The bone and joint decade

In April 1998 a consensus meeting of the European Orthopedic Research Society, co-sponsored by the World Health Organization, was held in Sweden to explore the societal impact of musculoskeletal conditions. Delegates representing not only orthopaedic surgery but also traumatology, rheumatology, physical therapy, osteoporosis, and physical medicine and rehabilitation determined that this first decade of the millennium should be declared the Bone and Joint Decade1. This movement was officially launched on January 13, 2000 at the World Health Organization in Geneva, Switzerland, with the immediate support of 15 nations and more than 650 organizations worldwide². The goals of the movement are to 'raise awareness and educate the world on the increasing societal impact of musculoskeletal injuries and disorders; empower patients to participate in decisions about their care and treatment; increase global funding for prevention activities and treatment research; and continually seek and promote cost-effective prevention and treatment of musculoskeletal injuries and disorders'3.

Injury, osteoporosis, and arthritis affect millions of people in developed countries, and are the most prevalent diseases for which patients seek physician appointments in the United States.

But what of the problems uniquely related to children? According to a recent report by the American Academy of Orthopedic Surgeons, the economic impact of the 17 most clinically important birth defects is estimated to exceed eight billion dollars annually (three billion dollars direct and five billion dollars indirect cost)4. In 1990 to 1991, leading congenital deformities included an estimated 6000 to 10 000 children born with talipes equinovarus, 1800 cases of spina bifida, and 1500 to 1900 children with limb reduction deformities. In 1998, the estimated cost per new case of spina bifida was estimated to be \$294 0005 and the total (direct and indirect) cost for cerebral palsy to be \$445 000 per affected person⁶. Despite the ability of folic acid to reduce the prevalence of neural tube defects, a survey noted that only 30% of non-pregnant women reported taking daily a multivitamin containing folic acid in 1997 compared with 25% in the 1995 survey 7 .

There is an alarming lack of similar data concerning the children in developing countries. According to the WHO, one in four children are excluded from routine immunization with the six basic vaccines, one of which is polio. More worrisome is that the proportion of children immunized has fallen from 80% in 1990 to 74% in 1998. Fortunately, the WHO efforts to eradicate wild polio virus have succeeded in reducing the widely circulating virus to just three major regions; South Asia, Nigeria, and the Democratic Republic of the Congo.

Childhood trauma remains a major cause of permanent injury, with untold lifelong economic and social consequences. One of the most devastating causes of permanent injury is that of landmines. Estimates show that there are more than 120 million landmines in 71 countries, with approximately 10 million mines in each of the following countries: Afghanistan, Angola, and Cambodia⁸. It is estimated that worldwide there are approximately 1200 non-fatal injuries each month, of which about one third result in amputation. Many of these victims are children and the treatment costs are estimated to range from \$3000 to \$5000 per victim⁸. These estimates do not include the lifelong cost of prosthetic limbs.

The international response to the Decade's campaign has the potential to enhance the lives of countless children worldwide and hopefully lend support to the efforts of those caring for children with disabilities. Kofi Annan, Secretary–General of the United Nations, most eloquently delivered this message on November 30, 1999 stating 'there are effective ways to prevent or treat these disabling conditions. But we must act on them now. The United Nations, the World Health Organization, national and international organizations for people with musculoskeletal disorders and health care professionals are working globally with the Bone and Joint Decade movement to improve the quality of life for people with musculoskeletal conditions...through research to improve prevention, treatment, and rehabilitation"9.

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References

- 1. Browner BD. (1999) The bone and joint decade 2000–2010. Journal of Bone and Joint Surgery 81A: 903–4. (Editorial.)
- 2. Weinstein SL. (2000) 2000–2010: the bone and joint decade *Journal of Bone and Joint Surgery* 82A: 1–3 (Editorial.)
- 3. http://www.boneandjointdecade.org/background.htm
- 4. Praemer A, Furner S, Rice DP, (Eds). (1999) *Musculoskeletal Conditions in the United States*. Rosemont Illinois: American Academy of Orthopedic Surgeons.
- Economic costs of birth defects and cerebral palsy: United States 1992. Morbidity and Mortality Weekly Report, Centers for Disease Control and Prevention. 44 (37): 694–9.
- Waitzman NJ, Romano PS, Scheffler RM. (1994) Estimates of the economic costs of birth defects. *Inquiry* 31: 188–205.
- 7. Gallup Organization– March of Dimes Birth Defects Foundation survey. Morbidity and Mortality Weekly Report, Centers for Disease Control and Prevention. 46 (31): 724–6.
- 8. Anderson N, da Sousa CP, Paredes S. (1995) Social cost of landmines in 4 countries: Afghanistan, Bosnia, Cambodia, Mozambique. *British Medical Journal* **311:** 718–21.
- $9.\ http://www.boneandjoint decade.org/united nations.htm$