The Bone and Joint Decade 2000–2010: The Indian perspective

The Bone and Joint Decade (BJD) was launched formally on 13 January 2000 at the World Health Organization (WHO) headquarters in Geneva. The inspiration and impetus for this movement came from the resounding success of the Brain Decade 1990–2000 that led to an increased awareness of the impact of brain disorders as well as increased funding in various fields of brain research.

This initiative coincides with the increasing global awareness of the impact of musculoskeletal disorders on society, the health care system and the individual. Musculoskeletal disorders are the commonest cause of severe long term pain and physical disability, afflicting millions across the world. Over half of all chronic conditions in people older than 50 years are caused by bone and joint disorders.\(^1\) With the number of people older than 50 years predicted to double by 2020,\(^2\) the ranks of those suffering from musculoskeletal disorders is expected to swell rapidly. Back ailments account for approximately half of restricted activity days, almost 61% of bed days and 16.2 million visits every year to back-care physicians in the USA.\(^3\) The incidence of osteoporotic fractures has almost doubled in the last decade and it is estimated that 40% of all women over 50 years of age will suffer from an osteoporotic fracture. Trauma remains the leading killer in developing countries, especially among the younger age groups. Almost 10–15 million people are injured each year in road traffic accidents and armed conflicts. The annual loss to developing countries from road traffic accidents has been estimated to be more than US$ 112 billion, which is equivalent to 2% of the GDP in these countries and 2–3 times of all the development assistance received by them.

The financial cost of treating musculoskeletal injuries continues to escalate in both the developing and the developed countries. It is anticipated that by 2010, one-fourth of the health expenditure of developing nations will be on trauma-related care.

The BJD is a global initiative to improve the health-related quality of life for people with musculoskeletal disorders. The stated goal is planned to be achieved by raising awareness of the growing burden of musculoskeletal disorders in society, empowering patients to participate in decisions on their care, promoting cost-effective prevention and treatment, and by increasing the understanding of musculoskeletal disorders through research. This global campaign also aims to establish priorities, provide information and support to bodies representing health care professionals and patients with musculoskeletal disorders, and promote all-round musculoskeletal health. It endeavours to identify the research needs and increase funding for such activities. Four clinical fields—joint diseases, spinal disorders, osteoporosis and trauma—have been identified with regard to: (i) estimating the burden of the problem and current treatment options; and (ii) delineating future prospects regarding the treatment and research of musculoskeletal disorders and injuries. Crippling diseases and deformities in children which deprive them of their normal development have also been considered for this campaign.

The campaign also aims to improve the diagnosis and treatment of musculoskeletal disorders by:

1. educating health care professionals about the burden of musculoskeletal disorders in society;
2. a training programme (at least 6 months long) with an aim to improve diagnostic skills of general practitioners and ensure timely and accurate referrals;
3. prevention, diagnosis and treatment of musculoskeletal disorders on evidence-based guidelines;
4. developing drugs with disease-modulating capabilities and reduced side-effects;
5. developing more biological treatment modalities; and
6. developing safer surgical procedures.

By implementing these measures, the campaign aims to reduce by 25% the
expected increase in musculoskeletal disorders such as osteoporotic fractures, arthritic destruction of joints and the incidence of severe trauma. It also aims to achieve a 25% reduction in the expected increase in indirect health costs for spinal disorders.

The onus for the success of the BJD movement demands close cooperation and coordination between orthopaedic surgeons, rheumatologists, epidemiologists, social scientists, statisticians, economists and health planners.

The BJD movement has elicited a tremendous response. The American Academy of Orthopedic Surgeons (AAOS) has constituted a Task Force on the BJD. The movement has been endorsed by 21 governments. The Secretary-General of the United Nations has extended his personal and active support to the BJD at its launch. The WHO, World Bank and more than 750 organizations around the world are presently supporting the BJD initiative. The BJD movement aims to achieve governmental endorsement from all countries by the year 2002.

