

POPULATION AGEING AND HEALTH CHALLENGES IN SOUTH AFRICA

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POPULATION AGEING

Population ageing, or demographic ageing, refers, in simplistic terms, to the process by which the older population (60 years or older)* become a proportionally larger component of the total population. Population ageing is an outcome of a population's demographic transition from higher to lower levels of fertility and mortality. In some populations, international migration plays a role too. During this process the age structure of the population changes from a broad-based pyramid shape with high proportions of children to a more columnar shape with increased proportions of middle-age and older persons.

Population ageing has been described as a key demographic feature of the 20th century. The United Nations termed it "one of the most distinctive demographic events" of the previous century, and stated that it will remain an important population issue throughout the 21st century.¹ In 1950, the world housed an estimated 205 million older persons, 606 million in 2000, and in 2050 the number is projected to increase to 2000 million. This reflects a tripling of the older population over each of two consecutive 50-year periods.¹

Although initially experienced by the more developed countries, population ageing is now a global phenomenon, experienced in virtually all countries of the world. Population ageing has become a well-publicised phenomenon and public concern in the more developed nations, but is commonly less publicised and less of a public concern in the less developed regions. This relative lack of concern observed in much of the less developed world is ironic for two reasons: first, in the year 2000, that part of the world was home to 62% of the world's older persons, and, secondly, the world's older population is growing at a much faster rate in the less compared to the more developed regions, which means that the older population will be increasingly concentrated in the less developed regions.^{1,2}

SOCIAL POLICY IMPLICATIONS OF POPULATION AGEING

As the younger-older balance in a population changes, the numbers and relative proportions of older persons increase, and such changes in a society's age composition affect various social and economic circumstances and structures in that society. Concerns often raised by population ageing are those related to a society's social security systems and patterns of resource distribution. These concerns include intergenerational support systems, workplace pension funds, retirement policies, social welfare assistance, health insurance/medical aid funds, and health-care provision.¹

In many developed countries population ageing is a gradual process occurring over many decades and following considerable socio-economic development, thus allowing for planning, policy development and resource allocation. However, in many developing countries population ageing is much more rapid, and is occurring on relatively larger population bases. Often, populations are ageing in developing countries before any significant socio-economic development has taken place, thus making planning, policy development and resource allocation a more difficult task than in developed nations.^{1,2}

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* We acknowledge the growing awareness that terms such as 'older persons', 'the elderly' and 'older population' represent an inadequate generalization that may conceal considerable diversity in persons belonging to a broad age group, often spanning 20 to 40 years of life. However, to enable international comparison, some chronological demarcation of age categories is required (Kinsella & Velkoff, 2001). As currently promoted and utilized by the United Nations and the World Health Organization, the term 'older persons' or 'older population' will be used, referring to persons 60 years or older. Some publications have used 50, 55 or 65 years as cut-off points. If references are made to these cut-off points, it will likewise be indicated in the text.

Demographic ageing, as fertility and births decline and populations begin and continue to age, often occurs in tandem with changes in the disease profile arising from socio-economic transformation in a society. Generally, the prominent causes of death change from those associated with infant and childhood mortality to those associated with older age; from a prominence of infectious, nutritional and maternal conditions to chronic and degenerative disease and other lifestyle-related disabilities.^{3,5} In this way, as a population ages there will be changes in its health needs with a greater demand for chronic care. Furthermore, as longevity increases in a population, the prevalence of chronic disease, disability and frailty increases through a tendency of declining physiological, physical, mental and cognitive functional capacities in ageing individuals.^{6,7} An ageing population, therefore, has an increasing number of people who need health and related care, and this is generally associated with rising demands on the health-care system.

A prominent feature in almost all countries is that women on average live longer than men; therefore older women greatly outnumber older men. This is mainly because mortality rates in men commonly are higher than those in women across the life span. This gender imbalance may hold important implications for social support and public planning, since older women generally are more likely to be widowed than men are. They are more likely than men to experience domestic violence, tend to be less educated than men, have less formal work experience and tend to have less access to private income sources. Furthermore, compared to men, they are more likely to experience discrimination in access to inheritances, social security measures, and political power and health. As a result of these cumulative disadvantages older women are more likely to be financially under-resourced, and to suffer disabilities and disease in older age than are men.^{1,8}

DEMOGRAPHIC TRENDS IN SOUTH AFRICA

Fertility

Persistent lowered fertility brings about declines in births, which, in turn, result in declining proportions of children and a corresponding increase in the proportion of older persons. Therefore, when persistent low fertility is leading to a decline in the size of successive birth cohorts, a population will start ageing. This process is called ageing from the base of the population structure.⁹⁻¹²

South Africa's total fertility rate (TFR) is estimated to have been in decline from at least the early 1950s when it was at a level of 6.1 live births per woman.¹³ Current national levels are estimated at 2.5,¹⁴ which is higher than that in developed countries, some of which have fallen below replacement level of 2.1. However, in regional terms, South Africa is already at a very low level compared to that of Africa as a continent (5.0), and individual neighbouring countries, such as Angola (7.2), Botswana (3.9), Mozambique (5.9) and Swaziland (4.4).¹ Persistent declining fertility in South Africa has recently resulted in a demographically-significant turning point where the number of annual births has started to decline, leading to a decline in the size of successive birth cohorts. Persistent fertility decline is a concern to South Africa as there will be a progressive decrease in the availability of kin upon whom future cohorts of older persons can rely for various forms of support. Such support includes financial and subsistence support, as well as assistance with health care and activities of daily living.

Mortality

Mortality's role in the process of population ageing is a somewhat more complex one, since mortality reduction usually at first leads to a rejuvenation of a population as infant and child mortality rates are reduced by the treatment of infectious and parasitic disease. As a population moves in time through different stages of its demographic transition, declines in mortality in older ages only at a later stage contribute to population ageing, this time leading to ageing from the top of the population age structure.^{2,15,16}

Historic mortality data in South Africa suffer considerable incompleteness, but it is estimated that child and infant mortality rates declined gradually from at least the 1950s until the early 1990s. Mortality data of the 1990s, however, were marked when age-specific death rates started showing increases in infants and children, and an uncommon, severe increase in young adult mortality.

