been since the onset of pain?	group a 20	2.5000	.68825	.15390
	group b 20	2.5500	.75915	.16975
	group a 20	2.3500	.81273	.18173

How much support do you need from others to help you during this onset of pain?	20	2.1000	.64072	.14327
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Table 4.4: post treatment Group Statistics

group	N	Mean	Std. Deviation	Std. Error Mean
To what degree do u rely on pain medication or pain relieving substances for you to be comfortable	40	2.0000	.71611	.11323
group a	40	2.2750	.78406	.12397
group b	40	2.2500	.74248	.11740
how much does pain interfere with your personal care	40	1.9250	.79703	.12602
group a	40	2.2750	.75064	.11869
group b	40	2.3750	.70484	.11144
how much limitation do you notice in lifting	40	2.1500	.76962	.12169
group a	40	2.3250	.61550	.09732
group b	40	1.8750	.64798	.10245
does pain limits your sitting in a chair	40	1.9000	.67178	.10622
group a	40	2.3500	.69982	.11065
group b	40	2.4750	.71567	.11316
how much does pain interfere with your sleeping	40	2.0750	.76418	.12083
group a	40	2.0500	.74936	.11848
group b	40	2.0250	.80024	.12653
how much does pain interfere with your social life	40	2.1500	.73554	.11630
group a	40	1.9750	.76753	.12136
group b	40	2.1250	.79057	.12500
how much does pain interfere with your travelling in a car	40	2.1500	.76962	.12169
group a	40	2.1750	.71208	.11259
group b	40	1.9250	.76418	.12083
how much control do you feel that you have over demands made on you	40	2.2250	.80024	.12653
group a	40	2.3500	.73554	.11630
group b	40	2.1250	.82236	.13003
how depressed have you been since the onset of pain	40	2.0500	.78283	.12378
group a	40	2.0500	.78283	.12378
group b	40	2.0500	.78283	.12378

DISCUSSION:

This paper is a report of study conducted to compare the effectiveness of two different interventions advised to manage the low back pain and sciatica.

60% of the participants were female and 40% were male. While 30% of participants were aged between 20 to 30years old, 35% of participants were aged between 31 to 40years old, 25% of participants were aged between 41 to 50years old and 10% of participants were aged between 51 to 60years old.

The aim of this RCT was to compare the effect of taking rest and staying active (back exercises) on a population with LBP and Sciatica. A pre-test/post-test design was implemented over a period of three weeks. Outcome measures consisted of DPQ and VAS scores. Pain and disability scores improved in all groups. At three weeks post-intervention, Group A showed the most significant improvements in both DPQ and VAS scores. However, results obtained after three weeks show that participants in Groups B had regressed to some extent. Group B scores had regressed close to pre-test levels. Group A scores were still much better than pre- intervention levels and were at par with Group B scores, which had continued to improve over the three weeks following the program. Group A showed the highest percentage difference between three-week post-test VAS and DPQ scores.

It is noteworthy that the participants had been randomly assigned to two groups without considering that age differences could affect outcomes. The distribution of ages between groups appears to relate to the initial results and may have introduced a bias in favor of Group A as age-related differences were striking. The 16-35 years old participants showed the greatest improvement, which could be due to several factors such as healing occurring faster in younger populations. For socio-cultural reasons, the youth have more body and movement awareness, so they assimilate exercises more easily. Also, they were more likely to be cases of first incidence of LBP, which would be easier to treat than recurrent episodes, or chronic LBP. The 36-50years old participants showed the least improvement. This may be because the patients in this age group are likely to have had the

greatest physical demands due to their lifestyles at work and at home, and also the least time for their own well- being. The 51-60 years old individuals had a better outcome than their younger counterparts, which may reflect the fact that they had more time for themselves and so were more likely to implement their home exercise plan (HEP). It would have been a good idea to record compliance to the HEP with a diary. Another factor contributing to the results obtained for the older groups may have been chronicity of pain. If pain persists for more than 12 weeks, or the individual suffers three or more LBP episodes in one year, the resumption of normal daily life becomes increasingly difficult due to the development of chronic pain. As time passes, it becomes very difficult for medical intervention to break down mal-adaptive behaviors and increased pain perception, which can impact heavily on psychological and physical function. Psycho-social factors can be a bigger predictor of chronicity than biological or physical factors.

80% of participants ranging between 20-40 years old age who stayed Active showed the greatest improvement, which could be due to several factors primarily the physical activity and secondarily because of healing occurring faster in younger population as compared to the older individuals. The 41-50 years old participants showed moderate improvement. The 51-60 years old participants showed the least improvement. This may be because the patients in this age group are likely to have had the greatest physical demands due to their lifestyles at work, at home, and also the least time for their own well-being.

