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**Burden of Inflammatory Back Pain and Ankylosing Spondylitis/Radiographic Axial SpondyloArthritis (SpA) in a Semi-Urban Community of Nain-Sukh: A COPCORD Study from Lahore, Pakistan**

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**Background:** There is scarcity of data on burden of Inflammatory Back Pain (IBP) and Ankylosing spondylitis (AS) in the community, in Pakistan.

**Objectives:** To determine the frequency of IBP and Radiographic Axial SpA/AS, as per Assessment of Spondylo-Arthritis Society (ASAS) criteria, in a semi-urban community of Nain-Sukh, Lahore.

**Methods:** This cross sectional, household survey was conducted by Division of Rheumatology, FMH College of Medicine and Dentistry, from November, 2018 to April, 2019, as per WHO-ILAR Community Operated Program for Control of Rheumatic Diseases (COPCORD). In Phase 1, Urdu version of the COPCORD questionnaire (CCQ) was administered by trained clinical assistants to identify subjects with Musculo-Skeletal (MSK) pain in last seven days. In Phase 2, Physiotherapists administered modified Urdu version of CCQ, through interview for identifying subjects with chronic back/spinal pain for applying ASAS criteria for IBP. In Phase 3, subjects with chronic back pain with age of onset  $\leq 45$  years, were enrolled through purposive sampling, assessed by rheumatologists for confirming IBP, clinical features of SpA. Subjects also underwent Lab and imaging, as per the defined protocol.

**Results:** Total of 4920 subjects were surveyed in Phase 1, having mean age of  $35.3 \pm 14.5$  years. There were 2770 (56.3 %) females. Out of total, 1407 (28.6 %) who had MSK pain in last seven days, 1205 (25.3 %) subjects were enrolled for Phase 2. Total 1034 (21 %) subjects reported to have spinal/back pain. Physiotherapists reported IBP in 329 (6.7 %). In Phase 3, total 305 (25.3 %) with chronic back pain, were examined clinically. IBP as per ASAS, was confirmed in 107 (2.2 %) and ASAS criteria for Radiographic Axial SpA/AS was met in 53 (1.1 %) of the surveyed population.

**Conclusion:** In this study about one out of every 10 subjects with back pain had confirmed IBP. Almost half of these subjects with IBP were diagnosed as Radiographic Axial SpA/Ankylosing Spondylitis.

**Key words:** Ankylosing Spondylitis, Inflammatory Back Pain, Radiographic Axial SpA, SpondyloArthritis, COPCORD

Table 1: Demographic variables of surveyed Population (N=4922)

Age in years Mean $\pm$ SD	35.33 $\pm$ 14.47
Female n (%)	2770 (56.3)
Age group n (%)	
25 or less	1537(31.2)
26-35	1391(28.3)
36-45	1004(20.4)
46-56	520(10.6)
56 and older	470(9.5)
Marital status n (%)	
Married	3711 (75.4)
Single	1003 (20.4)
Widowed	184 (3.7)
Divorced	16 (0.3)
Separated	8 (0.2)
Family size Mean $\pm$ SD	7.12 $\pm$ 3.80
Literacy Level n (%)	
Read only	384 (7.8)
Read and write	2439 (49.6)
Illiterate	2099 (42.6)
Years in school n (%)	
Primary	368(7.5)
Secondary	419(8.5)
Matric	767(15.6)
Intermediate	243(4.9)
Graduation	254(5.2)
Masters	40(.8)
Non-formal education	2831(57.6)
Smoking n (%)	449 (9.1)
Alcoholism n (%)	8 (0.2)
Current occupation n (%)	
Student	317 (6.4)
Farm work	148 (3.0)
Desk job	6 (0.1)
Field work	938 (19.1)
Shop business	548 (11.1)
House hold work	2526 (51.3)
House maid	59 (1.2)
Professional	71 (1.4)
Military	1 (0.0)
Retired	128 (2.6)
Unemployed	174 (3.5)
Monthly income n (%)	
Less than PKR 15,000 (USD 112)	2006 (40.8)
More than PKR 15,000 (USD 112)	2916 (59.2)