Estimates show that mortality levels in older adults have stayed fairly constant over the past two decades, and that it will remain fairly constant over the next two decades.¹⁴ These estimates indicate that the South African population has not yet started ageing from the apex of its age structure. However, analyses of demographic indicators have shown that the recently increased levels of mortality in infants, children and young adults have had a temporary accelerative effect on population ageing, hence creating a mortality-related ageing from the bottom and middle of the age structure.¹⁷ Furthermore, decreased mortality levels in the population younger than 60 years, prior to the 1990s, implies increased life expectancy at younger ages and increased numbers of persons surviving into older ages. The social implications of increasing numbers of older persons were mentioned earlier.

AIDS-specific mortality holds several important concerns in the context of population ageing and older persons. These concerns include acceleration of the ageing process for about two decades, while, so far, very limited planning has yet been done to accommodate the needs of a growing older population. In addition, AIDS-specific mortality diminishes a crucial support-base (i.e. the children) of a sizeable proportion of older South Africans, and research has shown that the epidemic has brought added household, care-giving and social-nurturing responsibilities to many of the country's affected older persons.¹⁸⁻²⁰

The AIDS epidemic has the potential to affect older persons' health and well-being in various direct and indirect ways. These include the following: physical and mental stress, anxiety and burnout from care-giving strains and a greater burden of household work; HIV infection through hands-on care-giving activities; and financial demands on older carers' income or savings related to the health-care costs of their sick offspring, the provision of material support to their AIDS-ill children and their dependants, funeral costs of deceased relatives, and suffering the loss of current and future financial support which the ill child or deceased would have provided.²¹⁻²³ These conditions and situations can increase older persons' risk of disease, injury, disability and diminished well-being themselves.

It is not that easy for scientists to make causal inferences about the impact of care giving on carers' health, but some studies do show an association between care giving and negative mental and physical health consequences.^{24,25} These studies concentrated mainly on the context of informal care for older persons, but the associations found in the just-mentioned studies suggest that AIDS carers may also experience negative health outcomes.²⁶ However, these could have stronger associations because of the relative newness of the disease and its management, including the often adverse social climate surrounding HIV and AIDS. Later studies have indeed shown that among AIDS carers the stress of care giving is directly associated with greater depressive symptomatology²⁷ and with more pronounced symptoms of poor health.²⁶

Migration

International immigration and emigration of people, especially working-age people, into and out of South Africa is an important demographic and socio-economic issue, but we were not able to find reliable data on such migration movements. Internal migration may affect demographic ageing of regional or local populations where, for example, a specific area is an artefact of the 'homelands' system and houses relatively large numbers of children and older persons, while working-age people emigrate in large numbers (compare the municipality areas of Jozini in KwaZulu-Natal and Thulamela in Limpopo). This phenomenon can also be seen where an area has limited employment opportunities but offers attractive retirement settings (the town of Hermanus). In contrast, towns such as Mthatha or Stellenbosch offer study and employment opportunities for thousands of young and working-age people, while no particularly attractive or large-scale retirement settings are offered.

At the familial or household level, internal migration may affect older persons; this can be either beneficial, when older persons are in receipt of remittances from working relatives, or disadvantageous, when they lose their traditional care-giving base as children emigrate. At the community and local level, it is suspected that the older population can be negatively affected through a weakened local workforce resulting in a diminished pool of tax payments. This, in turn, may reduce access to health, welfare or recreation infrastructure and resources in the form of, for example, clinics, health personnel, pension pay-points, social workers, luncheon clubs and formally organised cultural events.

POPULATION AGEING IN SOUTH AFRICA

Population 60+ as a proportion of the total population

The 2001 population census found that 7.3% of the total population were 60 years or older.²⁸ This proportion may be perceived as low, or at least considerably lower than the 2000 proportions of some developed nations, such as Italy (24.1%), Greece (23.4%) and Japan (23.2%), but it is higher than the proportions of almost all other African nations in 2000, with the exception of the two island populations of Mauritius (9%) and Reunion (9.9%). South Africa's 7.3% was noticeably higher than the 5.1% for the African continent as a whole, but displayed similar levels of ageing as those in such nations as Brazil (7.8%), India (7.6%), Mexico (6.9%), Samoa (6.8%) and Vietnam (7.5%). The average proportion for the Southern African region in 2000 was 5.7%, and neighbouring countries' proportions ranged from 4.5% in Angola and Botswana to 6.5% in Lesotho.¹ Fig. 1 illustrates that, despite the demographic impact of HIV/AIDS, the South African proportion is projected to increase over the next two decades, and that by 2025 more than one person in ten will be 60 years or older.

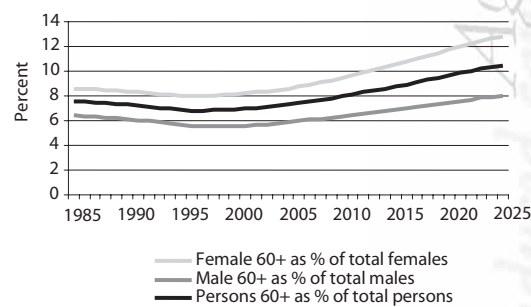


Figure 1: Older persons as a proportion of the total population, 1985-2025
Source: ASSA2002

Numbers of older persons

The above data has an important role to play in a discussion of population ageing, but percentages alone cannot portray the momentum of growth in the older population.²⁹ Although the proportion of the older population will increase moderately over the projection period, the absolute size is projected to increase by 112%, from 2.47 million in 1985 to 5.23 million in 2025, i.e. a doubling over the course of 40 years. Census 2001 counted 3.28 million older persons.²⁸ In the year 2000 South Africa had the second highest number of older persons on the African continent, only surpassed by the older population of Nigeria (5.42 million), while dwarfing the numbers in Reunion (71 000) and Mauritius (104 000), the nations with the highest and second highest proportions, respectively, in Africa.¹ The projected numbers in Fig. 2 below correspond well with the census count, and show that the total number of older persons is expected to increase more rapidly over the next two decades than over the past two decades.

