

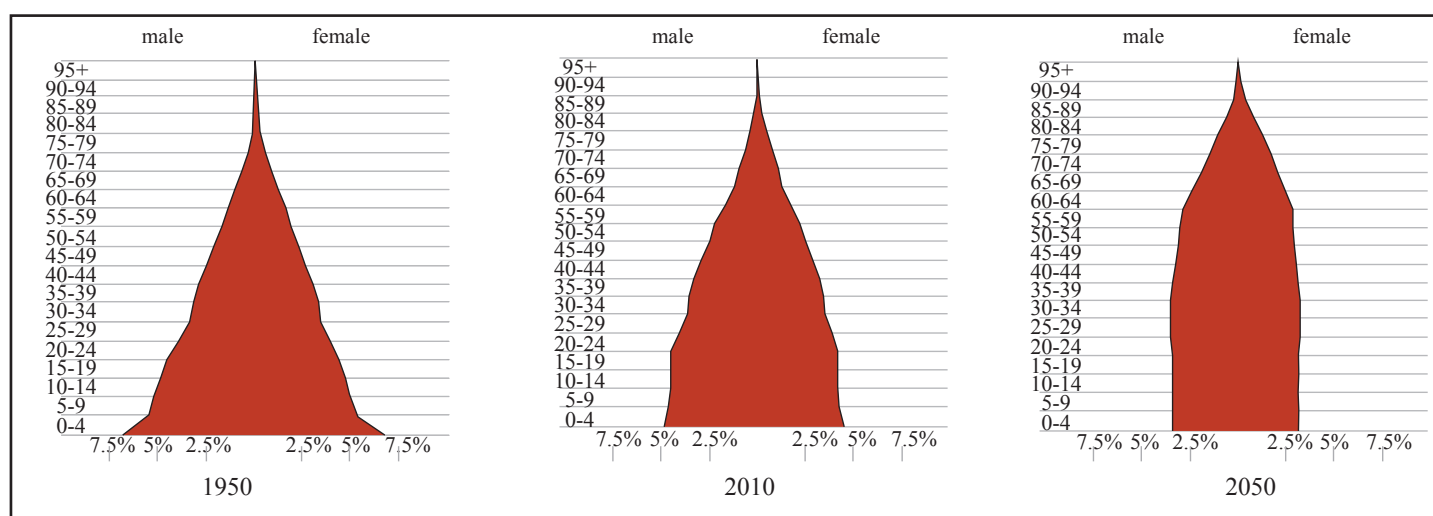


What Are The Likely Social and Economic Impacts of an Ageing Global Population?

Why is the global population aging?

Globally, the human population is showing an aging structure and within the next decade there will be more people on the planet aged over 65 than those aged under 15. Life expectancy is increasing in nearly all regions of the world- the exception being those countries of Africa where HIV/AIDS and other killer diseases are not under control. Figure 1 shows population pyramids for the global population for 1950, 2010 and an estimate for 2050.

Figure 1 Population Pyramids for the World Population 1950-2050



In 1950, the pyramid shows the influence of many countries still having a high birth and death rate and forms a clear triangle. By 2010, the base is not as wide as birth rates have fallen and the pyramid is also broader nearer the top, reflecting increasing life expectancy. In 2050, the base has further narrowed with a continuing reduction in birth rates and more people are living longer.

Today, death rates(outside war zones) are generally low and stable but birth rates in many countries are continuing to fall which results in a population that is ageing overall. Reasons for ageing populations include:

- Increased awareness of hygiene so fewer deaths due to infections.
- The universal use of antibiotics meaning that many once fatal diseases can be controlled and life expectancy increases.
- The education of women which often results in the delay of first pregnancy and having fewer children.
- Women wanting/needing to be part of the workforce and focusing on career first leaving less time for child rearing.
- The increasing expense of bringing up children so fewer offspring per family.