20% of participants who were categorized in the active group manifests least effectiveness of physical activity, pharmacotherapy and therapeutic modalities.

40% of participants who were designated in the Rest group showed improvement whereas the rest 60% of participants in this group didn't show any improvement, in fact their condition got worse day by day. This may be because the patients in this group mainly focused on taking rest and not performing any kind of physical activity. Patient's lack of interest in performing exercises and patient's inconsistency for

follow ups were the major problems that were faced throughout the trial period.

CONCLUSION:

The results of this study imply that staying active and doing therapeutic exercises have a better effect on improving pain and disability over a longer period than traditionally taking rest. Hence, "Staying active improves low back pain and sciatica". However, the younger age group showed marked improvement with

posture re-education and exercise. These results are clinically significant. Further longitudinal studies in this area are called for with a recommendation that participants should be followed up for at least **one year** post-intervention in order to find out that which approach has better long-term outcomes. It is recommended that home exercise plan should be easy to understand for the patients. Use of pictorial display or exercise chart is helpful.

Appendix:

Appendix-I

Advice to stay active v/s advice to take rest in bed for low back pain and sciatica.

The core objective of the current study is to explore the effectiveness of interventional therapy for low back pain and sciatica. Specifically, it compares the effectiveness of staying active leads to better results as compared to stay in rest. Moreover, it also explores which would be best intervention for patient having low back pain and sciatica.

We assure you that your personal data will be remained confidential and will not be disclosed anywhere.

Questionnaire:

Advice to stay active v/s advice to take rest in bed for Low Back Pain and Sciatica.

We are doing a research to find out the effectiveness of staying active or take rest in Low Back Pain and Sciatica. The research is being conducted to compare the interventional therapies for Low Back Pain and Sciatica. We assure you that your personal data will be remained confidential and will not be mentioned anywhere in our study and research paper.

For each aspect (0-3) is considered as Mild, (4-7) is considered as Moderate, (8- 10) is considered as Severe.

Name	_____	Age/Gender	_____
Occupation	_____	Marital status	_____
Rate your pain (VAS)			
No Pain	Extreme Pain		

0 1 2 3 4 5 6 7 8 9 10

1. Pain and Intensity

To what degree do you rely on pain medications or pain relieving substances for you to be comfortable?

No Pain	Extreme Pain									
0	1	2	3	4	5	6	7	8	9	10

2. Personal care

How much does pain interfere with your personal care (getting out of bed, teeth brushing, dressing)?

No Pain	Extreme Pain									
0	1	2	3	4	5	6	7	8	9	10

3. Lifting

How much pain do you notice in lifting?

No Pain	Extreme Pain									
0	1	2	3	4	5	6	7	8	9	10

4. Walking

Compared to how far you could walk before your injury or back trouble, how much does pain restrict walking now?
No Pain Extreme Pain

0 1 2 3 4 5 6 7 8 9 10

5. Sitting

How much pain you feel while sitting in the chair?

No Pain

Extreme Pain

0 1 2 3 4 5 6 7 8 9 10

6. Standing

How much does pain interfere with your tolerance to stand for long periods?

No Pain

Extreme Pain

0 1 2 3 4 5 6 7 8 9 10

7. Sleeping

How much does pain interfere with your sleeping?

No Pain

Extreme Pain

0 1 2 3 4 5 6 7 8 9 10

8. Social life

How much does pain interfere with your social life (dancing, games, going out, eating with friends, etc.)?

No Pain

Extreme Pain

0 1 2 3 4 5 6 7 8 9 10

9. Travelling

How much does pain interfere with travelling in a car?

No Pain

Extreme Pain

0 1 2 3 4 5 6 7 8 9 10

10. Vocational

How much does pain interfere with your job?

No Pain

Extreme Pain

0 1 2 3 4 5 6 7 8 9 10

11. Anxiety/Mood

How much control do you feel that you have over demands made on you?

No Pain

Extreme Pain

 0 1 2 3 4 5 6 7 8 9 10

12. Depression

How depressed have you been since the onset of pain?

No Pain

Extreme Pain

 0 1 2 3 4 5 6 7 8 9 10

13. Social support

How much support do you need from others to help you during this onset of pain (taking over chores, meals)?

No Pain

Extreme Pain

 0 1 2 3 4 5 6 7 8 9 10

Appendix-II

Consent Form:

I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have been asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study.

Name of Participant: _____

Signature of Participant: _____

Date: _____

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