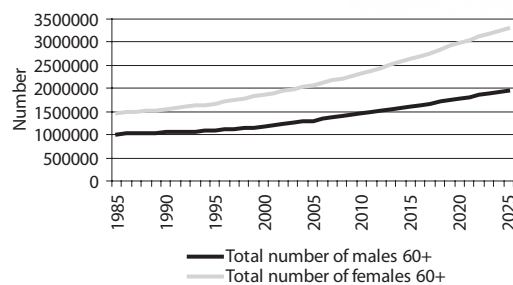


Figure 2: Total number of older males and females, 1985 - 2025
Source: ASSA2002

The growth in numbers is expected to occur in each five-year age group for both older men and women, as shown in Fig. 3. In older women, a considerable growth is projected in all the specified age groups, with each one being projected to more than double during the 40-year period. The total number of women 60+, for example, is projected to increase by 126%, compared to the total number of females 15-59 and 0-15, that are projected to increase by only 74% and 3%, respectively. Although the increase in the total number of older men is projected to be of a smaller magnitude than that of older women, it is still expected to nearly double during the projection period, from 1.02 million to 1.94 million. In the same period, the number of males 15-59 and 0-14 will increase by 83% and 8%, respectively.

These figures reveal that population growth in the older cohorts will be considerably more rapid than in the cohorts younger than 60 years old. As health typically declines and frailty and disability usually increase with advancing age, the near doubling of the oldest-old age group (80 years or older) is of particular concern. The increase in this group suggests an increase in the demand for long-term care, chronic care, frail care and end-of-life care. These, in turn, suggest an increased demand for appropriately trained health-care staff and informal carers to manage such demand.

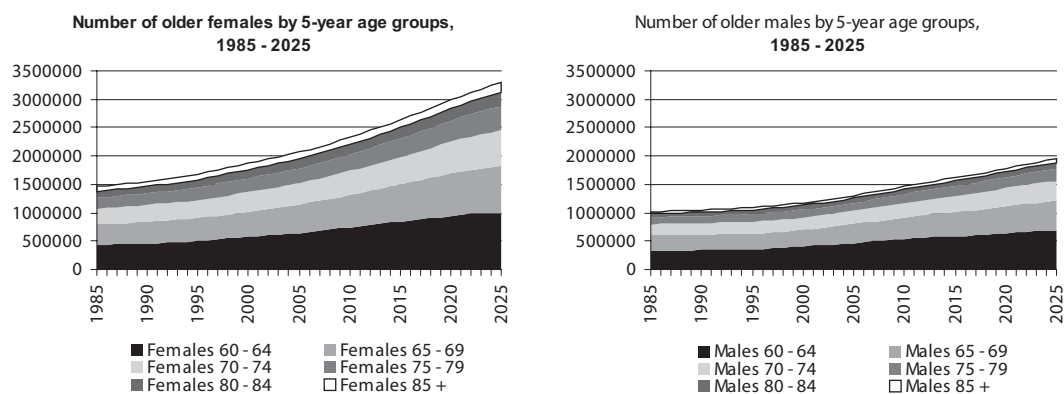


Figure 3: Number of older females and males by specified age groups, 1985 - 2025
Source: ASSA2002

Sustained feminisation of population ageing

Older women are not only projected to continue constituting a majority of the older population over the next two decades, but this trend is expected to increase. For example, in the 60+ population, the sex ratio is currently 0.63 (i.e. 63 men for every 100 women). Expressed as a proportion, 61% of the total current population 60+ are women. Two decades from now, this proportion is expected to increase to 63%. Consistent with global trends, the female share within the older South African population increases with age, as shown in the oldest-old population where currently 69% of the population 80+ years are women.

Growth rates

The annual growth rate of the 60+ population is estimated to have increased from around 1% in the late 1980s to 2.3% in 2005. This growth rate is now estimated to be four times higher than that of the population as a whole, and the difference between these rates is projected to increase for most of the next 15 years.¹⁴

Needs for support

In calculating dependency ratios, through crude generalisation, it is presumed that all persons over 65 years and those under 15 years are likely to be 'dependent' in some sense on those 15-64 years, the latter being perceived as the economically-critical age group who provide some sort of support, directly or indirectly, to persons in the other age groups. However, the indicator's value is limited as not all persons over 65 and less than 15 years require support, and not all persons 15-64 years old provide support. Despite its limitations, the dependency ratio is often used as a helpful indicator of the level of potential support needs in a society.¹

As the kind of support needed by the older (65+) and youth (<15) cohorts in a population may differ, it is useful to distinguish between the 'youth', 'older age' and 'total' dependency ratios. Fig. 4 shows the trends of these ratios over the past and future two decades in South Africa, indicating that the youth dependency ratio is projected to decrease substantially over the next two decades, whereas the older-age dependency ratio is projected to increase.

For planners it is important to note that the composition of the ratio has undergone and will continue to undergo important changes over the projection period, i.e. that the balance between the youth component and the older-age component is changing. From 1985 to 2025, it is estimated that the youth dependency ratio will decline by 70%, while the older-age dependency ratio will increase by 16%. Given the rather sharp fertility declines from 1985 to 2000, it is estimated that the older-age dependency ratio will increase by 45% between 2000 and 2025. This indicates the extent of the need to plan for the kind of support and security generally needed by older cohorts, and, conversely, indicates the declining dependency needs of the youth population.

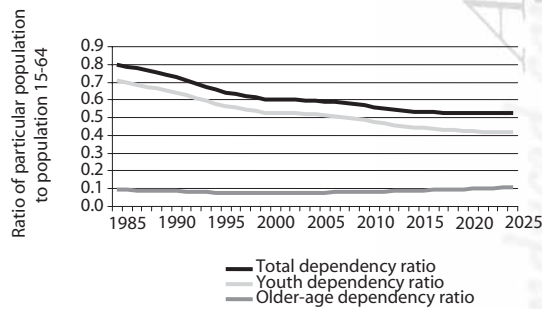


Figure 4: Total, youth and older-age dependency ratios, 1985-2025
Source: ASSA2002

Population group differences

Diverse ageing patterns are clear among the country's historically defined four population groups* as shown in Fig. 5. It needs to be kept in mind that independent analyses of the census results suggest an underestimate of children younger than 5 years, an overestimate of children aged 10-19 years, an underestimate of men relative to women, and an underestimate of whites. However, the pyramid shape of the 2001 black African population age structure is characteristic of demographically young populations, and signifies large numbers of children and a small number of older persons relative to the population younger than 60 years old. The age structure of the white population group has a narrower base and wider apex compared to that of the black African age structure, indicating that whites constitute a demographically older group. The Asian age structure is in an intermediate position between those of the whites and coloureds, and that of the coloureds, in an intermediate position between those of the Asians and black Africans.