These changes are largely linked to increasing levels of economic development and the Demographic Transition. Running parallel to these, there is often a Health Transition whereby as a population develops economically, it becomes less affected by Group 1 Diseases- those that are infectious- and becomes more influenced by Group 2 Diseases. These are non communicable diseases or NCDs and include cardiovascular diseases, Type 2 diabetes, cancers and diseases of the pulmonary system. These are also diseases that affect the older sections of the population more. Economic development is also often associated with an increasing “Westernisation” of diet. i.e. a diet high in saturated fats and sugars which can lead to problems of obesity and in later life contribute to problems such as arthritis and the need for joint replacement.

Life expectancy is still increasing globally and matched by a fall in fertility rates. (See Table 1 below- UN figs) By 2050 the fertility rate will be below replacement level (2.2 per woman) and the population should begin to fall after reaching an estimated global peak of around 9 billion people.

Table 1 Global Changing Life Expectancies and Fertility Rates

Year	Life Expectancy	Fertility Rate
1950	48	5
2010	68	2.5
2050	76	2

However, during this time, for the reasons given above, the population will continue to age. Figure 3 shows the top ten countries affected by ageing at 2011 and 2050. From being a problem mainly for developed nations, the issue of an ageing demographic spreads to nearly all countries by 2050 and there are new entrants into the top ten.

Fig 2 Countries with the highest share (%) of people over the age of 60

2011		2050	
Japan	31	Japan	42
Italy	27	Portugal	40
Germany	26	Bosnia Herzo.	40
Sweden	25	Cuba	39
Finland	25	Rep of Korea	39
Bulgaria	25	Italy	38
Greece	25	Spain	38
Portugal	24	Singapore	38

At present, the most rapidly expanding segment of population is the over 85 year olds. This population is also the one most susceptible to illness and general morbidity. This has important financial implications for all governments. We are living longer but will therefore need more care for our later, more dependent, life stages. As we age, we are more likely to suffer from dementia, with Alzheimer’s Disease being the most common form. 30% of those over 80 have a type of dementia. As the oldest old (those aged 85+) is expected to rise by 351% between 2010 and 2050, the incidence of these diseases is going to rise. This will lead to huge costs because of the high dependency and need for constant nursing care.

In Germany there are increasing numbers of pensioners to the number of workers:

- 1956 16 pensioners per 100 working adults
- 2006 29 “ “ “ “
- 2056 60 “ “ “ “

These changes have implications for healthcare and pension provision as there will be fewer people paying the taxes needed to support the elderly. This is difficult enough in developed countries but far harder in developing countries, where infrastructure is in its infancy.

What are the challenges of an ageing population?

1. The most rapidly expanding sector of the population is the over 80s who are most at risk from disability and illness.
2. Some increase in illness in the elderly is linked to obesity, leading to large numbers of Type 2 Diabetes, stroke and arthritis. This may become worse as the present younger generation ages as they already have a higher incidence of obesity.
3. NCD diseases are expensive to treat and often diagnosed late, therefore even higher costs.
4. How are pensions paid for when the dependency ratio is increasing?
5. Historically Europeans retire between the ages of 55 and 65 based on past, lower life expectancies, but now can expect another 20 years in retirement.
6. With smaller families, older people are more likely to go into institutionalised care. How can the costs of this be supported?

The following are typical responses to the problem of an ageing population in Europe and North America:

- Raise the normal age of retirement thus reducing the pension bill.
- Allow large flows of young international migrants to fill in employment gaps.

- Change health systems so that emphasis is on disease prevention in earlier years so that more people live to have a healthy old age.
- Encourage/ allow old people to be employed so they continue to pay into the tax system.

Case Study 1

A Double Whammy for China?

China is fast developing but there are regional disparities in wealth with most being concentrated in the eastern cities. In rural areas there is less access to healthcare and homes for the elderly and most are cared for within the family. However, in the cities the impact of the One Child Policy from 1979 in response to the population explosion has meant that many millions of children are supporting their parents and often four grandparents in old age. This is known as the 4-2-1 problem and creates a huge financial burden. Additionally, many of the younger generation have moved to the cities in the east of the country to work and are not around to help their family as they age.

As the population ages, who will pay for the pensions? Today 72% of the population is of working age but there is a huge number of baby boomers about to retire and there is not the workforce to replace them. By 2030 China will have the highest number of elderly in the world and by 2050 more than a quarter of its population will be over 65. Realising the implications of this, in 2013 the Chinese government relaxed the One Child Policy in order that, in the future, there would be enough children to look after their families and work to provide taxation income.

