

## Unraveling rheumatoid arthritis (RA) in a rural population: a 10-year follow-up of COPCORD Bhigwan

Arvind CHOPRA, V. ANURADHA, M. SALUJA,  
J. PATIL, V. LAGU, S. SANJIV, H. S. TANDALE

*Center for Rheumatic Disease (CRD), India*

The epidemiology of RA in Asian populations remains sparsely described.

The initial survey (1996) findings and methodology of the WHO ILAR COPCORD (Community oriented program for control of rheumatic diseases) Bhigwan model are published (Chopra et al. *J Assoc Physicians India* 2001;49:240-6). We reported an unusually high prevalence of 0.55% for RA (ACR criteria). A Stanford HAQ (Health Assessment Questionnaire), modified and validated for Indian use, has been used (max score 24) during a free of cost regular follow up. Incidence cases were identified and HLA DRB1 typing done. Absence of association with HLA DRB1 epitopes (Chopra et al. *Arth Rheum* 2000;43:9:S71) further fuelled speculations about Bhigwan RA. All active RA patients were treated with supervised DMARD regimens.

Earlier, we were inclined to believe that the Bhigwan RA is probably a benign community form. However, we have observed a spectrum-punctuated with several flares in an otherwise seemingly slow progressive disease. 10 years later, the large majority remain functionally active with low HAQ scores. To study the extent of disease, we compared Bhigwan survey RA (n = 27) to a randomly chosen sample of 103 patients of RA attending our city referral clinic. Almost 80% patients were females in both the cohorts. A higher extent of mean HAQ disability score (9.8 vs. 8.7), rheumatoid deformities (41% vs. 22%) and ACR classified RA (81% vs. 54%) was seen in Bhigwan. In contrast, more patients in the referral cohort showed rheumatoid nodules (11% vs. 4%) and seropositive RF (57% vs. 44%).

The annual incidence of RA was 44 per 100,000. (period sample size = 4545). The 10 year period prevalence of ACR classified RA was 0.7%. The prevalence of RA in the young Bhigwan female (aged 15-29 years = 113; 30-44 years = 1639; all per 100,000) population was exceptionally higher than the other global data (WHO TRS 919, 2003).

**Conclusion:** We have demonstrated a significant extent of RA in COPCORD Bhigwan and presented robust data on its occurrence. Further, the high proportion of RA in our relatively younger female population is alarming and merits due attention and probe.

**Acknowledgement:** Supported by a seed fund from APLAR and later by Arthritis Research Care Foundation - Center for Rheumatic Diseases, Pune India