Based on Census 2001, among whites about double the proportion (15.9%) are older persons (60+ years) compared to Asians (7.8%), black Africans (6.4%) and coloureds (6.4%).³⁰ Ageing is therefore most pronounced in whites. However, when the data are presented as the total number of older persons in the country, Black Africans made up the largest proportion, i.e. 69%, compared to white, coloured and Asian older persons, who made up 21%, 8%, and 3%, respectively.

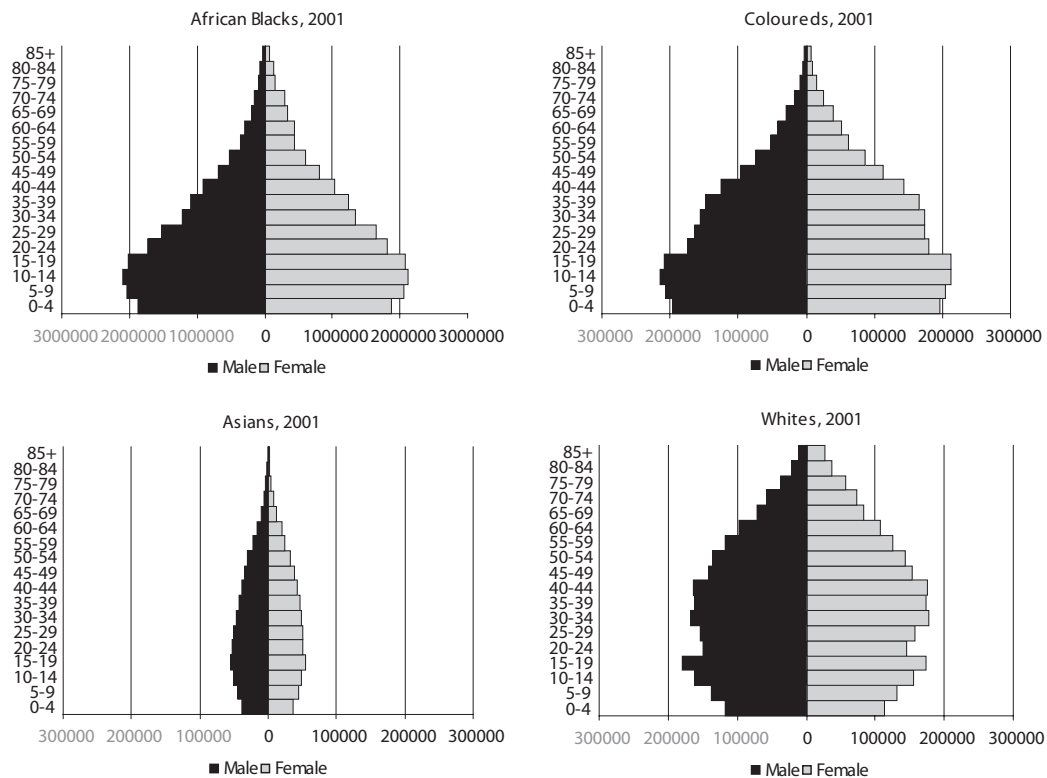


Figure 5: Age structures of South Africa's four population groups
Source: Statistics South Africa, Census 2001²⁸

* The population group classification is in accordance with the Population Registration Act of 1950. This classification has been used to highlight issues that may portray effects of historical disparities, and we do not subscribe to this classification for any other purpose.

When considering both the number of persons >64 years and those <15 years, the 'dependency' ratios per population group differ considerably. Census 2001 data show that the highest ratio was among black Africans (62.2), followed by coloureds (53.4), whites (43.1) and Asians (39.2). These differences reflect the differences among age structures, which in turn are a reflection of the different stages of each population group's fertility and mortality transition years.³¹

Provincial differences

Census 2001 shows variation in the proportions of older persons per provinces, with the Eastern Cape, Northern Cape and Western Cape having the highest proportions, and Gauteng, Mpumalanga and KwaZulu-Natal having the lowest (Fig. 6). All provinces have a pattern of older females than older males, which is a common demographic phenomenon because of women's higher life expectancy at birth. However, given the multiple, often lifelong gender disadvantages experienced by numerous older women arising from biases of gender, widowhood and old age, the gender imbalance may have an impact on the social and material well-being of older women.^{32,33} It is therefore important to note the consistently higher proportions of older women in the female provincial populations compared to the proportions of older persons in the total provincial population (Fig. 6). There is also a need to note the high levels of 'dependency' from older persons and children in Limpopo (82) and the Eastern Cape (76), showing particularly high 'dependency' ratios, followed by KwaZulu-Natal (65) and Mpumalanga (65).³⁰

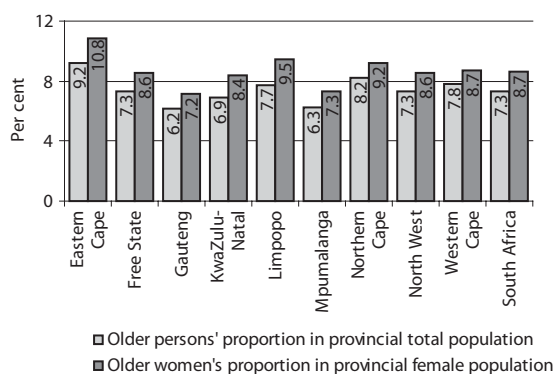


Figure 6: Older persons as a proportion of the total population per province: persons and women, 2001²⁸

HEALTH OF OLDER PERSONS

Changing health profiles related to changing age structure profiles

The demographic ageing of populations throughout the world is directly related to fundamental changes in the health and disease patterns within that population, as epidemiological change ensues with a change from the predominance of infectious, parasitic and nutritional disease to the growing weight of chronic diseases of lifestyle (CDL).

