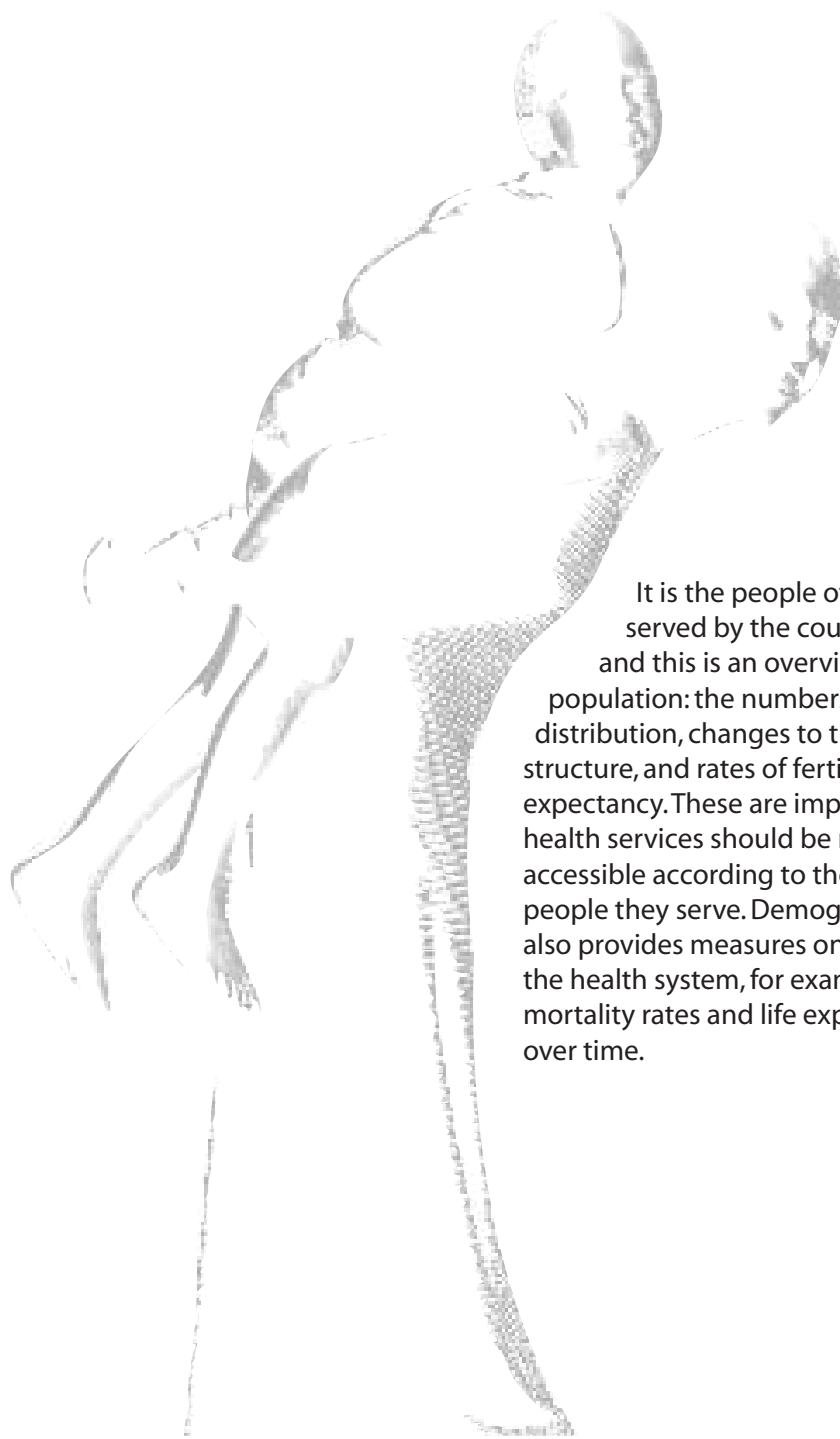


Chapter Two



It is the people of Namibia that are served by the country's health system, and this is an overview of that client population: the numbers of people, their distribution, changes to the population and its structure, and rates of fertility, mortality and life expectancy. These are important topics because health services should be made available and accessible according to the needs of the people they serve. Demographic information also provides measures on the effectiveness of the health system, for example by showing how mortality rates and life expectancies change over time.

