How does the health of the population affect development?

✶ People have basic human needs. These include access to healthcare and a healthy, safe environment.

✶ The health of a population is integral to its sustainable development. It is also a reliable indicator of the levels of poverty and inequality in a society.

✶ Improved health enables society and individuals to make use of available resources and fully exploit their own capacities.

✶ Health programmes run by the government, institutions or agencies can promote progress towards development.

Health and development – isn’t it obvious?

Improving the standards of healthcare enjoyed by people is one of the primary aims of any development programme. There is a general correlation between the wealth of a country (as measured in GNI per capita), and its levels of health (using measures such as life expectancy, infant mortality and incidence of infectious diseases). This correlation is easily explained: individual wealth makes it easier for people to access healthcare and national wealth makes it more likely that decent levels of nutrition will be available to the population, as well as sanitation and clean water. While it is true that there has been a big improvement in global health over the last 30 years, this is not true of all countries – in some, life expectancy is now much lower.

The optimism of the 1970s

People in sub-Saharan Africa suffer a lower standard of healthcare than in any other region of the world. Some historical perspectives place the blame for this situation upon the Western world. This is because the healthcare systems inherited by most African countries after the colonial period focused on providing care for the privileged in urban areas. Many
newly independent African governments recognized this imbalance and attempted to extend the range of their provision, emphasizing primary care and a community-based approach. Measurable progress, although uneven, was made in many countries and was recognized by the World Health Organization (WHO) at the Alma Ata Conference in 1978. This conference in Kazakhstan was attended by virtually all of the member nations of the WHO and UNICEF. The declaration agreed there (Health For All by the Year 2000) was seen as a major milestone in the promotion of global public health. Its broad definition of health (‘a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity’) was enlightened, and its emphasis on the importance of primary healthcare (PHC) as an essential part of an integrated health system was also well received by health professionals working in the developing world.

The declaration was optimistic that the glaring inequalities in health status between people in the developed and developing worlds could be addressed by a better use of the world’s resources, mostly achieved by reducing conflict and thereby releasing money spent on armaments. That optimism now seems very misplaced. The rich aid-giving countries decided that the full implementation of health systems based on PHC would be too expensive. A watered-down version, ‘selective primary health care’ – focused on some specific health issues – was introduced in many countries and was subsequently derided by critics as ‘Health for Some by the Year 2000’.

The debt crisis

There was progress in some countries, but the global economic crisis of the 1980s undid a lot of that work as indebted states were forced to seek the ‘help’ of the World Bank and the IMF. Many countries in the developing world had borrowed money to help fund development projects; when interest rates started to rise, paying back that money became increasingly difficult. The Bank and the IMF offered access to emergency funds but often insisted on public spending cuts in return, including cuts in healthcare and public services – this was called ‘structural adjustment’. These adjustment programmes increased levels of poverty and helped to create conditions that encouraged the spread of diseases. During the 1990s healthcare services continued to disintegrate in many countries and resources were still siphoned off to pay foreign creditors. In 1997 sub-Saharan African governments were transferring four times what they were spending on the health of their people to Northern creditors. In 1998, Senegal spent five times as much repaying foreign debts as on health.

Declining life expectancy

An example of declining public health as a result of the loss of healthcare services can be found in Zimbabwe, where life expectancy at birth for males has dramatically declined from 60 years in 1990 to 37 in 2008, among the lowest in the world. Life expectancy for females is even lower at 34 years. In the same period the infant mortality rate climbed from 53 to 81 deaths per 1,000 live births. The high incidence of HIV and AIDS has been a major cause of the decline in the health of the Zimbabwean population but not all the countries in the region with a high incidence of HIV have been affected so badly. There is a wide range in the extent and standards of public healthcare provision – even between countries at similar stages of economic development.

Health indicators for selected tropical African countries (2008)

<table>
<thead>
<tr>
<th>Country</th>
<th>HDI Ranking/182</th>
<th>Death Rate/1000</th>
<th>Annual health expenditure per capita ($)</th>
<th>HIV prevalence (% of pop)</th>
<th>Mortality rate &lt;5 years /1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dem. Rep. of Congo</td>
<td>176</td>
<td>17</td>
<td>9</td>
<td>3.5</td>
<td>199</td>
</tr>
<tr>
<td>Kenya</td>
<td>147</td>
<td>12</td>
<td>34</td>
<td>7.8</td>
<td>128</td>
</tr>
<tr>
<td>Malawi</td>
<td>160</td>
<td>12</td>
<td>17</td>
<td>11.9</td>
<td>100</td>
</tr>
<tr>
<td>Rwanda</td>
<td>167</td>
<td>14</td>
<td>37</td>
<td>2.8</td>
<td>112</td>
</tr>
<tr>
<td>Tanzania</td>
<td>151</td>
<td>11</td>
<td>22</td>
<td>6.2</td>
<td>104</td>
</tr>
<tr>
<td>Uganda</td>
<td>157</td>
<td>13</td>
<td>28</td>
<td>5.4</td>
<td>135</td>
</tr>
<tr>
<td>Zambia</td>
<td>164</td>
<td>17</td>
<td>57</td>
<td>15.2</td>
<td>135</td>
</tr>
</tbody>
</table>

