1 Introduction

Australia is one of the healthiest countries in the world and Australians are becoming even healthier. This is shown by declining death rates, increasing life expectancy, a low rate of life-threatening infectious diseases and, for most people, ready access to health care when needed. But there is still room for improvement; good health is not enjoyed by all, and the health of Aboriginal and Torres Strait Islander peoples is poor by any standard.

This first chapter discusses what health is, what determines it, and the need for good information on the causes and patterns of health and illness in the community. Chapter 2 outlines how long Australians live, the major diseases they die from, illnesses reported and levels of disability and handicap. In chapter 3, the health and ill-health of special populations are discussed. Chapter 4 looks at the actions taken and progress made in improving the health of Australians in the priority areas of cardiovascular health, cancer control, injury prevention and control, mental health and diabetes mellitus. Chapter 5 focuses on other diseases and risk factors that are amenable to public health action. The cost of health services, employment in the health industry, and the provision and performance of institutional health services are examined in chapter 6. Chapter 7 discusses the question of access to and use of hospital, medical and other health services. The final chapter looks at current developments in health information, and identifies some of the gaps and deficiencies in health statistics.

A wide range of statistical tables is included after chapter 8. These tables include data on population and fertility as well as health-related information. Many of the tables provide time series information, as well as comparing Australia with other countries. Tables have also been included for some of the figures in the report, for the benefit of readers who may wish to examine the data in more detail.

1.1 Health and its determinants

What is health?

In 1946 the World Health Organization (WHO) defined health as 'a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity' (WHO 1946). This definition remains widely used. It emphasises health as a positive experience and places it in a broad social context.

Concepts and measures of health vary depending on the frames of reference used by consumers, different groups of health professionals, health economists and others (Noack 1997). Biomedical concepts of health are concerned with the biological processes of health and ill-health. Clinical and epidemiological approaches consider mainly death, disease, disability, life expectancy, and years of healthy life. The social sciences focus more on social, emotional and material wellbeing as well as the quality of life. Some

measures are of everyday factors, such as whether people feel good, energetic or resilient. The understanding and measurement of health, therefore, needs to take account of the processes of disease, the management of illness, and the many factors which lead to improved health and wellbeing.

People can often feel perfectly fit and well despite underlying disease processes that will in time show up dramatically, and often suddenly, as serious illness such as heart attack or cancer. The factors that often play a major role in these processes, such as cigarette smoking and high blood cholesterol, are known as risk factors because they increase the risk of certain diseases. For these reasons many experts now see a truly healthy person as one who is not only symptom-free but also free of those risk factors that can be quietly 'hatching' disease. However, as discussed below, health is ultimately determined by many factors, not just physiological and behavioural risk factors.

Despite the broad context of health described above, much of the information available (and reported in this volume) is concerned with ill-health. This reflects the difficulty of measuring such concepts as 'wellbeing' and 'quality of life'.

What determines health?

Ideas about what determines health owe much to the evolution of epidemiology—the study of the causes and distribution of health and illness in populations. Epidemiology arose in the seventeenth century from a concern to improve public health and to reduce inequalities in mortality across society (Susser & Susser 1996). In the nineteenth century, the Sanitary Movement in England drew attention to the toll of sickness and death linked with industrial and urban living. Advances in microbiology led to the single-cause germ theory of disease, which dominated medical and public health sciences well into the twentieth century. The rise of chronic diseases in modern times forced a departure from the specific-cause model of the germ theory.

A multicausal framework is now generally used to explain population patterns of health and disease, sometimes referred to as the 'web of causation' (Krieger 1994). Some twenty years ago, a major Canadian government report depicted disease as an outcome of the interaction of human biology, lifestyle and environmental factors, as well as being modified by health care (Lalonde 1974). An analysis of factors contributing to the 10 leading causes of death in the United States attributed 50% of premature mortality to unhealthy behaviour and lifestyles, 20% to human biology, 20% to the physical environment and 10% to inadequate health care (Centers for Disease Control 1977).

Syme (1986) noted that there was a graded association between socioeconomic status and a range of health outcome measures. He suggested the need to consider environmental risk factors in understanding the causes of disease, and that these factors should be built into prevention programs. Psychological, cultural, educational and economic factors are important elements of the social environment for health and disease. Occupation, sex, marital status, major life events, social networks and social support are some of the other important related aspects. Health and economic wellbeing are related in that economic prosperity generally contributes to the health of the population.

The Ottawa Charter (WHO 1986) reflected these developing views by emphasising the need for broad health promotion strategies to improve the physical, social and economic environment. It recognised that for public policy to have the best influence on

health, action was needed from a range of sectors, not just the traditional 'health systems'.

The Ottawa Charter also recognised that the capacity of individuals to alter their behaviour is greatly influenced by social and cultural factors. One of the health promotion strategies suggested was to help individuals develop personal skills to exercise more control over their own health and environments and to make healthy choices.

Figure 1.1 presents a simple model of health.