N a m i b i a ' s p o p u l a t i o n

The distribution of people

In the year 2000, Namibia's had an estimated population of about 1,890,000 people.⁶ They live on a surface area of about 823,700 km², giving an average density of just over 2 people per km². However, people are spread very unevenly across the country (*Figure 2.1*). Large areas are completely uninhabited and many other areas are very sparsely populated. On the other hand, there are some very dense populations in towns and a few small rural areas. These concentrations are due to three factors, the first of which is the availability of suitable natural resources. Most rural people, therefore, live in areas where water is available, crops can be grown because rainfall and soil fertility is relatively high, and where there are sufficient pastures for livestock. These are the conditions that have made the Cuvelai drainage system, the Okavango River valley and the floodplains in eastern Caprivi so densely populated.

A second factor is the availability of employment and business opportunities, which attract people to urban areas at such a rapid rate, as described below. Thirdly, the presence of infrastructure, such as roads, water and other services, affects the distribution of people. These obviously add to the quality of life in towns but also affect the distribution of rural communities. Certain areas along main roads in Caprivi and Kavango are more populated for this reason. In addition, many people are attracted by the provision of pumped underground water to places where they would otherwise not live.

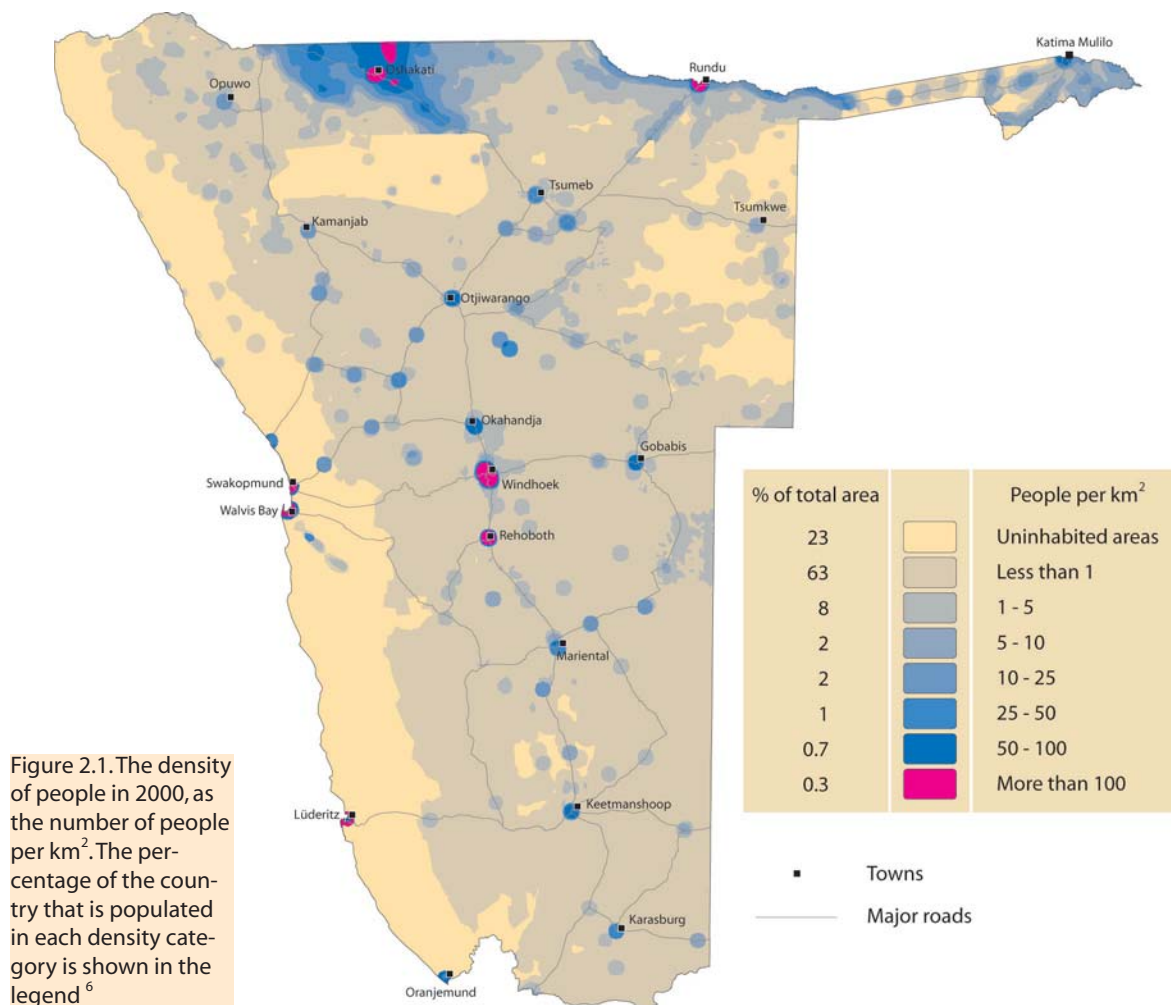


Figure 2.1. The density of people in 2000, as the number of people per km². The percentage of the country that is populated in each density category is shown in the legend⁶

Population size, structure and changes

The population in 2000 had grown by about eight times from an estimated 229,000 people counted during the first population census in 1921. Much of this increase was due to improvements in health care, with the result that more people survived childhood and enjoyed longer lives. The rate of population increase was roughly 2% per