The individual ageing process, from a medical perspective, is often associated with disease and disability. This association has been challenged on the grounds that there are many older persons who do not suffer chronic illness or disability, and many claiming to be in good health despite the presence of chronic illness.^{34,35} However, this 'medical myth' is supported by morbidity and cause-of-death statistics showing that diseases are usually more common among older than younger people, and that the prevalence of disability and chronic disease increases with advanced age.³⁴ As in many other countries, mortality statistics in South Africa are an important and often-used source of evidence on the health status of the population, while it is difficult to find reliably measured population-based information about disease, disability and health risks. Given the recent emphasis on reproductive, child, adolescent and maternal health in the country, it is likely to be even more difficult to find reliable representative information about disease, disability and health risks in the older population.

Large mortality burden from CDL in older ages

As described elsewhere in the report, the total population suffers a unique quadruple mortality burden, consisting of the dual infectious/chronic disease burden, with the addition of high rates of injury and HIV/AIDS. In the older population (60+ years), however, the majority of the mortality burden comes from CDL, which were responsible for an estimated 84% of deaths in 2000. Fig. 7 shows the 20 leading causes of death in older men and women, and highlights the significant chronic disease burden in the older population.

Ischaemic heart disease (IHD) and stroke were the two leading single causes of death, with the order for men and women reversed. These two conditions accounted for almost one-third of deaths in the older population. Whereas hypertensive heart disease was responsible for more than double the proportion of deaths among women compared to men, chronic obstructive pulmonary disease accounted for almost double the proportion of deaths among men compared to women. Large numbers of death were from malignant neoplasms. In men, lung cancer was the leading cause of cancer deaths, followed by prostate, oesophageal, stomach, liver and colorectal cancer. In women, breast cancer was the leading cause of cancer deaths, followed by lung, cervix, oesophageal and colorectal cancer.³⁰

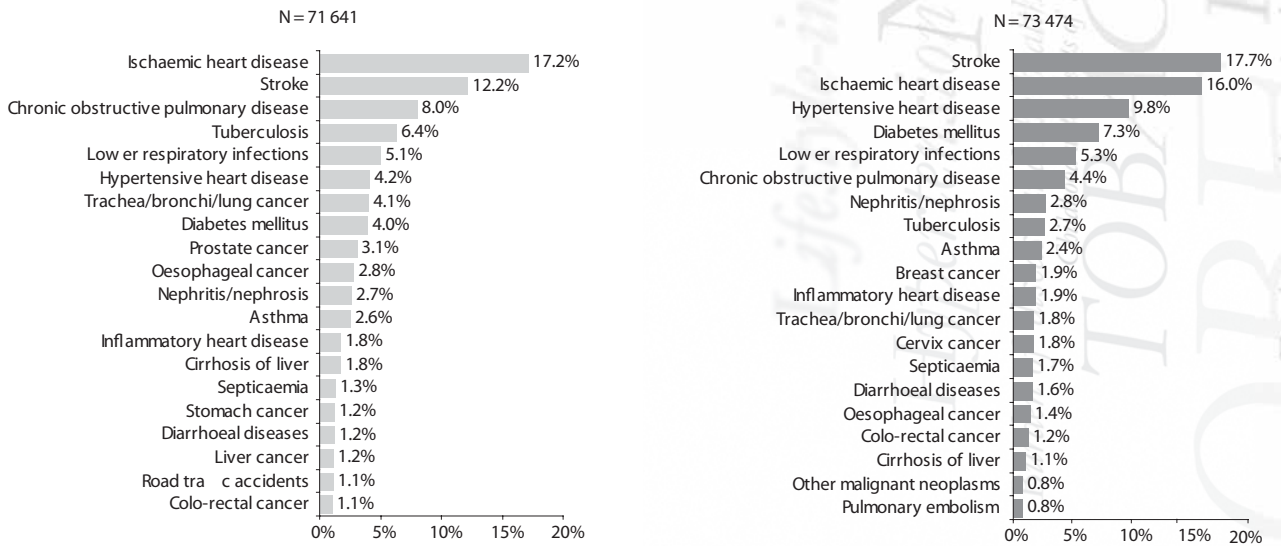


Figure 7: Leading 20 single causes of death in men (left) and women (right) 60 years or older, 2000⁴⁶

Age-specific analysis has shown that CDL also have an extensive mortality impact on segments of the population younger than 60 years. For example, cardiovascular disease, neoplasms, diabetes and respiratory disease claim considerable numbers of people in their 30s, 40s and 50s, as shown elsewhere in this report. Of all CDL deaths in 2000, an estimated 41% occurred in persons younger than 60 years.

Selected chronic conditions

Data from the South African Demographic and Health Survey of 1998 (SADHS 1998) provides selected indicators for adult health and prevalence data of selected types of disability, as collected during the 2001 Population Census, are presented below for the 65+ and 60+ populations, respectively. The findings presented here generally rely on self-reported data; the exceptions were body mass index (BMI) and blood pressure, which were measured by the investigators.

Compared to other age groups, high proportions of persons 65+ had symptoms of asthma and chronic bronchitis. These symptoms were more commonly found in women than men, while self-reported asthma and chronic bronchitis conditions were more commonly found in older men compared to older women (Fig. 8). Of the self-reported other chronic diseases for which national data were found, arthritis, IHD and diabetes were most common in the older population. These three diseases were much more frequently reported in older women compared to older men. Hyperlipidaemia and tuberculosis were more frequently reported in older men compared to women, but the sex differences were less prominent (Fig. 9).^{36,37}

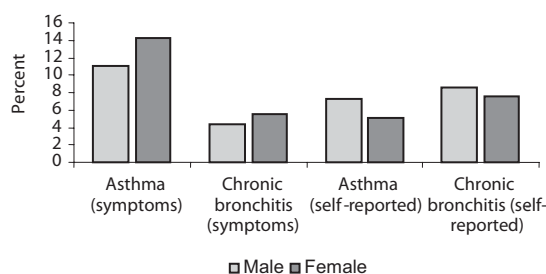
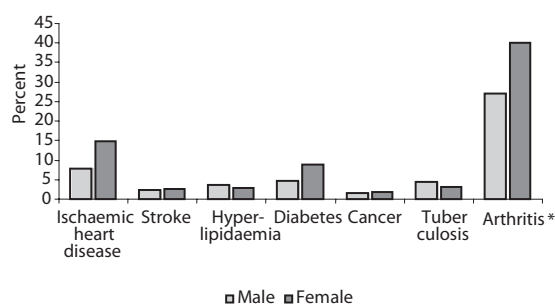


