Book Reviews

Controlling diseases due to helminth infection,
D.W.T. Crompton, A. Montresor, M.C. Nesheim,
L. Savioli, editors (World Health Organization, Geneva)
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Geo helminthiasis is an important public health problem
worldwide especially in the developing countries possibly
because of lack of proper sanitation facilities, lack of
safe drinking water, and poor and illiterate population. In
India, in spite of better health education and diagnostic
facilities available, intestinal helminthic infestations
continue to be a threat to the mankind especially due to
the impact of high worm burden on malnourished and
school going children. Familial distribution of Ascaris
lumbricoides, anaemia resulting in low birth weight
babies during pregnancy because of hookworm infection,
higher incidence of intestinal taeniasis in pig rearing than
in non pig rearing communities, negative effects on
growth and development particularly in malnourished
children and economic consequences on the family and
community, higher prevalence among children under five
years in rural and semi urban slums and recent detection
of some of these helminths in human immunodeficiency
virus (HIV) positive patients are some of the reported
facts which indicate the magnitude of the problem and
need for control of these soil transmitted helminths
particularly targeting the children and pregnant women.
Mebendazole, albendazole and some others like
praziquantel are promising and effective antihelminthic
drugs. The WHO is promoting school-based strategy to
control these diseases. These drugs as such or as
medicated salts in combination with diethylcarbamazine
(DEC) may serve useful purpose for most prophylaxes
and treatment in geohelminthic/filariasis endemic areas.
Since major underlying cause of several parasitic diseases
is poor hygienic condition, integration of control efforts
with hygiene-related diseases should have a synergistic
effect in reducing poverty related diseases in general.
For this, the knowledge of epidemiology, appropriate use
of antihelminthic drugs monitoring the impact of control
measures, and ensuring the sustainability of control
efforts are important. The present publication is an
earnest and sincere attempt toward fulfilling these major
lacunae. The book originated from the proceedings of
the conference held in Bali, Indonesia in February 2000
is divided into four parts on Public health significance,
Strategies and major programmes for the control of
diseases due to helminth infections, Antihelminthic
chemotherapy, and Experience from national control
programmes.

Under Public health significance, the enormicity of
the problem due to various helminths in endemic areas
and the resultant effects on growth and development of
children and pregnant women with compromised immune
status has been adequately highlighted.

The second part deals with several strategies adapted
for control of intestinal helminths and lymphatic filariasis
in different countries with the help of WHO through the
existing school health system, the Hashimoto Initiative
and control of soil-transmitted helminth infections: the
Japanese challenge. It was shown that focusing
resources on effective school health system would result
in improving quality and equity of education.

Part III deals with the available antihelminthic drugs
and those in pipeline and their usefulness in control
programmes so as to lower the morbidity and mortality.
The knowledge of epidemiology in a given population
has been adequately emphasized for success of control
programmes. Detection and management of drug
resistance has also been highlighted.

Part IV deals with the experiences gained through
different national and local antihelminth control
programmes in different countries of South East Asia.
It was demonstrated that deworming is an affordable
cost-effective public health measure that can be readily
integrated with existing health care programmes and
therefore deserves high priority in endemic countries.
Sustainability of its benefits will depend upon having dedicated health professionals, political commitment, community participation, health education and investment in providing sanitation facilities. The book will certainly be of immense help to local and national health related control/eradication agencies/bodies to formulate their plans and also to research investigators studying the endemiCity of microbial diseases. I wish that the price of this book is within the reach of investigators and is made available to all the libraries for wide use.

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This report by a WHO Scientific Group is an attempt to present the worldwide burden of musculoskeletal conditions. It is an initiative of the WHO in collaboration with the Bone and Joint Decade 2000-2010. The Group aimed to identify, review and compile data on all aspects of the global burden of musculoskeletal diseases; study the impact on the individual, family and society; establish outcome measures; and measure the health impact and economic burden of these diseases. This report is the first such effort to summarize comprehensively the effect of major musculoskeletal conditions.

Musculoskeletal disorders are the most frequent cause of physical disability in developed countries. The publication of this report, at a time when non-communicable diseases are assuming increasing importance in developing countries too, is opportune. The prevalence of musculoskeletal disorders increases with age. The reduction in mortality from infectious diseases coupled with global ageing of the population will translate into a marked increase in the number of people with these disabling disorders. Musculoskeletal traumas, particularly those caused by road accidents, are a significant cause of mortality and chronic impairment in the young. Musculoskeletal diseases, therefore, are major causes of morbidity worldwide affecting both the young and old. They have a substantial impact on health and impose a heavy economic burden on health care systems. The acquisition of robust data concerning these conditions is an important initial step in order to be able to assign priorities and develop preventive strategies.