year in the first half of the 1900s, and it then rose to 3% per year during the last few decades (*Figure 2.2*). It is estimated that the population will continue rising to around 2,250,000 people in 2010 and 2,600,000 by the year 2020. The annual rate of increase is, however, expected to decline from 3% to about 1.5 % between 2010 and 2020, both as a result of HIV/AIDS and falling fertility rates.

There is a good deal of migration in Namibia, both by people entering the country and by people moving from rural to urban areas. Accurate figures on the numbers of immigrants are not available, but it is clear that many people have moved into northern Namibia - especially from Angola - where they add significantly to the population that has to be served by the health services. More is known about the extent of rural-urban movements. The proportion of the whole population now living in urban areas has increased over the past 100 years from virtually zero to about 39% in 2001 (*Figure 2.2*). Over 80% of Namibia's population may well be living in towns by the year 2020.



Figure 2.2. The size of Namibia's population between 1921 and 2000, and projected changes over the next 20 years (top), and the proportion of people living in rural and urban areas (bottom)^{6,7,8}

Age pyramids (*Figure 2.3*) provide graphic images of populations to show the number of people of each sex in different age groups. Comparisons between pyramids for 1960, 1970, 1991 and 2000 also show how the population has grown and changed over the years. Growing populations generally have the highest number of people in the lowest age group, such that the bars for 0 to 4 year-olds are substantially wider than for those aged 5 to 9. That pattern was true in 1960, 1970 and 1991, but not in 2000, when the number of children aged 0 to 4 was less than those aged 5 to 9. This significant change in the structure of the population is due to the considerable decline in fertility in recent years (*Figure 2.6*). There are roughly equal numbers of males and females in Namibia, although the proportion of females appears to have increased slightly over the past 40 years from about 49% to 53% in 2000.