Today, with a reducing workforce, workers are demanding higher wages and this makes China less competitive. Although great wealth has been created over the last two decades, healthcare and social security are not well developed in the country. It will not have enough time to develop the services needed for all of its elderly. It is beginning to look at ways in which the elderly can be supported within cities by grouping facilities near to their housing so they can maintain their independence for longer. The city of Shanghai is a member of the UN Age -Friendly Cities (see below). China’s development, population growth and ageing have been compressed into just half a century- this will inevitably lead to problems.

Case Study2

The World’s Oldest Nation- Japan

Japan is the first country to face the problem of a rapidly ageing population. See fig 3 Factbox below.

Figure 3 Fact Box

Japan fact box

- Population 2012 127.5 million
- Population has fallen by 284 000
- Number of people over 65 = 30 million
- Over 65s account for 24% of the populations
- Children aged 15 and under = 13%
- Life Expectancy at birth is highest in the world.
- LE for men is 80; LE for women is 86.
- Fertility rate is 1.37, so below replacement level.
- The population is ageing and declining in size at the same time

Whilst over 50% of Japan’s elderly are living in the cities, the rest live in remote rural areas where there are not enough facilities and services to cope. In Tokyo alone there are about 400 residential homes for the aged but it is estimated that this is already too few- 800 are needed now and that need is going to grow. Within the elderly cohort there are 2.5 million with some form of dementia, adding to the problems of care and the money to finance it.

Japan operates a universal care system where you receive care according to your physical or mental need and not dependent on income level or family situation. This is severely under pressure as the economy shrinks. The percentage of the elderly living with a child has fallen from 87% to 48% as families become dispersed due to moving for jobs and as attitudes change. However, Japan has been working on the problems of ageing for over 20 years, once they realised they had a problem. Actions taken include:

- keep the over 65s active so that being in better health means that the years of aged dependency are reduced. Provide sports facilities etc.
- Encourage over 65s to take on jobs in the community (after retiring from their main job) such as gardening, helping out in kindergarten etc. Receive a small payment and pay some tax which helps the economy.
- Total retirement being pushed up into mid 70s
- Encouraging more women into the workforce when younger. Japan has a low participation rate for a developed country. Helps economy.
- Research into use of robotics to help with low level tasks in elderly homes and hospitals. Robots to dispense medicines or to remind elderly person living on their own to take medicine or even to eat!
- Lots of research into ageing to best identify needs and strategies for coping. Japan realised the problem early and is ahead in research and in adapting society to serve the needs of its ageing population.

