



A COMPARATIVE STUDY ON THE PREVALENCE AND SEVERITY OF LUMBAR SPONDYLOSIS AMONG WORKING AND NON-WORKING ADULT INDIAN POPULATION.

Medical Science

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ABSTRACT

The prevalence of Lumbar Spondylosis is on the rise in India. Due to low education status and compulsion to do manual labour, not following proper work ergonomics, necessity for job travel and lack of medical knowledge there is high morbidity in Indian rural population due to Lumbar Spondylosis. This comparative study conducted in a tertiary care centre in Andhra Pradesh, India focus on the prevalence and severity of Lumbar Spondylosis in working and non working population. Research on Lumbar Spondylosis will decrease disease morbidity and complications of severe Lumbar Spondylosis. This study was conducted in rural India where the nature of employment will be mostly manual labour and the spreading of awareness on Lumbar Spondylosis is the need of the hour.

KEYWORDS

Lumbar Spondylosis, Work Ergonomics, Morbidity.

INTRODUCTION

With growing civilization every person is compelled to work, motorized transport and combined with natural history of Lumbar Spondylosis the lumbar degenerative diseases are on the rise. In this study I try to find the prevalence and severity of Lumbar Spondylosis in the working and non-working adult population

- a. **Study Setting:** In a tertiary care centre / hospital –DR.YSR government medical college /government general hospital - Neurosurgery Outpatient department.
- b. **Study Population:** Outpatients presented to Neurosurgery department GGH Eluru.
- c. **Selection Criteria:**
- i. **Inclusion Criteria** - All patients with Low Back Ache, Pain radiating to lower limb/Limbs whose age is 18 years or >18-year-old irrespective of working / non-working for the last 3 years.
- ii. **Exclusion Criteria** - Failed Back Syndrome, part of hemi sensory disturbance syndromes, spinal trauma, systemic diseases affecting bone health, and pregnant patients
- d. **Sample Size:** convenient sample size of 274....out of which working category is 215 and non working is 59.
- e. **Sampling Technique:** All outpatients with lumbar radiculopathy pain presented to Neurosurgery department from January 2025 to June 2025 were included.
- f. **Study Duration:** Six months from January 2025 to June 2025
- g. **Method of Data Collection:** Physical Examination, History, Question & Answer method in OPD
- h. **Study Tools:** Clinical Examination, x ray LS Spine MRI- LS Spine Radiological findings, Questionnaires, visual analog scale for pain
- i. **Study Variables:** Age of incidence of Lumbar Spondylosis in Non-working population, gender, working and non-working, prevalence of lumbar spondylosis

population compared to non working population on visual analogue scale of pain measurement. 195 out of 215 [90.69%] working patients are having moderate to severe pain where as 52 out of 59 [88.13 %] non working patients have moderate to severe pain. Pain severity is relatively high in working patients compared to non working patients.

CONCLUSIONS

There is high prevalence of lumbar spondylosis in rural working population and especially women rural working population. The necessity of both men and women of families to work for adequate living is an important reason for high number of working women presenting with lumbar spondylosis. The rural working women has to carry out household chores in addition to outside paid work. The severity of lumbar spondylosis was relatively higher in working class. The prevalence and severity of lumbar spondylosis is also higher in non working Indian women which can be attributed to household chores which include high manual work. This study found out that Indian rural working and non working women are highly effected by lumbar spondylosis. Further scientific studies are required on Indian rural women overall health conditions predisposing them to lumbar spondylosis and provision of better working conditions for rural Indian workers irrespective of gender.

REFERENCES

- 1) Hirsch C, S. Schajowicz E studies on structural changes in the lumbar annulus fibrosus Acta Orthop Scand. 1952;22:184-231
- 2) Battie MC, Videman T, Gibbons LE, et al. 1995 Volvo Award in clinical sciences: determinants of lumbar disc degeneration. A study relating lifetime exposures and magnetic resonance imaging findings in identical twins. Spine. 1995; 20:2601–2612
- 3) Epstein NE. Symptomatic Lumbar Spinal Stenosis. Surgical Neurology. 1998; 50:3–10
- 4) Deen HG. Diagnosis and Management of Lumbar Disk Disease. Mayo Clinic Proceedings. 1996; 71:283–287
- 5) Johnsson KE, Rosén I, Udén A. The Natural Course of Lumbar Spinal Stenosis. Acta Orthop Scand. 1990; 61
- 6) Frymoyer JW. Back Pain and Sciatica. N Engl J Med. 1988; 318:291–300
- 7) Ehni G. Significance of the Small Lumbar Spinal Canal. J Neurosurg. 1969; 31:490–494

RESULTS

Table: 1

	Working	Non working	Total
Female	127	58	185
Male	88	1	89
Total	215	59	274

Table: 2

	VAS 1-3	VAS 4-6	VAS 7-8	VAS 9-10	Total
Female non working	7	23	16	12	58
Female working	12	48	39	28	127
Male non working	0	1	0	0	1
Male working	8	21	33	26	88
Total	27	93	88	66	274

Case Study

Out of 215 working class patients, 127 were female and 88 were male. Also among non working category of total 59 patients, 58 were female patients. The severity of lumbar spondylosis is more in working