Figure 8: Self-reported chronic lung disease prevalence: Respondents reporting symptoms of asthma and chronic bronchitis, and respondents reporting being told by a health professional that they had asthma or chronic bronchitis³⁶



*Arthritis data, based on self-report, not told by health professional, taken from CASE, 1994³⁸
 Figure 9: Other self-reported chronic disease prevalence in the population 65+, as told by a health professional to the respondent

Selected risk and lifestyle factors for chronic disease

It is widely acknowledged that being overweight or obese is associated with an increased risk of disease. The adverse metabolic effects include raised blood pressure, altered blood lipid profiles (raised triglycerides and cholesterol levels), and the development of insulin resistance; these, in turn, are related to a range of chronic diseases.³⁹ In the population 65+ years old, 43% of men and 60% of women had excess body weight with a BMI ≥ 25 kg/m² (Fig. 10).³⁶ This implies that large proportions of this population are at risk of a range of associated chronic conditions – including IHD, hypertensive disease, ischaemic stroke, type 2 diabetes, osteoarthritis and several cancers^{39*} – and the associated limitations in survivors. A recent United States study among 7 132 adults, 70 years and older, has indeed found that obese men and women were more likely to develop a physical limitation that kept them from performing daily tasks than their non-obese counterparts.⁴⁰ This study concluded that finding effective ways to reduce obesity among older persons could have a “major” impact on disability rates in the older population.

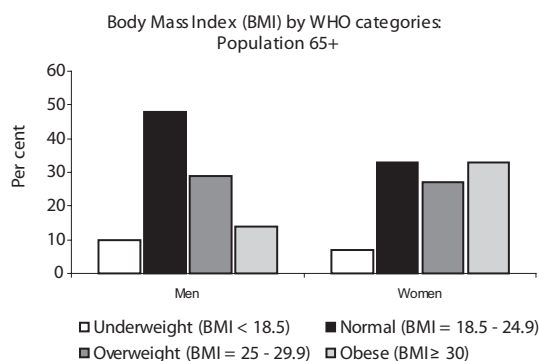


Figure 10: Measured body mass index in the population 65+ 36

Findings emanating from SADHS 1998 showed very high levels of hypertension prevalence in the population 65+ years old, with 52% of men and 60% of women having had a blood pressure reading of $\geq 140/90$ mmHg. In each sex the prevalence was far more than double that in the total adult population (≥ 15 years). Compounding these high prevalence rates, only 38% of hypertensive men 65+ years were aware that they had the condition, less than one-third were taking a medication, and a mere 14% had their condition under control. Awareness and treatment levels in women 65+ were to some extent more satisfactory than in men, though far from ideal, while the levels of control were equally dissatisfactory (Fig. 11).^{30,36,37}

Evidence exists that high blood pressure causes an increased risk of IHD, stroke, hypertensive heart disease and other cardiovascular and renal diseases.³⁹ In 2000, the former three conditions were the three leading causes of death in older persons. The proportion of these conditions that were attributable to hypertension in the 60+ population has not yet been published in South African studies. Although it is not possible to say whether the increased risk of developing such conditions are related to having high blood pressure before or after age 60 years, the high levels of hypertension in the older population, combined with poor levels of awareness, treatment and control of the condition, need improved attention and intervention.

* Increased age-specific levels of underweight at older ages, on the other hand, are also a concern.

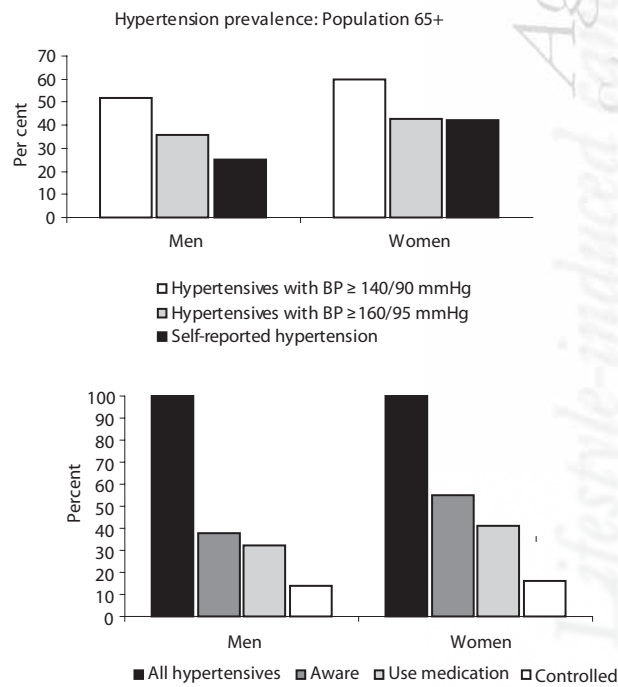


Figure 11: Measured prevalence, and self-reported awareness, treatment and control of hypertension in the population 65+³⁶

In the population 65+ years, 35% of men and 7% of women reported smoking tobacco products daily at the time of the 1998 SADHS.³⁶ These proportions were not much lower than the 37% of all adult men and 9% of all adult women \geq 15 years smoking tobacco daily. Given the adverse health effects of environmental tobacco smoke (ETS), it is worrying that over one-fifth of all men 65+ years and over a quarter of all women of the same age were likely exposed to ETS by sharing a household with smokers. A considerable proportion of men (43%) were exposed to dust and fumes in the workplace (Fig. 12), and the mean duration of exposure to workplace dust and fumes for both men and women was 18 years.^{30,36,37}

Existing evidence that smoking causes substantially increased risk of mortality from several cancers, all vascular disease, heart disease, chronic obstructive pulmonary disease and other respiratory diseases³⁹ may be perceived as less of a concern in the older population considering the usual lag in time before tobacco-associated chronic morbidity sets in. However, many older smokers may live another 10 to 20 years or more, during which the impact may manifest, and it hence seems unwise to exclude the older population from tobacco-related health promotion investments. An additional motivation for not neglecting the older population relates to evidence that the extent of disease burden is consistently higher among groups known to have smoked longest.³⁹ Among men and women 65+ years who ever smoked cigarettes daily, a mean duration of 38 years in men and 35 years in women was found.³⁶ The 65+ population thus had the highest mean duration of smoking among all age groups, and although this is most likely simply a reflection of age, the higher disease burden associated with groups who have smoked longest remains a concern.