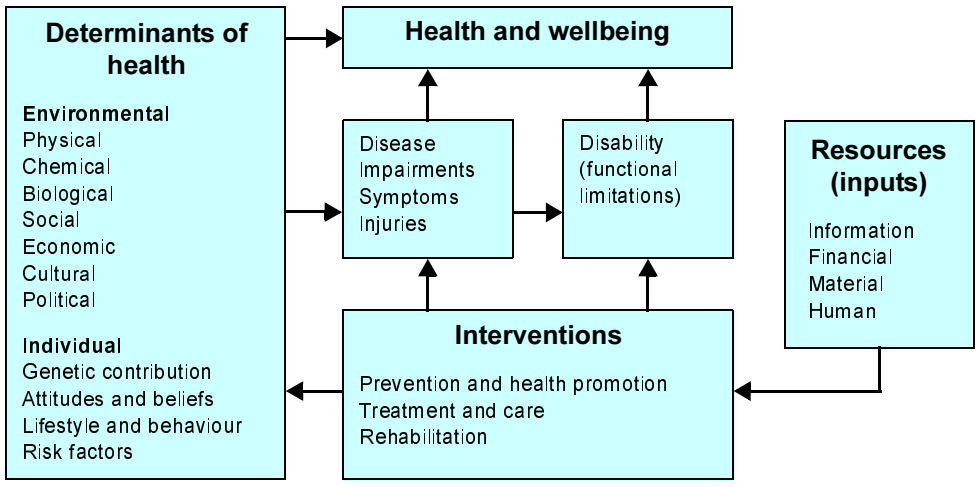

Figure 1.1: A conceptual framework for health

Large changes in global health patterns and technology (particularly in molecular biology and information technology) have broadened thinking about health even further (Susser & Susser 1996). Krieger (1994) proposed an 'ecosocial' framework that integrated biomedical and social approaches to understanding health. It was recognised that combating new infections such as HIV (human immunodeficiency virus) need efforts on many fronts, from research on the infecting agent and processes at the molecular level, to the behaviour of individuals and the societies they live in, through to the interactions among societies on a global scale. Developments in global communications, which provide instant access to health and social data stored around the world, have opened new possibilities for understanding and controlling disease, subject to privacy safeguards.

Implications for interventions

A better understanding of the determinants of good health has widened the scope for improvement. Rather than simply responding to immediate needs, it is now possible, through health promotion and control of risk factors, to ensure sustainable improvements in health and a better quality of life—at least for the population as a whole.

Chapter 4 looks at developments and progress in those areas of public health chosen as priorities for action. For maximum improvements, the health sector must develop partnerships with a wide range of other sectors to develop health-related activities that ensure the best use of limited resources. It must also ensure that other sectors take into account the possible health impact of their decisions.

Reorienting health care services along these lines remains central to public health policy. Australia's approach to the planning and delivery of health care is changing. Governments are faced with growing demands on treatment and care services. Population growth and ageing, the introduction of new technologies, uneven distribution of doctors, changing patterns of medical practice and patient expectations are all affecting service supply and demand. Responses to these pressures, such as the introduction of output-based funding for hospitals in some States and coordinated care trials, have tried to achieve efficiency gains without compromising the effectiveness of health care for individuals.

Also, since much illness and injury in the community is potentially preventable, it is a major challenge to develop approaches that get the right balance between treatment and prevention when allocating scarce resources within the health system.

Since the 1980s, Australia has implemented a series of national public health strategies and programs to tackle health problems in society, including HIV/AIDS, breast and cervical cancer, alcohol, tobacco and illicit drugs, immunisation, and mental health. These programs have involved a broad range of stakeholders (in both the health sector and the broader community) and have focused on health outcomes as a measure of their effectiveness. The discussion paper *Health Australia* (NHMRC 1995) has suggested the key factors in the success of these strategies are technical capacity, policy and strategic direction, and supportive structures. These lessons now need to be applied across the whole of the public health system.

Ultimately, a strong partnership between public health and clinical medical care is necessary to achieve and maintain the best health status of the population. Public health can help the health of all people, including those in medical care. Similarly, medical care has an important role in all aspects of prevention that operate at the individual level.

1.2 The role of health information

Reliable information on the determinants of health, the causes of ill-health, and the patterns and trends of health and illness in populations is fundamental to developing effective health policies and programs. In the area of public health, information is required to:

- monitor trends in the health and wellbeing of the community;
- help determine priorities for public health initiatives;
- identify emerging issues that require action;
- contribute to the design (or re-design) and management of public health activities; and
- monitor the effects of those activities.

Public health information is required for a range of target populations and to cover both population health activities and clinical medical care (especially primary health care). Valid and reliable data on prevalence, trends in a range of health outcomes, behavioural and environmental risk factors, and quality, cost and effectiveness of strategies are needed to support effective health system development as well as to further the broad research and development effort (WHO 1996).

Later sections of this report use health information to indicate the effectiveness of some of the public health strategies. For example, there has been a continuing decline in the death rate for cardiovascular disease associated with improved blood pressure levels among the population and a fall in smoking rates. There have also been declines in death rates for lung cancer among males and colorectal cancer among both males and females. The effectiveness of injury prevention and control programs is shown by the continuing decline in the injury death rate.

However, information also shows areas where further action is required. For example, more Australians are becoming overweight, smoking among young adults remains at a high level, suicide among young males is about three times the rate in 1960, and higher rates of childhood immunisation are required to achieve population immunity. Also, little progress has been made in reducing the gap between the health of Aboriginal and Torres Strait Islander populations and other Australians.

A national partnership approach to public health information is being established in Australia. This is a collaborative arrangement between the Commonwealth and the States and Territories, whereby data are collected in a standard way and pooled to produce national information. A nationwide linking of public health information with that in personal health care would also provide a more strategic approach to public health. The likely benefits of a national approach include greater:

- capacity to describe national public health problems and take concerted national action;
- capacity to produce national information, and comparable State and Territory information;
- capacity to observe and respond to emerging public health problems;
- pooling of information on rare events for epidemiological analysis;
- sharing of expertise across jurisdictions; and
- consistency and better coordination in tackling public health issues.

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