The report focuses on five conditions, viz rheumatoid arthritis (RA), osteoarthritis (OA), osteoporosis, spinal disorders and major limb trauma. While RA can be taken as an index condition for inflammatory diseases and OA can be considered representative of non-inflammatory or degenerative conditions, one notable exclusion has been soft tissue rheumatism (STR). Conditions like bursitis, tendonitis, repetitive strain injury etc., which comprise STR are very important because they are ubiquitous and account for a large chunk of rheumatic disease burden in the community. It would have been ideal to have information on other common musculoskeletal diseases like gout, spondyloarthropathies, connective tissue diseases etc. This report gives data for the 6 WHO regions (African, Americas, South East Asia, European, Eastern Mediterranean and Western Pacific). These have been further divided into mortality strata A to E based on their levels of child mortality and mortality among men aged 15-59 yr. For each region, information has been provided in age and gender bands. The collation of epidemiologic data for all regions of the world is a mammoth task, given the fact that data in developing countries may be fragmented, incomplete or simply not available. Despite lacunae, the Scientific Group’s major achievement has been to develop a consensus on definitions of each condition to be used in all future studies; agreed age bands; reported data separated by gender; and guidelines for the uniform collection of data. Another aspect of note is that the report tries to provide data for children. Rheumatic diseases comprise more than 150 diverse musculoskeletal conditions. The problem, all too often, gets neglected in children. This is because of the widely held, though erroneous, belief that arthritis does not affect children.

One valuable data source that this report has highlighted is so called ‘grey literature’ like government sponsored surveys, health care in pension funds, government providers (hospital discharge data, emergency room registrations, etc.), national registries of physical disability and data on days lost from work
through illness. This problem may be especially important in India where Ministries other than Health and Family Welfare may be repositories of such information. The report has used both the 1987 American College of Rheumatology (ACR) criteria and the 1958 American Rheumatism Association (ARA) criteria for RA. The latter are no longer used now and it would have been ideal to have the 1987 criteria in all situations. Even the latter have been criticized for their inability to pick up early RA, which is important given the fact that early intervention has enormous impact on the ultimate outcome of the disease. While dealing with osteoporosis, the report provides information on the incidence of proximal femur fracture. The group very rightly has emphasized the critical need of obtaining further information on vertebral and distal forearm fractures. It is also important to generate and collate normative data on bone mineral density. The manufacturers of densitometers use reference data from Caucasian females which are very likely inappropriate for Asians. The widespread subclinical deficiency of vitamin D in areas like the Indian subcontinent calls for urgent studies.

Apart from incidence, prevalence and what is known in terms of numbers, the report provides a relevant model for the course of each condition by assigning stages and levels of severity. This is relevant because the severity and course of musculoskeletal conditions is very variable. Health and economic indicators constitute the third important component of the report. In this era of cost constraints, rational utilization of health resources is to be preferred over rationing. Both direct and indirect costs are important. These economic indicators need adjustment for geographical and cultural differences. Health being a multidimensional function, the health impact and economic burden at the population level can be assessed through various surveys. The Group has identified simple indicators that can be used universally viz., pain related to the musculoskeletal system, bones and joints; limited mobility; the ability to perform activities of daily living; and limited participation in society because of musculoskeletal complaints. Priority areas have been identified and it is left to each country to set its own goal and agenda.

The fourth component of the report deals with health status measures. Measures of health status provide information on a variety of domains that represent health. Numerous assessment instruments are available. The advantage of using generic instruments is that comparability is achieved with conditions outside the musculoskeletal field. However, a relative disadvantage can be the relative insensitivity of a particular instrument to musculoskeletal conditions. Disease-specific instruments, on the other hand, may only allow comparison of the health status of a specific condition either cross-sectionally between centers or longitudinally, e.g., following new treatments. Of a set of core domains and sub domains the Scientific Group viewed the following as being the most relevant for musculoskeletal conditions: physical health, with sub domains, and pain and physical function (mobility and activities of daily living); social health; and mental health, with sub domains, and energy/vitality and anxiety. The inventory of published assessment instruments for musculoskeletal conditions in the report is a useful ‘one point’ information source and is bound to benefit researchers and scientists in this area. Identification of a parsimonious set of instruments is important but needs translation and validation into Hindi and other regional languages to find wide usage in India.

The Technical Report Series ends by recommending that guidelines should be developed to facilitate the uniform collection of data for comparison between geographical regions and longitudinal assessment of changes in disease patterns; the most essential regions from which data are missing should be identified; simple instruments should be developed and validated in a format that can be used worldwide; and consensus reached on definition and staging of musculoskeletal conditions. The publication of this report is a preliminary, albeit, very important step in this direction. Much needs to be done and it is up to each country to set up national databases with international links, enabling maximum utilization of data so as to alleviate the colossal burden of musculoskeletal conditions.

The report is informative, well researched, and is expected to serve as an important source of information for all those interested in the field of musculoskeletal diseases.

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