

## Correspondence

### A call to integrate musculoskeletal disorders into the national programme for non-communicable diseases (NCD)

Sir,

The pilot phase of the National Programme for Prevention and Control of Diabetes, Cardiovascular diseases and Stroke (NPDCS) was launched in 2008 with the slogan - "A new initiative for a healthy nation". This was a laudable effort to tackle the swiftly increasing burden of non-communicable diseases (NCD) in the country. Although NPDCS rightly prioritizes diseases which top the list of 'causes of mortality' in the community, yet it is felt that NCDs causing prolonged morbidity have been overlooked. Following the pilot phase, two programmes on cancer and geriatrics have also been amalgamated with the NPDCS, which is currently being carried out in 20,000 sub-centres and 700 Community Health Centres (CHCs) in 100 districts across 15 states in the country<sup>1</sup>.

In this context, rheumatic-musculoskeletal diseases (RMSD), acclaimed to be the major cause of chronic morbidity throughout the world<sup>2</sup>, need to be addressed. Paucity of data on prevalence, lack of awareness among the public and diseases with increased mortality overshadowing these are some of the reasons for RMSD being overlooked by policy makers and medical fraternity. The Community Oriented Programme for the Control of Rheumatic Diseases (COPCORD), launched jointly by the World Health Organization (WHO) and International League of Associations for Rheumatology (ILAR) to assess the burden of RMSD in the developing world, came up as an apt remedy for this problem<sup>3</sup>. The pioneering COPCORD study in Bhigwan, near Pune, in 1996, paved way for many similar, uniformly designed projects, funded by the Bone and Joint Decade (BJD) - India, throughout the country (Fig.)<sup>4</sup>. All these projects have been completed successfully and efforts are under way to bring out a national registry of RMSD, compiling these data.

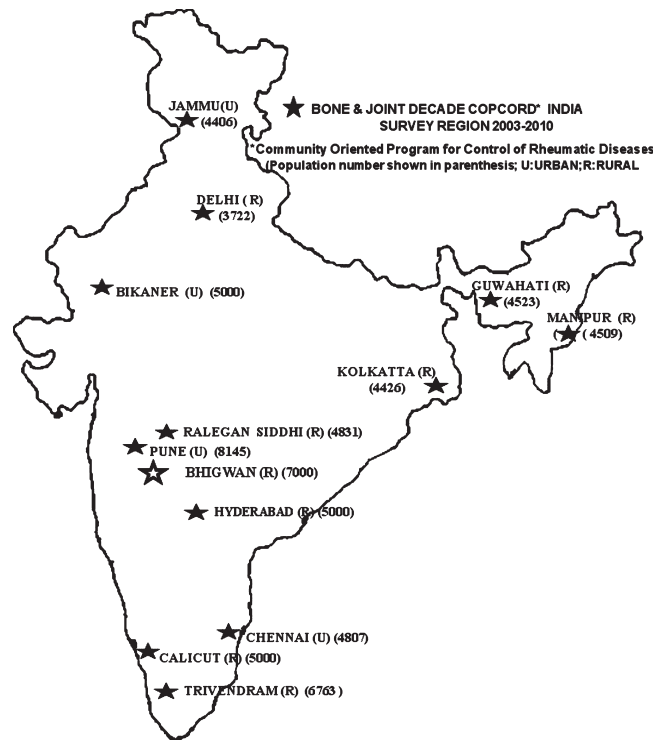


Fig. BJD - India COPCORD survey region 2003-10.

Source: <http://www.copcord.org/india.asp>

Two independent, rural COPCORD study groups in the north (Calicut) and south (Thiruvananthapuram) of Kerala studied 5000 and 6763 subjects, respectively<sup>5</sup>. The commonest self-reported ailment in both the study populations was musculoskeletal pain<sup>6</sup>. Female gender, heavy work, productive age group, hypertension, diabetes and substance abuse showed significant positive associations with RMSD. Point prevalence of RMSD in Thiruvananthapuram and Calicut were 26.08 and 29 per cent, respectively. Osteoarthritis of knees was highly prevalent at both the sites. Though the burden of inflammatory arthritis was in concert with

other regions<sup>4</sup>, an interesting observation in both the regions was the high prevalence of infection-related arthropathy, which, in fact was responsible for the overall high point prevalence of RMSD<sup>7</sup>.

Along with the steadily increasing prevalence of NCDs, in many parts of the country, re-emerging viruses have increased the burden of chronic RMSD<sup>8</sup>. Kerala was badly hit by multiple chikungunya viral (CHIKV) epidemics since 2006; the after-effects are still looming large<sup>9</sup>. Both the COPCORD study groups in the State inadvertently captured the burden of post-CHIKV rheumatism. CHIKV related RMSD was present in 26.5 per cent of the subjects in Thiruvananthapuram. Of these, 437 subjects (31.3%), naïve for RMSD, had various musculoskeletal symptoms about 18 months following the epidemic<sup>10</sup>. Prevalence of both inflammatory and non-inflammatory arthropathies rose following the epidemic, though no specific pattern of joint involvement could be identified. It was intriguing to note an increase in the incidence of soft tissue rheumatism, especially tenosynovitis, in the Thiruvananthapuram region following the epidemic<sup>11</sup>. Bursitis of the wrists was also very common in this group. Well-structured, prospective studies need to be conducted to look into associations.

