

lifestyles and self-management of health, reproductive health, occupational health, mental health, and the special health problems of particular population groups, such as the elderly, northern residents, native peoples, and the disabled.

Medical Research Council. Most federal grants supporting health science research in universities and hospitals are channelled through this council. It provides grants-in-aid of operating and equipment requirements for research projects and direct support for investigators and research trainees. It offers incentives for research both in productive fields where major contributions may be expected and in fields or regions where research is not adequately developed. Support is given for meetings, international scientific activities and exchange of scientists. The budget of the council was \$113 million for 1982-83, up from \$88 million for the fiscal year 1981-82.

The national health research and development program provided \$11 million for health research and related scientific activities in 1981-82. Among the 235 projects supported were investigations into the safety and quality of foods and pharmaceutical products, and the identification of chemical, physical and biological hazards in the home, workplace and community. Support was given to research related to the quality and availability of health services, and promotion of healthy lifestyles and behaviour patterns.

To meet a need for qualified health research manpower, the program assisted 50 students at the masters and doctoral levels and 55 established health research scientists.

3.3 Health personnel and facilities

In the 1980s, Canadians are being served by a system of hospital and medical care complemented by a broad range of other health services. Health workers include more than 45,000 physicians, 230,000 registered nurses, 11,000 licensed dentists and a large pool of other health professionals in such activities as diagnostic treatment, rehabilitation, public health and health promotion.

Services are provided in nearly 1,300 hospitals and more than 5,000 extended care facilities. The hospitals account for more than 50 million patient-days in a year and a substantial load of out-patient services.

Physicians. The number of active civilian physicians in Canada, including interns and residents, increased at a rate far exceeding population growth from 1971 to 1981 (Table 3.25). There was a 38% increase in the number of physicians while the population grew 12.8%. In 1981, 50.2% of the active civilian physician population, excluding interns and residents, were general practitioners and family physicians. The remaining 49.8% were certified specialists. As there was an almost identical percentage distribution

between general practitioners and family physicians and specialists in 1971, the tendency to specialize was no greater in 1981 than it was 10 years earlier.

A 38% increase in physicians from 1971 to 1981 can be attributed to two factors, the increasing number of medical graduates and the number of physicians immigrating to Canada. Prior to 1975, almost as many immigrant physicians as medical graduates in Canada were added to the stock each year. Since then the number immigrating has been decreasing and graduates from Canadian medical schools have increased.

The stock of physicians as it relates to the population reached 1:538 in 1981, surpassing a ratio set by a national physician requirements committee established by NHW. If general and family practitioners are examined as a separate group, there has been a surplus since 1975 when the recommended physician/population ratio was reached. Most medical specialists were at or above the recommended stock for 1981. In sharp contrast were surgical and other specialities which, with few exceptions, were not projected to reach the recommended physician/population ratio until after 1983.

Dentists. The number of active dentists increased 54.1% from 1971 to 1981, having kept far ahead of the population growth rate of 12.8% during the same period (Table 3.26). Canada had a dentist per 2,913 persons in 1971. The ratio was 1:2,133 in 1981. Dental schools played a large role in the increase. During the decade, two new dental schools were opened. Most schools had relatively stable numbers of graduates. Two exceptions were large increases in the number of graduates from the University of British Columbia and Western University.

Nurses represent about two-thirds of all health manpower in Canada and are an integral part of the health care system. Historically, nurses have been predominantly female (99.2% in 1970), but there has since been an increase in the number of male nurses and the percentage of female nurses has decreased slightly to approximately 98%.

Most nurses have always worked in hospitals or related institutions. The percentage working in hospitals remained relatively stable during 1970-78, increasing only slightly from 82% to 84.7%.

About 35% of nurses worked part-time (less than 35 hours per week) in 1981.

Pharmacists. The number of licensed pharmacists increased from 11,330 in 1971 to 17,039 in 1981 (Table 3.29). There were 683 graduates of pharmacy schools in 1981, 258 more than in 1971. Beginning in 1976, women graduating outnumbered men; 64% of all graduates of pharmacy schools in 1981 were women.

Optometrists. In 1981 there were 2,224 active optometrists in Canada or one to 11,016 persons. This was an increase from one per 13,784 persons in