

# Rehabilitation medicine: introduction to the series

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**M**edicine evolves to reflect the needs of society. This evolution is commonly viewed to be driven by scientific research advances. However, factors on a macroscopic, population level can be equally influential.

Three such factors in the 20th century led to the creation of a new specialty, physical medicine and rehabilitation. For much of the last century, medicine revolved around the concept of saving lives. The result has been prolonged quantity of life with an increase in the prevalence of chronic disease. During the same decades, armed conflicts not only redefined geographic maps but also enhanced the public's awareness of people with disabilities; in some instances, this group came to represent a new segment of society. In addition, the polio epidemic of the 1950s left many people with friends and family members with disabilities, and the presidency of Franklin Roosevelt in the United States led to an awareness that a disability does not have to be a social handicap. The recognition of the inherent value of people with disabilities and of their needs resulted in the development of the speciality of physical medicine and rehabilitation. At its most basic, this speciality focuses on maximizing a person's independence through medical, psychological or physical treatments or through modifications to their environment.

Common causes of disability requiring complex rehabilitation include cardiovascular diseases, respiratory ailments and arthritis. Less common but potentially devastating conditions such as spinal cord injury, acquired brain injury, amputation and congenital neurologic or musculoskeletal conditions often require lifelong medical follow-up. Each of these conditions presents its own subset of medical complications and rehabilitation needs. Fortunately for the physician, some of the complications and needs overlap between conditions. For example, understanding the principles of spasticity management can help the clinician to treat the child with cerebral palsy, the adult with a spinal cord injury and the elderly patient with a stroke.

For this series we have chosen 3 topics that highlight different aspects of rehabilitation medicine. Two of the topics, the management of spasticity and the management of swallowing disorders, address principles that can be applied to more than one patient population. The other topic, auto-

nomic dysreflexia (see page 931), is a complication of spinal cord injury that not only can result in significant morbidity but also can serve as a clue to underlying pathology.

It should be noted that this series includes topics in rehabilitation medicine only and does not reflect the full scope of the specialty. The articles focus on inpatient physiatry; community outpatient physiatry deals primarily with musculoskeletal disorders, pain and peripheral neuropathies.

According to Statistics Canada's 1983–1984 Canadian Health and Disability Survey of 126 698 people aged 15 years and older, 12.5% of Canadian adults felt that they had an activity limitation.<sup>1</sup> There are 340 physiatrists in Canada,<sup>2</sup> not all of whom are necessarily in active clinical practice. Thus, the bulk of the medical care provided to people with disabilities is provided by other physicians. Many of the issues in physical medicine and rehabilitation are covered poorly in Canadian medical schools, if they are taught at all. We hope this series will be useful to a wide range of readers, and we welcome comments.

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*Competing interests:* None declared.

*Contributors:* Dr. Radhakrishna wrote the initial draft of this paper. Both authors contributed substantially to the revision process.

*Acknowledgements:* We thank Drs. Cynthia Dent, Nigel Ashworth, Mario DiPersio, John Guthrie and Namita Nanda for their helpful comments on the articles in the series.

## References

1. *Canadian health and disability survey*. Ottawa: Statistics Canada; 1989. Available: [www.statcan.ca/english/sdds/3826.htm](http://www.statcan.ca/english/sdds/3826.htm) (accessed 2003 Sept 22).
2. Royal College of Physicians and Surgeons of Canada. *Directory of fellows*. Available: [www.royalcollege.ca/index\\_e.php?submit=Search](http://www.royalcollege.ca/index_e.php?submit=Search) (accessed 2003 Sept 22).

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