The magnitude of the burden of RMSD is quite explicit and the real picture of these disorders in the country will come to the forefront once the BJD-India national registry of RMSD becomes a reality. The fast-changing face of RMSD epidemiology in States like Kerala is quite baffling, even for the epidemiologists. There are still many grey areas in the knowledge of RMSD, like risk factors, health economics and treatment seeking behaviour of the patients, which need to be explored. The concept of community rheumatology has to be encouraged, especially in the rural communities, to spread awareness and prevention strategies. This will enhance the quality of life in the population to a great extent. There is an urgent need to take steps to decrease the morbidity caused by these disorders.

Incorporating musculoskeletal disorders under the umbrella of NCDs may be initiated as a pilot phase in a State like Kerala, to start with. The government should work hand in hand with organizations like the BJD-India, which has already taken steps to initiate the process of solving this predicament. Without the help of the policy makers and the media this aim will always be a dream!

**Ashish J. Mathew\*<sup>#</sup>, Asma Rahim\*\*<sup>,</sup>  
Thomas Bina<sup>+</sup>, Binoy J. Paul\*\* &  
Arvind Chopra<sup>+</sup>**

\*Trivandrum COPCORD Study Group  
Medical College Hospital  
Thiruvananthapuram

\*\*Calicut COPCORD Study Group  
Calicut Medical College, Calicut

+WHO-ILAR COPCORD & BJD - India  
Centre for Rheumatic Diseases, Pune

*#For correspondence:*

Dr Ashish J. Mathew  
Department of Clinical Immunology &  
Rheumatology, Christian Medical College  
Vellore 632 004, India  
mathewaj@live.com

## References

1. National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular diseases and Stroke (NPCDCS) approved (Internet). India: Press Information Bureau, Government of India; 2010. Available from: <http://www.pib.nic.in/newsite/erelease.aspx?relid=63087>, accessed on July 8, 2010.
2. WHO Scientific Group on the Burden of Musculoskeletal Conditions at the Start of the New Millennium. *The burden of musculoskeletal conditions at the start of the new millennium*, Report of a WHO Scientific Group. Geneva: World Health Organization; 2003.
3. Chopra A. COPCORD - An unrecognized fountainhead of community rheumatology in developing countries. *J Rheumatol* 2004; 31 : 2320-2.
4. Joshi VL, Chopra A. Is there an urban-rural divide? Population surveys of rheumatic musculoskeletal disorders in the Pune region of India using the COPCORD Bhigwan model. *J Rheumatol* 2009; 36 : 614-22.
5. Rahim A, Mathew AJ, Mathew AJ. Perennial impression of an emerging arbovirus on the epidemiology of rheumatic diseases in south India: Insights from the COPCORD study. *J Postgrad Med* 2011; 57 : 226-8.
6. Mathew AJ, Chopra AJ, Chopra A, Thekkemuriyil DV, George E, Goyal V, Bhaskarannair J. Impact of musculoskeletal pain on physical function and health-related quality of life in a rural community in south India: a WHO ILAR COPCORD BJD India study. *Clin Rheumatol* 2011; 30 : 1491-7.
7. Mathew AJ, Goyal V, George E, Varughese D, Antony J, Chopra A. Incidental capture of Chikungunya associated chronic rheumatism along with other rheumatic musculoskeletal disorders in a rural community in south India: A BJD India WHO COPCORD project. *Arthritis Rheum* 2010; 62 (Suppl): 651.
8. Chopra A, Anuradha V, Lagoo-Joshi V, Kunjir V, Salvi S, Saluja M. Chikungunya virus aches and pains: an emerging challenge. *Arthritis Rheum* 2008; 58 : 2921-2.

9. Kannan M, Rajendran R, Sunish IP, Balasubramaniam R, Arunachalam N, Paramasivan R, *et al*. A study on chikungunya outbreak during 2007 in Kerala, south India. *Indian J Med Res* 2009; 129 : 311-5.
10. Mathew AJ, Goyal V, George E, Thekkemuriyil D, Jayakumar B, Chopra A. Rheumatic musculoskeletal pain and disorders in a naïve group of individuals 15 months following a Chikungunya viral epidemic in south India: a population based observational study. *Int J Clin Pract* 2011; 65 : 1306-2.
11. Mathew AJ, Chopra A, Nair GS, Anandam N, Antony J. Increased incidence of soft tissue rheumatism following Chikungunya viral epidemic: incidental or causal? *Ann Rheum Dis* 2011; 70 (Suppl 3): 567.