Figure 12: Self-reported tobacco use and exposure to an unhealthy environment in the population 65+³⁶

Intoxication by and addiction to alcohol products each have their direct effects, but, additionally, causal relationships have been found between average intake of alcohol and over 60 types of disease and injury, including cirrhosis of the liver, epilepsy, depression, motor vehicle accidents and other injuries, and several cancers.³⁹ In the case of some chronic conditions, such as hypertension, stroke, diabetes and IHD, there can be a beneficial effect from moderate intake but a harmful effect from high intake.

Among people 65+ years old about 46% of men and 20% of women reported being current consumers of alcohol. These proportions were higher than were those in all adult men and women 15 years and older. Health risks of alcohol consumption are commonly associated with high consumption levels, but the 1998 SADHS does not provide good data on levels of consumption.³⁶ However, the dataset includes an assessment of alcohol dependence as assessed through the CAGE questionnaire* Of men and women 65+ years old, 23% and 12%, respectively, reported CAGE alcohol dependence (Fig. 13). The dependence rate for women 65+ was somewhat higher than the average for all adult women (9.9%).^{30,36} These levels of alcohol dependency, and the higher rate of current alcohol consumers in the older population than the average adult rate, are matters of concern; possible health hazards relate to mobility issues and the presumed greater consumption of medication in the older population.³⁰

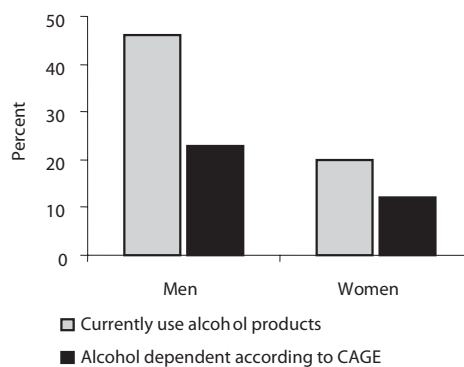


Figure 13: Reported alcohol use and dependency in the population 65 years or older³⁶

Disability and mental health

During the 1980s, the WHO noted a distinction in prominent causes of disability between developed and developing countries: disability in developing countries stems primarily from malnutrition, accidents, communicable disease and congenital conditions, whereas in developed countries disability stems mainly from chronic disease such as arthritis, cardiovascular disease, mental illness, metabolic disorders and the consequences of alcohol and drug abuse.² Given South Africa's dual epidemiological profile, and the added burden of injuries, it is likely that the population has a diverse and extensive disability burden. The incidence of disability and impairment increases with age,⁴¹ and the numbers of disabled persons are expected to increase as a correlate of absolute population growth.² In poor and deprived communities, a lifetime exposure to nutritional inadequacies, unattended or inadequately attended health and injury problems, and a number of environmental risk factors imply that many people enter older age with chronic ill-health and disability.^{32,42} Therefore, it is possible, given South African society's particular epidemiological profile and its socio-political past, that disability may be a particularly extensive problem in older South Africans.

Limited representative disability data are available, and a full description of disability in the older population is not possible. However, one study on moderate and severe self-reported disability reported a diverse disability burden in the South African population that spans both the above-mentioned developed and developing country cause profiles of disability. This study also found that the prevalence of disability indeed increases considerably in the older population, with particularly steep increases in older and oldest-old black African respondents.⁴³ A detailed, representative description of physical limitations, be it severe bodily handicaps or activities of daily living (ADL) and instrumental activities of daily living (IADL) impediments, measured by professional opinion and/or standardised instruments in the older population, would be very useful for research and intervention development purposes.

* CAGE: C - Has anyone ever felt you should cut down on your drinking? A - Have people annoyed you by criticizing your drinking? G - Have you ever felt guilty about your drinking? E - Have you ever had a drink first thing in the morning (an eye-opener) to steady your nerves or to get rid of a hangover?

The 2001 population census collected data on selected types of disabilities, i.e. sight, hearing, communication, physical, intellectual, emotional and multiple disabilities. In the population 60+, about 16% reported having a disability. The most common disabilities in this older population were sight and physical disability. The census data furthermore show that the prevalence of disability increases with age: about 13% of persons aged 60-69 reported disabilities compared to about 17% of persons aged 70-79, and over a quarter of persons age 80+ (Fig. 14).

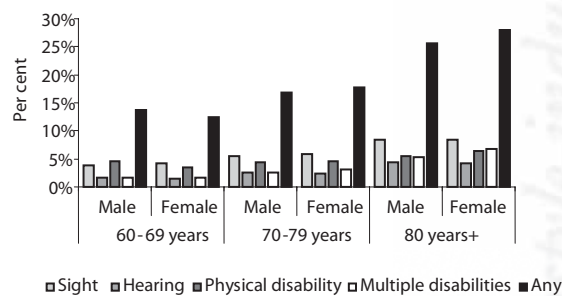


Figure 14: The prevalence of selected disabilities in the population 60 years or older, by selected age bands and sex²⁸

The Global Burden of Disease Studies has shown that mental health problems, including neuropsychiatric conditions, are a leading cause of reduced quality of life worldwide.⁴⁴ Although mental health problems are not an inevitable outcome of the individual ageing process, various life changing events and losses over the lifetime may lead to mental health disorders, and is it not uncommon that older age brings about many stressors, such as decreasing functional capacity and social isolation that may increase mental ill-health.^{41,45} A considerable increase in the number of older persons with mental illness can be expected because of population ageing and the significant increases in the number of older persons.⁴¹

The initial South African burden of disease study has highlighted the lack of population-based data on mental health in South Africa.⁴⁶ There is a vast need for appropriate instruments to obtain objective measures of physical health functioning, activities of daily living, mental health functioning, cognitive functioning and psychosocial functioning in older persons. There is also a need to investigate the extent of elder abuse that may result in physical harm, but which is likely to affect the psychosocial well-being of older persons more extensively.³⁷ Additionally, there is a need to assess the extent to which physical and mental health services, assistive devices and technology, and support services are available to older persons.