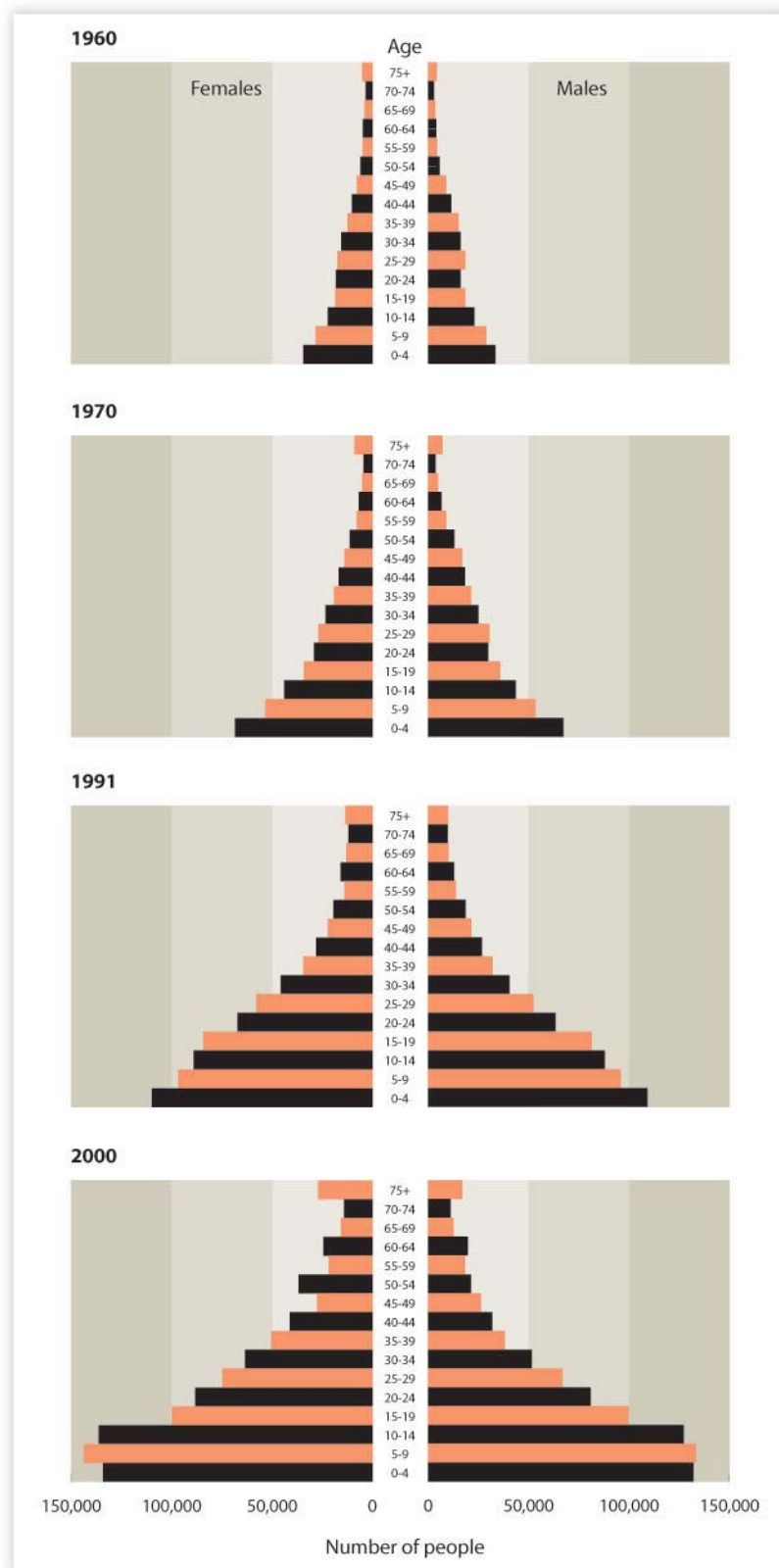
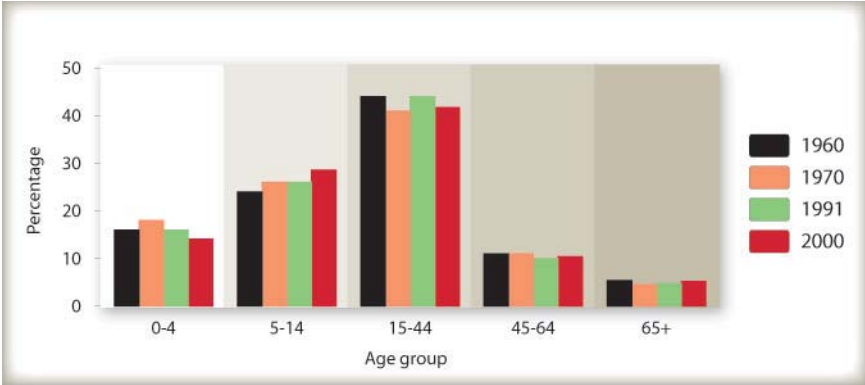


Figure 2.3. Numbers of females (left) and males (right) in the population in 1960, 1970, 1991 and 2000^{8,9}

Changing shapes of the age pyramids over the last 40 years clearly show how the number of young people has increased. The shapes of the pyramids also provide the impression that the percentage of young people in the whole population must have increased. In fact, the proportions of different age groups have remained rather constant (*Figure 2.4*). There has been a slight recent reduction in the proportion of 0 to 4 year-olds and an increase in the percentage of 5-14 year-olds. Overall, people under the age of 15 make up about 43% of the total population. The proportions of other age groups have changed little: those aged 15-44 make up about 42% of all people, the 45-64 age group comprises of about 10% of the population, while 5% of all people are in the oldest group aged 65 years and above.