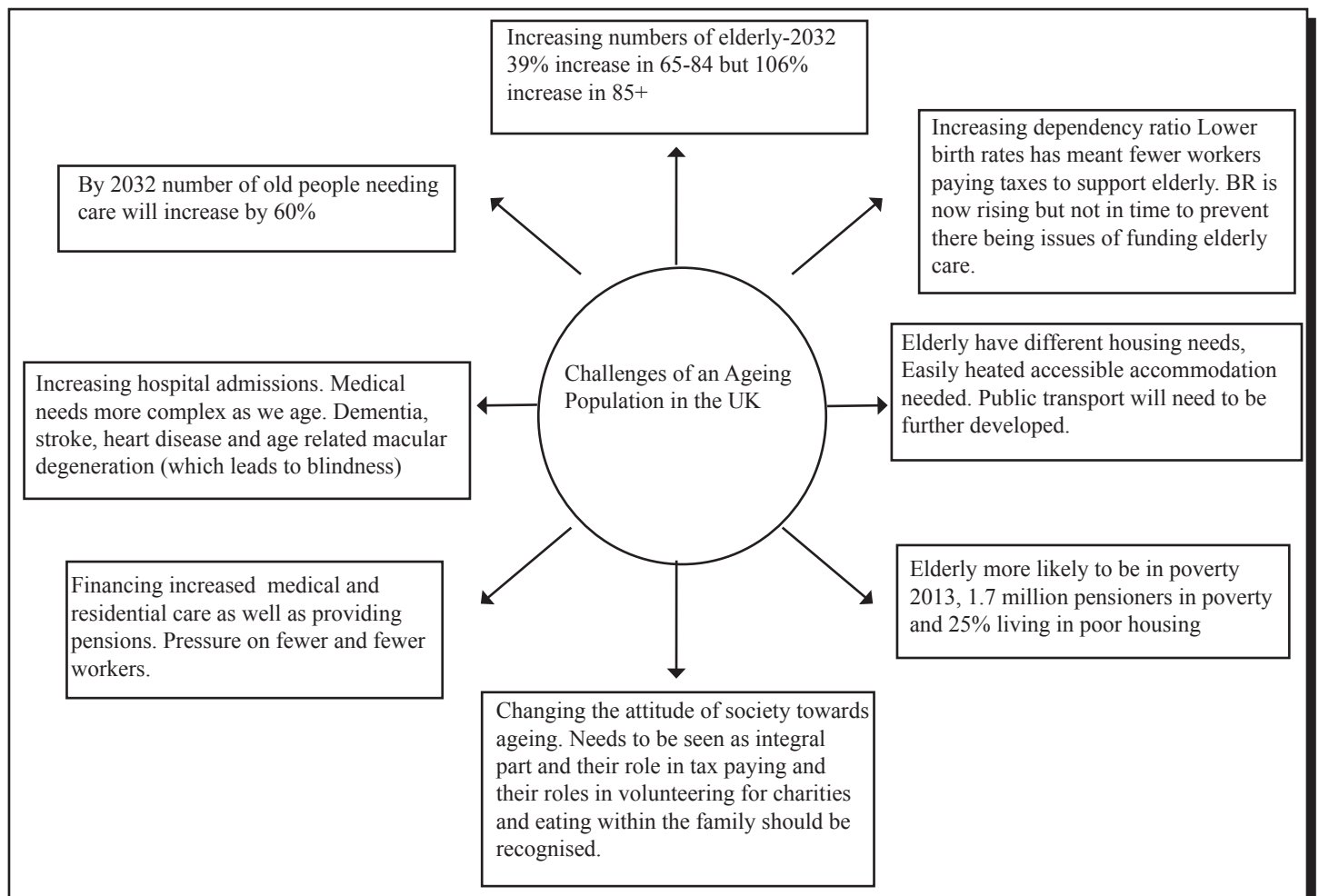
Can the UK cope with its rapidly ageing population?

(Note the UK is not in the top 15!)

Already in nearly all areas of the UK (except London) the proportion of those aged over 65 exceeds those under 15. This demographic change is resulting in increasing dependency ratios and a need for planning for an aged future. Many people look to change area when they retire and often this is to a seaside location where the land tends to be flat and the climate more equable. There is a stretch of the south coast from Bournemouth, through Worthing, Hove and Brighton to Eastbourne which, because of the high numbers of pensioners, is known as Costa Geriatrica. The top five retirement locations are more dispersed than that but are all in coastal counties in the southern half of the UK They are:

1. Christchurch, Dorset -30% retirees
2. West Somerset, South West- 29%
3. North Norfolk, East Anglia-29%
4. Rother, East Sussex-28%
5. East Devon, South West-28%

As the population ages, there are several challenges to be met. See Figure 4



However, ageing is not all negative. It has been estimated that the over 65s have a net contribution of over £40 billion per annum in terms of the care they provide (for grandchildren, disabled spouse etc); their spending, donations to charities and their volunteering. In 2010 the Ageing Well Programme was launched with the aim of providing a better quality of life for older people through local services. It encourages older people to take part in civic life and to live independently for as long as possible.

Birth rates are increasing now in the UK, especially in the cities and this, coupled with immigration of young migrants from other parts of Europe and beyond, may slow down the process of our ageing population. These young workers will pay taxes which will help the economy and may provide the labour needed in care for the elderly. The UK government is already in the process of increasing the age at which people can draw their state pension. The first stage was to bring women's pensionable age up from 60 to 65 to match that of men which it will do by November 2018. By 2020 the pensionable age for both will rise to 66 and to 67 in about 2026. This will help reduce the pension burden.

