

SAT0401

**RHEUMATIC DISEASE IN VILLAGE BHIGWAN (INDIA):
A POPULATION BASED COPCORD STUDY FOLLOW UP
1996-2003 - SUMMARY FINDINGS**

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Background: WHO-ILAR COPCORD (Community oriented program for control of rheumatic diseases) population surveys (Stage I) have been completed in several countries to measure RMS (rheumatic musculoskeletal disorders).

Objectives: To evaluate the prevalence and occurrence of rheumatic diseases in a select Indian (Asian) rural population under the WHO – ILAR COPCORD program.

Methods: In Feb-Mar 1996, 21 trained rural health workers (HW) completed a house-house census (4600 adults >15 yrs age, mostly farmers) survey in Bhigwan (West India) using a modified COPCORD fast track model. Validated modified core questionnaires were used to interview and identify RMS cases (past or present). Concurrently, one rheumatologist (AC) examined & classified all cases in a central village facility as per standard clinical/ACR criteria. Rampant steroid abuse that often clouded clinical judgment and an unexpected proportion of suspected inflammatory arthritis (IA) were compelling enough reasons to extend the program beyond survey; this had not been attempted by the earlier COPCORD projects. Assisted by 8 local GPs and 2 HW, we visit the village every 3-4 weeks to treat patients free-of-cost, identify new cases but focus on IA. By 2003, the adult population is almost 5100. 95% CI of point prevalence is shown in parenthesis.

Results: During survey, 18.2% adults (response 89%) recorded RMS; IA, OA (all sites), and STR (soft-tissue pains/rheumatism) were seen in 10.5%, 30% & 54% cases resp. The survey prevalence of RA (ACR), IA-U (unclassifiable/includes incomplete SSA) & OA (all site) was 0.5% (0.3-0.7), 0.85 (0.6-1.1) & 5.8% (5.1-6.5) resp.; 44% IA remained unclassifiable. In 55-60% STR, illness was probably related to occupation and life style, and 21% of diffuse forms STR satisfied ACR fibromyalgia criteria.

FOLLOW-UP (FU):- Till date, RA has been diagnosed in 44 patients (ACR=32; clinical=12; post survey=17; sero+RF=43%); there are 16 (ACR=10) incidence cases. Radiological erosions (hands/feet) were seen in 54% RA patients. A lack of assoc of RA with HLA DRB1* was reported earlier (Arth Rheum 2000;7(suppl)S71). 102 patients (62%) of IA cohort, predominantly seronegative and polyarticular, remain unclassifiable. Poor timing of MStiffness, dominant foot disease, rare RA nodules, low sero positive RF & steroid abuse in an otherwise classical RA often interfered with ACR classification. One SLE case was diagnosed in a young female with a strong family history of RA. AS and gout each was diagnosed in 6 patients. In contrast to our hospital practice, TB and Leprosy were infrequently seen but complete Reiter & HIV/STD related arthritis was conspicuously absent.

Conclusion: This maiden Indian report highlights RMS in a rural population. Compared to other Asian populations, IA (both RA & Unclassifiable) is unexpectedly high. But STR seems to be the dominant community problem. A follow up COPCORD is essential to vindicate the Stage I findings and also target Stages II & III (identify risk factors, health education, and evaluate control strategy).

References: i. Chopra A et al. Pain and Disability, Perceptions and beliefs of a rural Indian Population: A WHO-ILAR COPCORD study. *The Journal of Rheumatology* 2002; 29:3, 614-21

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