Figure 2.4. Percentages of the population in different age groups over the past 40 years^{8,9}



Demographic rates

Declining fertility rates are, along with the effects of HIV/AIDS, the most significant demographic changes to have occurred in Namibia in recent years. The national fertility rate (the average number of children born to a woman during her life) dropped by almost 2 children from 6.1 children in 1991 to an estimated 4.2 children in 2000. Much of the decrease is due to the greater involvement of women in the cash economy as formal employees and businesswomen, and improved levels of education.

While it is clear that women with higher levels of schooling have fewer children, the effects of education on fertility only become apparent after the completion of primary school or Grade 7 (*Figure 2.5*). Thus, women who have had no education or who have completed primary grades have similar numbers of children, on average. Those who have been to secondary school produce progressively smaller families the higher the grade they complete.

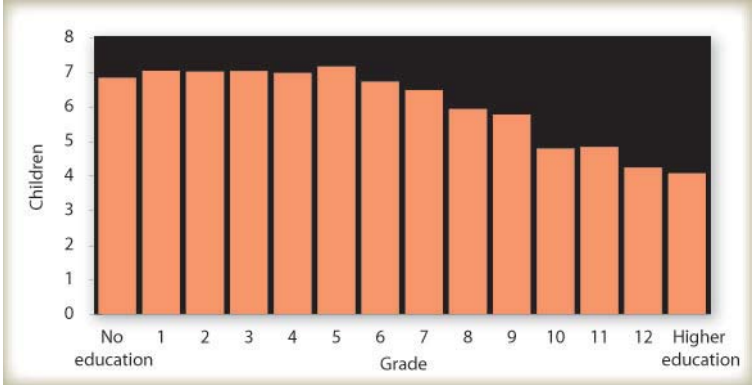


Figure 2.5. Average numbers of children born to women who have had no schooling, or who have left school having completed different grades or who have an education higher than Grade 12¹⁰

Fertility rates have declined more in some regions than in others. The biggest changes occurred in Kavango, Oshikoto and Otjozondjupa, whereas the smallest declines were in regions where fertility rates were already rather low in 1991, for example Karas and Khomas (*Figure 2.6*). Women in rural areas produce an average of 5.1 children, which is 2 children more than mothers in urban areas (3.1 children in 2000).