The International BJD Steering Committee and the WHO have jointly sponsored the BJD Monitor Project which aims to review and collate data on the global burden of musculoskeletal disorders in terms of their incidence and prevalence. It also plans to identify the impact of musculoskeletal disorders, in terms of quality of life, disability and cost on individuals, families and societies. This project also hopes to evolve a consensus on the methods to quantify disability caused by musculoskeletal conditions and is expected to develop future strategies to improve the health-related quality of life for people with musculoskeletal disorders.

Should India endorse this initiative?

With a population of over 61 million above the age of 50 years, India is likely to encounter a heavier burden of musculoskeletal disorders and a higher financial burden than other countries. Hence, it is important to identify the incidence and burden of musculoskeletal conditions and injuries in our population. A review and compilation of the existing data will help to extrapolate these to predict the increase in musculoskeletal disorders by the end of the decade as well as estimate the expenditure required to tackle them. It will also help to develop future strategies to improve the health-related quality of life of people afflicted with such problems. Rheumatologists and orthopaedic surgeons in India have the dual responsibility of familiarizing themselves with the international effort to measure the burden of musculoskeletal diseases as well as to participate in the implementation of programmes at the national level to reduce the disease burden. We need to identify the thrust areas and establish priorities so that the limited resources at our disposal can be used more efficiently.

The experience from the Brain Decade has shown that official endorsement inevitably leads to improved awareness, infrastructure and funding for research, as well as considerable scientific advancement. The emphasis on biological treatment modalities and practice of safer surgical procedures are going to be cost-effective in the long term. Research and advancement in the prevention and treatment of musculoskeletal disorders is expected to reduce the burden of such disorders to society by shifting indirect to direct health care costs. Also, the BJD campaign aims to include initiatives in any geographical location and to support activities in developing countries. An Indian initiative at this juncture will also be supported by an international campaign to mitigate the suffering of people with musculoskeletal disorders.

The Indian perspective

The standards and needs in India are different from those of the western world with cross-cultural differences and barriers, widespread poverty and illiteracy. Many of the musculoskeletal disorders prevalent in India are non-existent in the West. Nutritional disorders such as rickets, osteomalacia and scurvy are still rampant in India and can be prevented or treated by education and inexpensive interventions. The non-availability of safe drinking water has led to a high incidence of fluorosis
in many areas. Consumption of Kesri dal (Lathyrus sativum) has led to lathyrism, an important problem in many parts of India. Leprosy still remains the cause for many a musculoskeletal deformity. Tuberculosis is common and leads to grotesque deformities in children who grow up with a considerable sense of inferiority due to poor cosmesis. School and community screening to detect spinal deformity early to prevent progression still remains an unfulfilled dream. Accidents on the road, in industry and agricultural farms render thousands disabled every year. The lack of education, proper roads, safety norms and political will have contributed to making road travel hazardous and industry unsafe workplaces.

While empowering patients in decision-making may be a long term objective, it may be easier to promote cost-effective prevention and treatment. Many of the practices prevalent in India are indeed quite beneficial such as breastfeeding the baby, carrying babies by the side of the pelvis or on the shoulders (leading to more stable hips!). Simple interventions such as public education to reinforce these practices while discouraging harmful practices can reduce the incidence of musculoskeletal disorders. The division of Indian System of Medicine and Homoeopathy (ISMH) can be useful in developing indigenous drugs at a low cost and reduced side-effects. Regulatory bodies can ensure better and safe nursing homes and operation theatres. Non-governmental organizations, social bodies and non-commercial organizations can be invited to join the initiative and work towards awareness in the society about the need to prevent and treat musculoskeletal disorders.

National programmes, on the lines of the successful polio eradication programme, can be launched to fight diseases such as rickets, osteomalacia, fluorosis, leprosy and musculoskeletal tuberculosis.

Thus, while India should endorse this global campaign, it is important that the international targets should not be our guides. We should initiate the movement in India to prepare us better for the projected global rise in the burden of musculoskeletal disorders. Indeed, we need to join hands with the rest of the world in the endeavour to ‘keep people moving’.

REFERENCES


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