Case Study

The Retirement Capital of the UK- Christchurch in Dorset

- 30% of the population of 47750 are pensioners.
- By 2031 the percentage will have increased to 38%
- Life Expectancy: Male= 80.3. Female= 84.4. Both above UK average.
- Death Rate is higher than UK average as a result of ageing population. 11.8 per 1000, UK 9.4 per 1000 (2008).
- Birth Rate is lower than UK average. 9.2 per 1000, 13 per 1000 in UK as a whole.
- Although there are more deaths than births the population is not falling due to in migration of people, especially in 45-64 year olds. Largest reductions in population are in the 15-29 year olds which further reduces the fertility rate in Christchurch.
- Increasing numbers of elderly requiring care- either in nursing homes or in their own home.
- Bournemouth, Dorset and Poole are working together in the Total Place Project which aims to improve the quality of lives of the elderly by linking together all agencies involved in elderly care and thereby reducing costs. This involves a change in thinking from providing final stage care to focusing on prevention and community services. This is to help people stay in their own homes for as long as possible

Possible Futures?

In order that we can better cope as a society with an ageing population, new initiatives should be investigated that reduce financial pressures and yet still provide a dignified existence for those with a greater dependency.

1. Hogewey in the Netherlands

This is a gated village in the Netherlands. It was opened in 2009 and was specifically designed to support people with dementia. It includes the following features:

- Has its own town square, supermarket, theatre, cafe, hairdresser.
- 23 houses set around the square. 6 people to each.
- Interiors reflect residents' previous lives.
- No locks within the village and residents are free to wander around and given more autonomy.
- Carers do not wear uniforms

With a less regimented and alien environment, it has been found that less medication is used and the quality of life is better for the residents. Its costs are no more than an average residential home.

2. WHO Global Network of Age -Friendly Cities (GNAFC)

This is a broader approach and encourages participating cities to improve the environmental, economic and social factors that impact on the health of those over 65. It involved older people in the implementation of the programme. An age -friendly city is:

An inclusive and accessible urban environment that promotes active ageing.

So, there should be ease of access to a range of facilities and activities and there should be encouragement and support for healthy participation in these. Provisions of an age-friendly city include:

- Access to green spaces is important, especially as people downsize to smaller properties, often without a garden.
- Seating is needed within these so that older people can maintain mobility and independence.
- Pavement maintenance is important to prevent trip ups and broken bones, thus reducing hospital visits for fracture repair.
- Walkways and cycle paths help in maintaining fitness and a feeling of security will encourage participation in outdoor activity, thus prolonging health and well-being.

Conclusion

Older people cannot just be regarded as a single group. There is a large range of needs to be met and those needs are going to increase over time, in all countries. Encouraging healthy lifestyles when young would make it more likely that people would have the majority of their old age in reasonable health and only during the very last years would care be needed. In order for this to occur, planning must be undertaken now in terms of having suitable housing geared for the elderly, public transport that is available and adapted for elderly access and services to help the elderly remain independent for as long as possible. By carrying out such plans, the elderly can remain within their communities and participate for longer and the need for expensive residential care would reduce.

Review Question

Referring to examples, outline the costs and benefits of an ageing population. How can the benefits be made more likely to occur?

Answer Guidelines:

- Define an ageing population and why this should be occurring almost globally. (Declining death rate, gradually being matched by a declining birth rate)
- Outline costs such as increasing medical need as we age, need for care homes in later stages, providing pensions.
- The ageing will increase for a number of decades and has to be addressed in advance of the real pressures which will start to be felt from 2030 onwards.
- Outline the positives of the ageing population such as the unpaid childcare they give.
- In order that the ageing populations do not become dependent too early, there is a need to encourage good health, a lack of obesity and continued physical exercise from youth through to old age which should help in maintaining independence in later years and thus reducing financial costs to society.

Useful websites

1. www.ageuk.org.uk/latest-press/archive/vision-and-imagination-critical-to-meet-challenges-of-ageing-population/ Paper by Age UK.
2. http://www.parliament.uk/documents/commons/lib/research/key_issues/Key%20Issues%20The%20ageing%20population2007.pdf Parliamentary summary of the problems of ageing

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