ACCESS TO HEALTH AND RELATED CARE

Similar to the scarcity of reliable population-based information about disease, disability and health risks in the older population, there is limited data about geriatric service provision and utilisation. A recent South African government report to the United Nations Second World Assembly on Ageing states that older persons have free access to primary health care at over 3500 primary health-care clinics; that recipients of social grants receive secondary health-care services free of charge at public hospitals; that three geriatric departments exist in the country; and that a range of health promoting guidelines, some specific to older persons, others inclusive of older persons, as well as relevant information communications have been produced by the Department of Health.⁴⁷ Age-in-Action, the country's main non-governmental organisation, with an exclusive interest in older persons, has offered valuable programmes and services to the older population over the past years. With financial support from the Department of Social Development and a number of private organisations, these services include a toll-free national help-line (HEAL) for reporting elder abuse and neglect, and training programmes for community care to frail and disabled older persons, older caregivers of HIV/AIDS relatives, and recreational activities and physical exercise in older persons.⁴⁸

The value of these services to the older population is acknowledged, but evidence exists that transforming health care in South Africa has not all been positive for poor and older citizens, and, in particular, has resulted in the marginalisation of geriatric services. Examples include the trimming of some well-established services for the poor and uninsured; budgetary reductions at Groote Schuur hospital have resulted in limiting joint replacements from 350 per year in 1993 to 60 per year in 2003; numerous community nurses have been redeployed from geriatric services to assist, for example, in child immunisation programmes; the integration of preventive, curative and rehabilitative needs of older clients into general sessions at community clinics; and the re-direction of funds for dietary supplementations for older persons to programmes concerned with children and pregnant and lactating women.⁴⁹⁻⁵¹

Research studies among older persons have shown dissatisfaction with the content and quality of health care at the primary level, including an inefficient appointment system, long waiting times, and apparent lack of interest of staff in health problems of older clients.^{52,53} A qualitative study among 240 older persons in both rural and urban areas of three provinces revealed that the quality of public health-care services they had received was a major concern among older persons. This study referred among other things to shortages or unavailability of medication, unavailability of assistive devices, and perceived lack of thoroughness, respect and sharing of information in the health personnel who attended to them.⁵⁴⁻⁵⁶

HEALTH CHALLENGES OF POPULATION AGEING

Demographic change in South Africa has produced a rapidly ageing population that is expected to continue ageing at a rapid rate for at least the short- to medium-term future. The projection figures illustrate that we have entered an era with steep increases in the number of older persons and much slower growth in the cohorts younger than 60, resulting in little growth in the total population. This is particularly marked for women who comprise a significantly larger number of the older population. Of particular concern is the near doubling of the oldest-old (80 years or older) age group. While these projections require that there be acknowledgement of, and dedicated planning for the growing numbers and proportions of older persons with its related social and economic implications, it currently seems that the serious consequences of population ageing are not adequately planned for and responded to by government. Such plans need to incorporate both mainstream and special needs of older persons. The demographic projections pose clear challenges to the health sector. Not only is there a need to plan for the increase in the numbers in older persons but there is also the need to recognise and plan for an expected increase in chronic morbidity and disability.

It is likely that having more persons who are older than ever before, implies increases in the prevalence of chronic disease, disability and frailty.^{6,7,57} Increased numbers of older persons and increased levels of chronic ill-health, frailty and disability are expected at a time when geriatric care at public facilities have been reported to deteriorate; when only 13% of persons 65+ have access to a medical aid fund; and when escalating costs render private care out of reach for the majority of the country's older persons. These challenges are occurring at a time when de-institutionalisation is promoted in frail, mental and disabled care services, while neither formal nor informal home-care programmes are sufficiently in place to absorb the demand created by de-institutionalisation.³⁰

The mortality data show clearly the huge burden from CDL in the older population, and the morbidity and risk factor data show the large proportion of older persons affected by selected risk factors for chronic disease. Other chapters in this report have shown the burden of CDL and the prevalence of risk factors in younger segments of the population. These highlight the importance of having strategies and policies in place, on the one hand, to manage chronic illness and prevent complications in the older population, and, on the other hand, to prevent disease through reduction of risk factors. The latter will require the implementation of preventive health measures in the younger and unaffected older population. While it is acknowledged in a recent Lancet series that countries with stressed health systems may be faced with a difficult task to create solutions to address the escalating demands of chronic disease and their common risk factors, it is also reported that every country, regardless of the level of its resources, has the potential to make improvements in preventing and controlling chronic disease.⁵⁸ South Africa, like other developing countries, has been highlighted as being in a unique demographic moment, before the numbers of older persons increase, where more attention needs to be focused on efforts to ensure healthy ageing and, in particular, minimising the rise in cardiovascular disease.⁵⁹ The declining number of births and the significantly slower rate of increase in children than in older persons over the next two decades should provide a fiscal opportunity that must be targeted on reducing health demands of the ageing population.⁵⁹ If you "save" a life by preventing a case of IHD, the person will not disappear and never come to a clinic. Instead, the person will appear at a clinic a few years later with cancer or arthritis or some other CDL. Indeed, preventing disease might actually increase health-care costs (or demands) in the long term. Prevention is required, not to save money, but because it is the best way to enhance the overall health of the population. In other words, you give people an extra few years of high quality life.

Despite the country's commitments to research through international efforts, such as the World Health Organization's Minimum Data Set on Ageing and the Madrid International Plan of Action on Ageing, and despite the references to research in local policy documents, such as the draft South African Policy for Older Persons and the Older Persons Bill, there is a lack of recent, complete morbidity and mortality data, accompanied by a paucity in research about older persons' health status and

health needs. Particularly lacking are data around the cognitive, mental and physical functioning in older persons, and measures of post-reproductive sexual health. Continued high-level political will and sufficient resources are required for a comprehensive research plan on ageing. Some of the issues that should be included are: healthy ageing over the life span; age-friendly health care and service delivery; dynamics of individual ageing in the South African context; and demographic, economic and social dynamics and implications of population ageing. In turn, these issues point to the important need to train sufficient numbers of health promotion scientists, population scientists, geriatric care professionals and gerontologists.

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