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SOCIO-DEMOGRAPHIC CHARACTERISTICS OF SPONDYLOLISTHESIS, A STUDY OF 40 CASES

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ABSTRACT

Background: Spondylolisthesis in Lumbar spine occurs in different occupations who are working hard. **Objectives**: The purpose of the present study was to find out the Socio-demographic Characteristics and occupational Mode of spondylolisthesis in Lumbar Spine. **Methodology:** This cross-sectional study was conducted at two private Hospitals, Islami Bank Hospital, Motijheel and Islamia General Hospital, Jatrabari, Dhaka, Bangladesh from January 2013 to June 2017 for a period of 4.5 years. Patients with diagnosed cases of Spondylolisthesis irrespective of age and sex were selected as study population. An elaborate history of the selected patient was taken with an emphasis of occupation, time of symptoms, past history of hard working. **Result:** A total number of 40 patients with Spondylolisthesis in lumbar spine were recruited. Out of 40 patients, 32(80%) patients were in the age group of 31-60 years that is active age group, Very young and Old age Group bears less percentage The mean age was 45.92 years. The male and female ratio was 2:3. In this series most affected people are House wife (62.5%), next to this Hard worker (manual worker and Farmer) 20%. Affected females mostly are above 40 years age 14 (62.49%). Mostly affected people are in Low socioeconomic group 22(55%) **Conclusion:** In this series, Active age group female people age more than 40 years of low socioeconomic conditions are most commonly affected in Spondylolisthesis in Lumbar spine.

KEYWORDS: Spondylolisthesis, Lumbar spine, sociodemographic.

INTRODUCTION

Spondylolisthesis is the medical term describing a forward displacement of the upper vertebra over the lower vertebra.[1]

This condition was originally described by Killian in 1854, when he used the Greek words "spondylo" to signify spine and "listhesis" to indicate to slip or fall. As a matter of fact, it almost invariably occurs between the fourth (L4) and the fifth lumbar (L5) vertebrae, or between the fifth (L5) and the first sacral vertebra (S1).[2]

Normal laminae and facets act as a locking mechanism, preventing the vertebrae below from sliding forward. Only when the mechanism breaks do the gearbox go forward.[3]

Degenerative spondylolisthesis usually affects people over the age of 40 and is only detected in the late stages of the disease. Because of ligamentous laxity and aberrant facet morphology, women are four to six times more likely than males to have this disease. Gymnastics, weightlifting, dance, football, and volley ball are all high-risk activities. A congenital abnormality or an accident causes this disease in children. Most patients will benefit from conservative therapy.[4-5]

In this study our main goal is to evaluate the socio-Demographic characteristics and occupational mode Of Spondylolisthesis.

OBJECTIVE

To assess the socio-Demographic characteristics and occupational mode Of Spondylolisthesis.

METHODOLOGY

This cross-sectional type study was carried out at two private Hospitals, Islami Bank Hospital, Motijheel and Islamia General Hospital, Jatrabari, Dhaka, Bangladesh from January 2013 to June 2017 for a period of 4.5 years. A total of 40 Patients with diagnosed cases of Spondylolisthesis irrespective of age and sex were

selected as study population. An elaborate history of the selected patient was taken with an emphasis of occupation, time of symptoms, past history of hard working

All collected data were coding and input in SPSS-25 for further analysis. Both descriptive and inferential statistics done. Descriptive statistics included frequency distribution, percent, mean, standard deviation; graph, tables, figures and inferential statistics.

RESULTS

In table-1 shows age distribution of the patients where most of the patients belong to 31-40- and 41-50-years age group,(27.5% +27.5%) 55%followed by 25% patients belong to 51-60 years age group, 12.5% belong to 21-0 years age group, 7.5% patients belong to >60 years age group. 32(80%) patients were in the age group of 31-60 years that is active age group, Very young and Old age Group bears less percentage The following table is given below in detail:

Table-1: Age distribution of the patients.

Age Group	Number of Patients	Percentage
21-30	05	12.5%
31-40	11	27.5%
41-50	11	27.5%
51-60	10	25%
>60	03	7.5%

In table-2 shows distribution of age according to Female N=24 where most of the patients belong to 31-40- and 41-50-years age group, 33.33%. The following table is given below in detail:

Table-2: Age Distribution of Female patients.

Age group	Number of patients	percentage
21-30	02	4.16%
31-40	07	33.33%
41-50	08	33.33%
51-60	05	20.83%
>60	01	8.33%

In figure-1 shows gender distribution where 60% were female, 40% were male. The following figure is given below in detail:

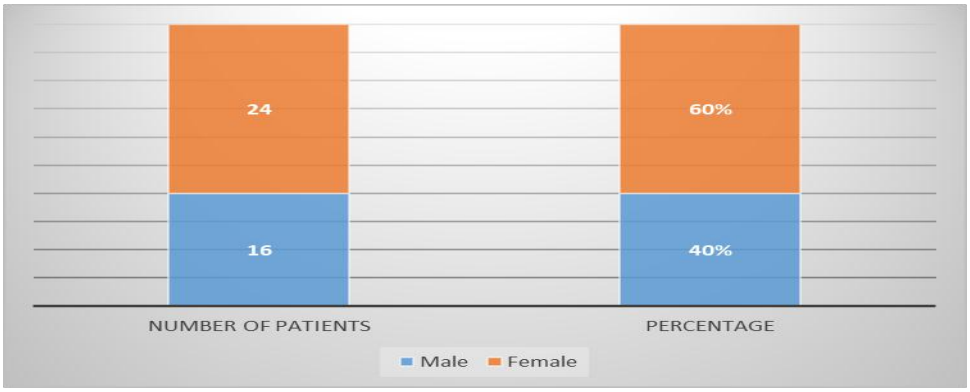

Figure-1: Gender Distribution.