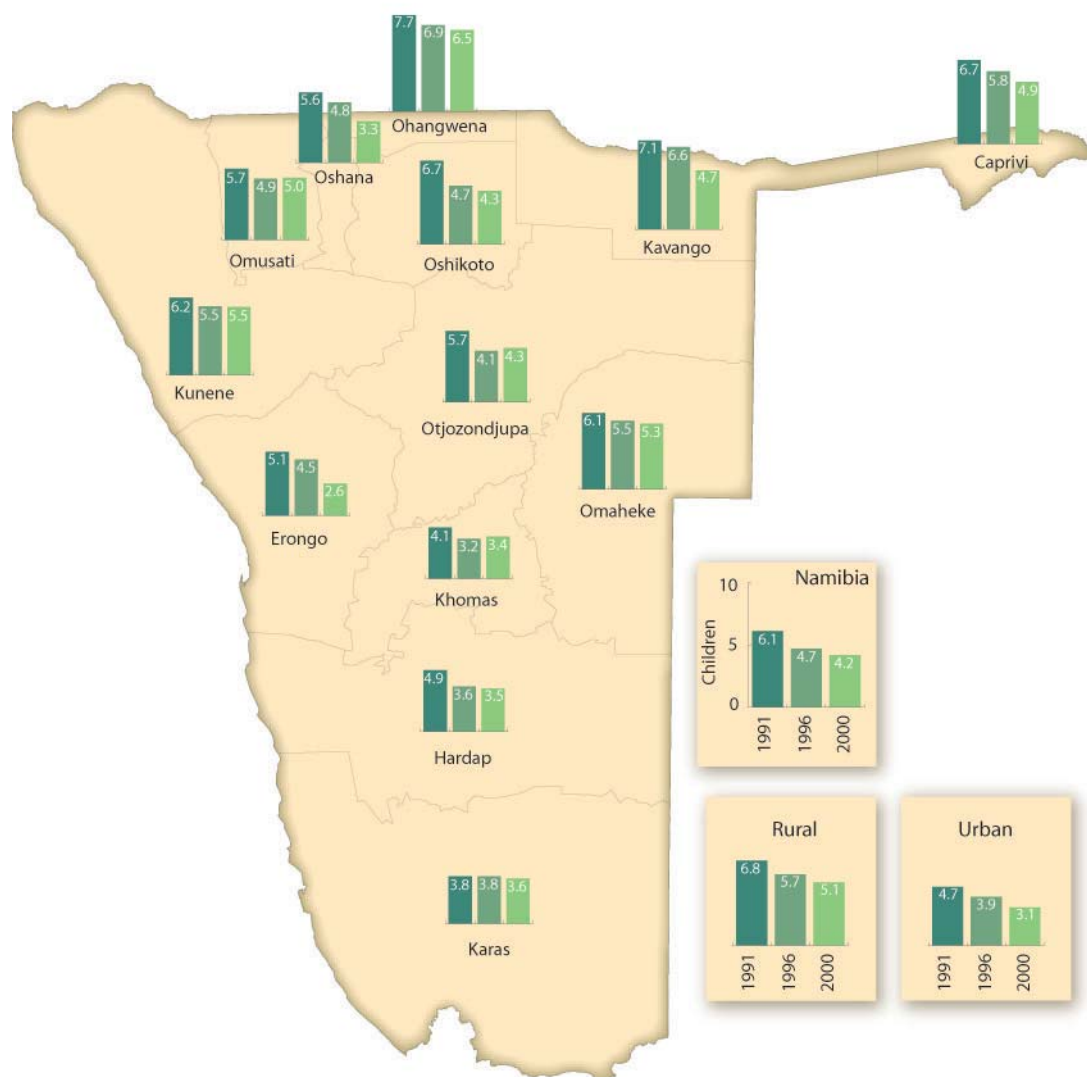


Figure 2.6. Changing rates of fertility in each region, in Namibia as a whole, and in urban and rural areas between 1991 and 2000. The fertility rate is the average number of children born to a woman during her life^{8,9,10}

Mortality rates are routinely estimated for young people because the number that die have a major impact on the overall size and structure of a population, and because they are important indicators of the effectiveness of health care. Two indicators of mortality among children are given here. The infant mortality rate measures the proportion of all children expected to die in their first year of life. Thus, of 1,000 babies born in 1992, approximately 61 would have died before age 1 (*Figure 2.7*). The rate dropped to 38 in 2000, reflecting a major reduction in infant mortality. The greatest decrease occurred in the north-east health zone (Caprivi and Kavango), and infant mortality declined more in urban than rural areas.

Child mortality rates also dropped, from 31 in 1992 to 26 in 2000 in the country as a whole. These are the numbers of children that die before reaching the age of 5 out of 1,000 1-year old's. The greatest improvements were in the north-east and central health zones. Child mortality also dropped more in rural than in urban areas.

