

# Musculo-skeletal diseases

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The end of the current century is characterized by the very fast pace of a wide range of developmental processes in all regions of the world. Today civil societies empower their citizens by better access to education and information. Thanks to progress in communication and the diffusion of knowledge and experiences, a wide range of issues fundamental to human and economic development are being shared by millions of people all over the world. Health is firmly placed at the centre of the development agenda to ensure that economic and technological progress is compatible with the protection and promotion of the quality of life for all.

Economically, the world is shaped by the spread of neo-liberal market values, resulting in increased interconnectedness between countries. The rate of globalization of trade, travel and migration, technology development and marketing has accelerated dramatically over the past two decades, resulting in gains for some and, unfortunately, marginalization for others. National and local decisions are influenced as never before by global forces and policies.

The WHO World Health Report underscores that over the past 2–3 decades considerable health gains have been realized by many developing nations which, in turn, determined an unprecedented increase of life expectancy up to on average 64 years today, and projected to reach 71 years by the year 2020. The world is ageing faster than ever before. But, “while extending our life span is desirable in itself”, the World Health Report says, “the quality of human life is at least as important as its quantity.” The Report stresses one obvious and simple thing, that increased longevity does not come free. Every year many millions die prematurely or are disabled by diseases, many of which are noninfectious in origin but, to a large extent, preventable. “Thus longer life can be a penalty as well as a prize” warns the Report.

Noncommunicable diseases (NCDs) have been continuously in the shade of other global persisting or emerging public health issues. A number of important

reasons are behind that. First and foremost, NCDs by their nature are not transmissible and therefore not dangerous in relations between people and societies. Second, NCDs’ global impact was for a long time obscured because of scarcity of information about them, particularly from the developing world. Third, long lasting, deeply rooted opinion of their incurable course. Last, but not least, a widely spread view that NCDs were the prerogative of wealthy, ageing populations and societies in the industrialized world. A question then was often posed if NCDs should unnecessarily detract from the needs of the majority of the population of the globe, who live in poverty in developing countries.

Fortunately WHO NCD technical programmes secretariat managed to keep momentum, created by publication of the Global Burden of Disease and Public Health (Murray and Lopez 1996) importance of musculo-skeletal diseases, a part of larger group of chronic diseases was brought to general public attention. Among facts presented in the world health report the following data were emphasized.

Quotation from the report:

- “40% of people over 70 suffer from osteoarthritis of the knee.
- 80% of patients with osteoarthritis have some degree of limitation of movement and 25% cannot perform their major daily activities of life.
- Rheumatoid arthritis is estimated to affect 165 million people.”

But before we reached that recognition, much water ran under the bridge, as it can be judged from the following short historical retrospect.

“Perhaps the most fundamental difficulty in regard to rheumatic diseases (RD) is that the problem is insufficiently appreciated and understood. Critical to this lack of appreciation is an information deficit.”

This quotation is taken from the WHO progress report by the Director-General at the World Health Assembly in 1976. The report also stated that by that time much effort has been directed at killing diseases,

whereas crippling conditions were relatively neglected - and yet the social and economic burden which the latter impose was probably greater. These statements were a kind of preamble to the world Rheumatism Year declared in 1977 by the International League Against Rheumatism (ILAR), fully supported by WHO. In conjunction with the World Rheumatism Year, interest and support was pronounced by a number of countries, who initiated the upgrading of their public and professional education. One example of a landmark event was an "Advanced Course on Rheumatoid Arthritis and Allied Diseases", organized by the Kennedy Institute, London, and supported by WHO in April 1977, which covered both aetiology and treatment of RD, including standardization of clinical, therapeutic, radiological and laboratory criteria of good medical practice.

One of WHO's greatest strengths in international work is its recognized role of honest broker in health matters. It is well supported by its "convening power," that is a constitutional mandate to call upon the best minds, knowledge and expertise from all over the world to benefit health development in Member States. There has been a long useful collaboration with the International League Against Rheumatism (ILAR), the nongovernmental organisation in official relations with WHO collaboration aimed at providing interested countries with updated information on epidemiology and management of rheumatic diseases.

Already in the early eighties a joint WHO/ILAR community oriented programme for the control of rheumatic diseases (COPCORD) was initiated. This cooperative venture based on surveys of services and nearly 20,000 individuals involving quite a number of developing countries such as the Philippines, Indonesia, Malaysia, Thailand, China, Pakistan, India, Brazil, Chili and Mexico provided valuable information on the magnitude of the problem there in terms of prevalence of RD, which practically equals that in industrialized world as well as the pressing need to build the capacity to deal with this health problem.

That experience prompted the convening of a WHO Scientific Group on RD in 1989. It was indeed a state-of-the-art review of a very wide spectrum of conditions, from nonspecific aches and pains in joints, to full-blown rheumatoid arthritis with all its extra-articular manifestations. There was ample evidence that rheumatic diseases cause more pain and disability than any other group of conditions in developed countries. The same pattern of morbidity is now being seen in the developing world. For each of the reviewed diseases, the Scientific Group defined areas of necessary research and made recommendations about education, prevention and treatment. It also

stressed the importance of socioeconomic and genetic factors in relation to these disorders.

Osteoporosis was another area of public health concern where WHO convened a Study Group (1994) to facilitate understanding the factors underlying the metabolic changes and to consider possible ways to prevent and improve treatment of this disease.

Surveys undertaken in developed countries indicate that, by the age of 70, more than one in four women have sustained at least one osteoporotic fracture. The estimated life-time risk for wrist hip and vertebral fractures has been estimated to be in the order of 15 % i.e. very close to that of ischaemic heart disease.

The available data leave little doubt that osteoporosis is reaching epidemic proportions, and that it will become increasingly important in most countries due to a proportionate increase of the aged population, as well as a notable change of risk factor profile.

WHO envisions a way to improve the community musculo-skeletal health through increased collaborative efforts and with the mutual support of governmental and nongovernmental organizations at the global, regional and national levels in increasing the capacity to run effective community control programmes. These programmes should include the whole range of measures from professional training, patient and family education, community and patients participation to enhancement of early detection, and effective treatment and rehabilitation. It becomes increasingly clear that such programmes should also become an integral part of health services including existing primary health care systems. An association between the prevalence of defined chronic musculo-skeletal diseases—osteoarthritis, low back pain, osteoporosis—and such risk factors as obesity, physical inactivity, stress and smoking, opens up the perspective of the prevention in the population by the correction of these risk factors. The commonality of these risk factors for a larger group of noncommunicable diseases (cardiovascular, certain types of cancer, diabetes, chronic respiratory diseases etc.) shows a strong potential for the prevention of chronic musculo-skeletal diseases as part of a more comprehensive noncommunicable diseases prevention and control programme, a global strategy for which is going to be developed in the World Health Organization.

## Reference

Murray J L, Lopez A D (Eds.). The global burden of disease: a comprehensive assessment of mortality and disability from diseases, injuries, and risk factors in 1990 and projected to 2020. WHO 1996.