In table-3 shows occupational distribution where majority of the female were housewife, 62.5%. Followed by 20% were manual worker, 5% were service holder and teacher, 7.5% were businessman. The following table is given below in detail:

Table-3: Occupational distribution.

No	Name of Occupation	Number of Patients	Percentage
01	House Wife	25	62.5%
02	Manual worker	08	20%
03	Service	02	05%
04	Teacher	02	05%
05	Business	03	7.5%

In table-4 shows distribution of Patient's Economic condition where most of the patients belong to low economic status, 55% followed by 40% were in middle economic status and 5% were higher economic status. The following table is given below in detail:

Table-4: Distribution of Patient's Economic condition.

Economic Status	Number of Patients	Percentage
Low	22	55%
Middle	18	40%
Higher	02	05%

DISCUSSION

Spondylolithesis is a forward slide of the upper vertebra in respect to the lower one, which is categorized by Wiltse and Rothman as dysplastic, isthmic, degenerative, traumatic, pathologic and iatrogenic. Meyer ding Grades I, II, II, IV, and V or spondylectomies assess the degree of slide. Meyerding Grades I and II are low, whereas Meyerding Grades 3, 4, or 5 are high. 3 Spondylolishesis is usually the mechanism of spinal instability.[4] Spondylolisthesis affects up to 5% of the general population and can strike at any age due to ligamentous laxity, a deficiency in the pars inter-articularis, or prior surgery.[5]

During the study we found most of the patients belong to 31-40- and 41-50-years age group, 27.5% followed by 25% patients belong to 51-60 years age group, 12.5% belong to 21-0 years age group, 7.5% patients belong to >60 years age group. Like other study majority were female, 60%.

In this study, the average age incidence were 41.4 years, which was similar to the Madan and Boeree et al (44.4 years)15 and Kim et al (41.3 years)16. Among 40 patients of this study, majority of them are 4th and 5th decade, with slight female preponderance 22 female (55%) and 18 male (45%). The female predominance may be attributed to repeated birth trauma, tendency to obesity, weak musculature and osteoporosis.[6]

While other study shows age of the patients varied from 21-70 years. Majority of patients belonged to age group 51-60 years, mean age was 43.7 years.[7] This is close to the another study in which mean age was 41.4years. High incidence of spondylolisthesis in this age group is due to degenerative changes of spine.[8]

In one Bangladeshi study reported that, males were5(41.67%) and females were 7 (58.33%) which was similar to the another in which females were two thirds (about 68%). This may be due to women who suffer from early osteoporosis and negligence about diet and also poverty in our country.[9-10]

In this series majority of the female were housewife, 62.5%. Followed by 20% were manual worker, 5% were service holder and teacher, 7.5% were businessman. In other series, found l.9% housewives, 24.2% service holders, 12.1% students, 11% workers, 11% business men, and farmers 4.4%.[11]

In our case majority patients belong to lower c=economic conditions which was relatable to other study.[12] It may predicted that due lower economic status people may were unable to ask for treatment or found unconscious about their conditions.

CONCLUSION

In this series, Active age group female people age more than 40 years of low socioeconomic conditions are most commonly affected in Spondylolisthesis in Lumbar spine.

REFERENCE

1. Hart LG, Deyo RA, Cherkin DC. Physician of fice visits for low back pain. Frequency, clinical evaluation, and treatment patterns from a US National Survey. Spine, 1995; 20: 11-9.
2. Casey PJ, Weinstein JN. Low back pain. In: Ruddy S, Jr EDH, Sledge CB, editors. Kelley's Text book of Rheumatology. Philadelphia-London: WB Saunders, 2001; 509-524.
3. Frymoyer JD. Back pain and sciatica. N Engl J Med, 1998; 318: 291-300.
4. Waddle G. Simple low back pain rest or active exercise? Ann Rheum Dis., 1993; 52: 317-19.
5. Simmonds M, Harding V, Watson P, Claveau Y. Physical therapy assessment: expending the model. Pain Res Manage, 2000; 16: 1013-28.
6. Patel T, Abna A. Diagnosis and Management of acute low back pain. American Academy, 2000; 39: 2-13.
7. Lahad A, Malter AD, Berg AO, Deyo RA. The ef fectiveness of Four interventions for the prevention of Low Back Pain. JAMA, 1994; 272: 1286-1291.
8. Spitzer WO. Scientific approach to the assessment and management of activity-related spinal disorders. A monograph for clinicials. Report of the Quebec Task Force on Spinal Disorders. Spine, 1987; 12(suppl 1): S1-S59.
9. Bigos S. Acute low backproblems in adults: assessment and treatment. Agency for Health Care Policy and Res earch. Clin Pract Guide Quick Ref Guide Clin, 1994; 1: 1-25.
10. Basford J. Electrical Therapy. Krusens Handbook of Physical Medicine and Rehabilitation. 4th ed. Oxford: Oxford University Press, 1987; 375 - 380.
11. Thorsteinsson G, Stonnington HH, Stillwell GK, elveback Lr. The placebo ef fect of transcutaneous electrical stimulation. Pain, 1978; 5: 31-41
12. Marchand S, Charest J, Li J, Chenard JR, Lavignolle B, Laurencelle L. Is TENS purely a placebo ef fect? A controlled study on chronic low back pain. Pain, 1993; 54: 99-106.