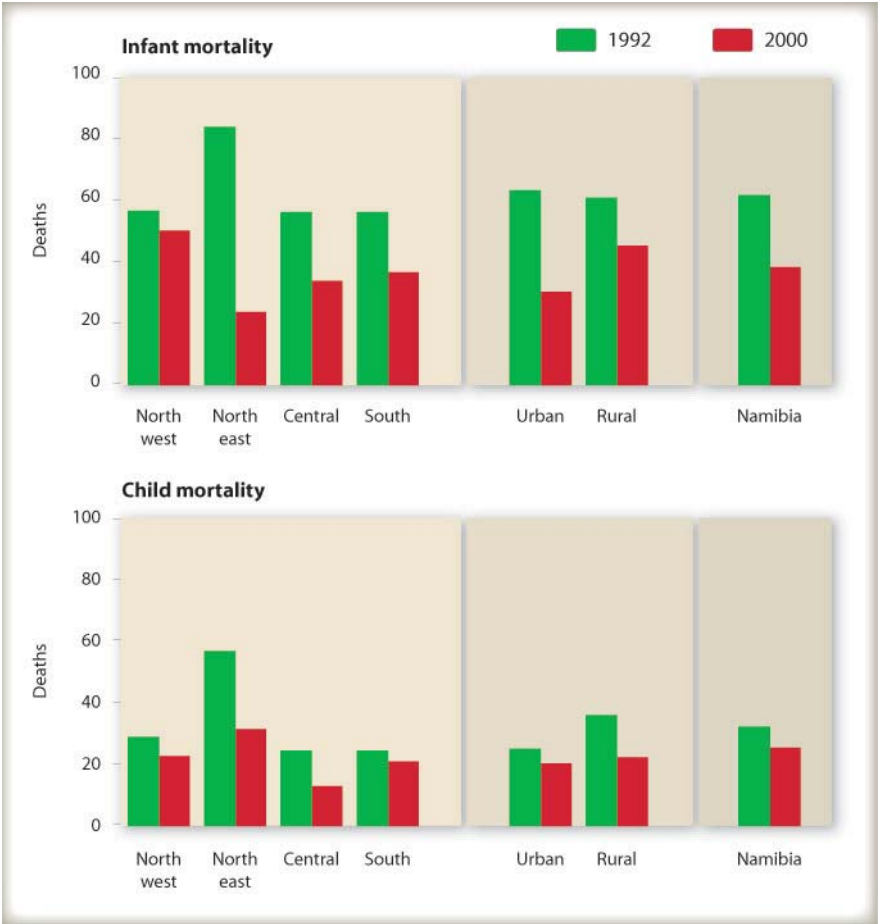


Figure 2.7. Infant and child mortality rates in 1992 and 2000. Infant mortality rate is the proportion of children expected to die before the age of 1 year out of 1,000 live births. The child mortality rate is the proportion of children expected to die before the age of 5 out of 1,000 children that reach the age of 1 year^{9,11}

While Namibia has achieved major gains in reducing mortality among children over the past 10 years, life expectancies have not improved (*Figure 2.8*). In fact, the HIV/AIDS epidemic has caused a massive decline in the life span of the average person. The overall life expectancy in 1991 was 61 years. It then dropped to 52 years in 1998 and 43 years in 2000. While there were significant declines in all regions, the biggest reductions have been in Hardap, Caprivi, Oshikoto and Omusati.

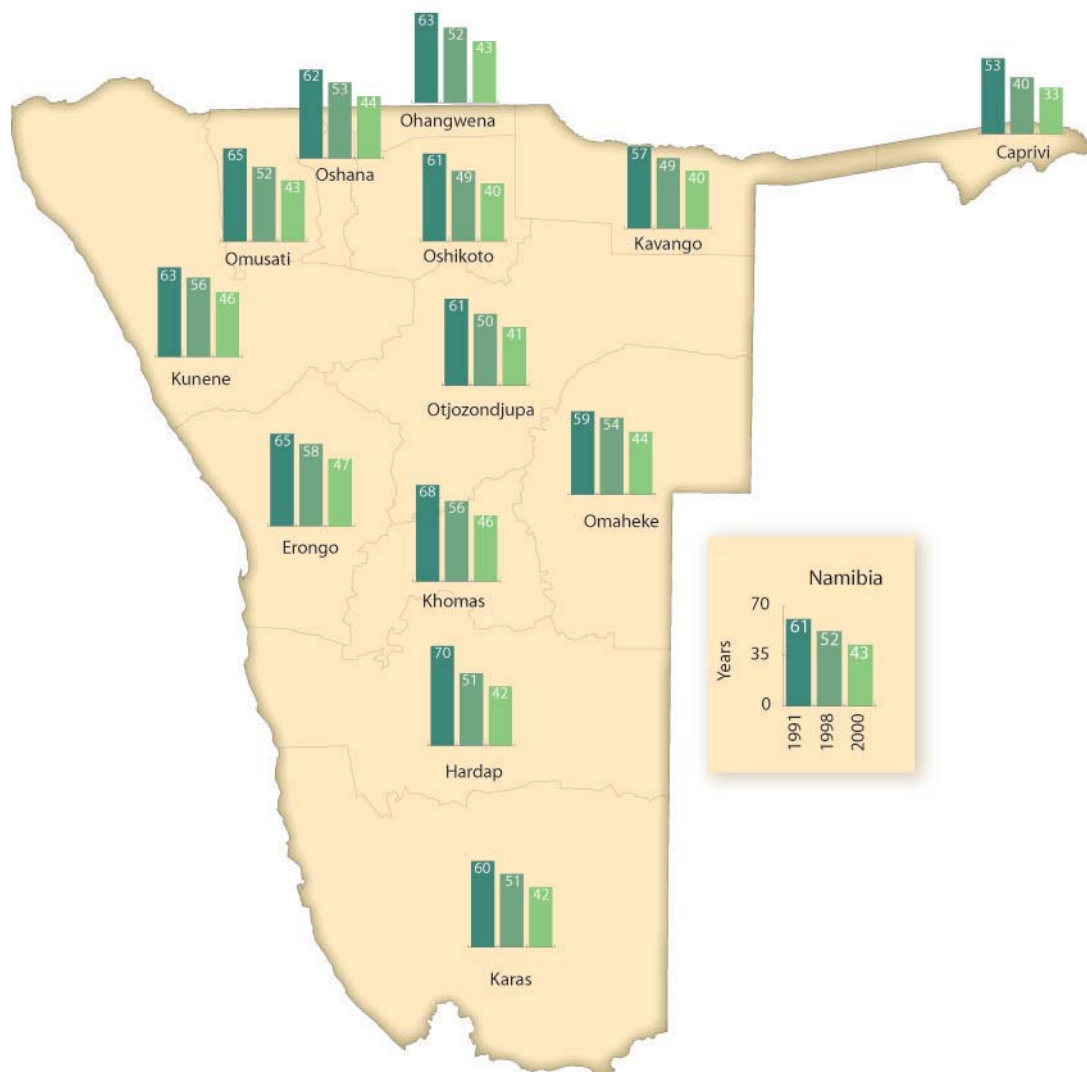


Figure 2.8. Changing life expectancies between 1991 and 2000 in each region and in Namibia as a whole^{8,9,12}

In a normal population, the greatest number of deaths occur among the youngest children. The chances of dying then drop steadily in the middle age groups before increasing again among older people. This pattern has now changed in Namibia as a result of the great number of middle-aged people dying from HIV/AIDS. During the early stages of the epidemic in 1995, there was only a slight increase in the number of people aged 25 to 50 who died. By 1999, however, there were very many more people who died in this age group (*Figure 2.9*). That trend is likely to continue and increase over the next 10 to 15 years (see page 45).

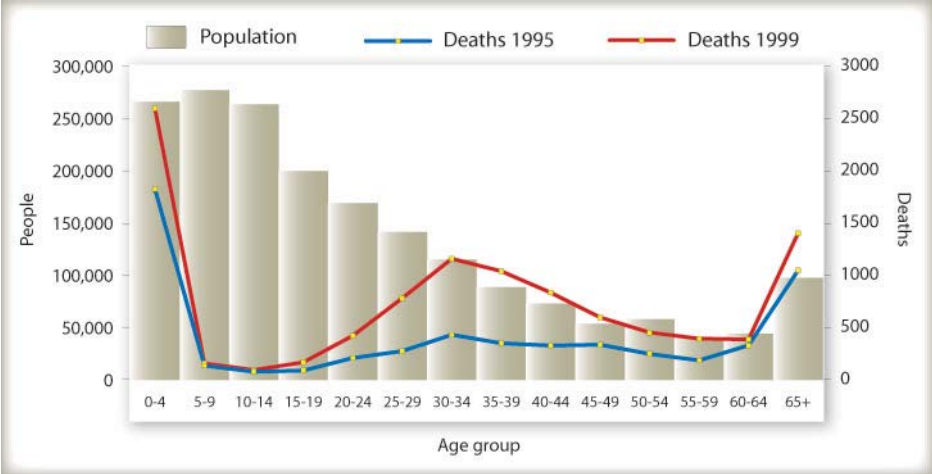


Figure 2.9. A profile of the total number of deaths in public hospitals among people of different ages during 1995 (blue line) and 1999 (red line). The bars show the total number of people during 2000⁹