Saying goodbye. AIDS has had a devastating impact on life expectancy in sub-Saharan Africa.
Table X shows some health-related indicators for seven African countries. The statistics show some obvious similarities but also some significant differences. Is health expenditure in each country the most important factor?

Developed and developing countries – different health priorities

There are major differences in the health priorities of developed and developing countries. In developing countries the emphasis is on combating infectious diseases and issues associated with birth and maternity. In developed countries the emphasis is on lifestyle factors associated with smoking and diets that have high levels of fatty foods, such as heart disease and cancer. These are much more likely to occur the longer a person lives and as a result a lot of healthcare resources are allocated to caring for the elderly. In developing countries the biggest problem is viral and bacterial communicable diseases such as cholera, hepatitis, polio and typhoid, and airborne diseases such as whooping cough, diphtheria, tuberculosis and pneumonia. In developed countries these diseases are sometimes encountered but can usually be treated effectively. Other diseases in developing countries may be transmitted by insects including malaria, bilharzia and sleeping sickness. There is a higher prevalence of these diseases amongst the young in developing countries because they are often weakened by malnutrition. The situation is often worse in rural areas where access to healthcare, sanitation and clean water is more difficult. In sub-Saharan Africa today, two-fifths of the population still lacks access to safe water and two-thirds do not enjoy adequate sanitation.

Can changes in health patterns as a country develops be predicted? Logic would suggest that there should be a relationship between the general health of the population of a country’s level of development.

<table>
<thead>
<tr>
<th>Percentage of population with access to:</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved drinking-water, 2006</td>
<td>Total</td>
<td>Urban</td>
<td>Rural</td>
<td>Total</td>
<td>Urban</td>
<td>Rural</td>
<td>Total</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>58</td>
<td>81</td>
<td>46</td>
<td>31</td>
<td>42</td>
<td>24</td>
<td>31</td>
</tr>
<tr>
<td>Middle East &amp; North Africa</td>
<td>87</td>
<td>94</td>
<td>78</td>
<td>73</td>
<td>87</td>
<td>53</td>
<td>73</td>
</tr>
<tr>
<td>Asia</td>
<td>87</td>
<td>96</td>
<td>82</td>
<td>51</td>
<td>69</td>
<td>41</td>
<td>51</td>
</tr>
<tr>
<td>Latin America &amp; Caribbean</td>
<td>92</td>
<td>97</td>
<td>73</td>
<td>78</td>
<td>86</td>
<td>52</td>
<td>78</td>
</tr>
<tr>
<td>Industrialized countries</td>
<td>100</td>
<td>100</td>
<td>98</td>
<td>100</td>
<td>100</td>
<td>99</td>
<td>100</td>
</tr>
</tbody>
</table>

Omran’s epidemiological transition model attempts to do this by linking disease patterns over a period of time to changing social, economic, demographic and environmental conditions.

Key features of Omran’s transition model (1971).

First phase: subsistence agriculture, high fertility rate, high infant death rate, low life expectancy; infectious diseases are the main cause of death.

Second phase: improvement in agriculture, sanitation and nutrition and reduced death rate.

Third phase: intensive agriculture and industrialization, lower fertility rate, longer life expectancy; non-communicable degenerative diseases become the main cause of death.

According to this model, the most pronounced positive changes in health and disease patterns take place amongst children and mothers. The result is a sharp decline in the mortality of these groups and, because of the improved survival rates and other social and economic factors, a declining birth rate. The model has obvious similarities to the better known demographic transition model of population growth and is often referred to by those who support a modernist perspective on development.

How should healthcare be funded?

Providing a programme of healthcare for all is a very expensive proposition for any government but is a particularly heavy burden in developing countries. All the richer countries spend at least 5 per cent of their gross national income on public healthcare, and some countries spend much more. In developing countries the figure is much lower: Sierra Leone spends 0.9 per cent and Bangladesh 1.7 per cent. In some parts of the world, notably in sub-Saharan Africa, missionaries still play a significant part in healthcare provision alongside contributions from various NGOs. Where some form of public healthcare programme does exist, it often follows outdated, inappropriate colonial methods that are top down and urban based. Much of the healthcare budget is frequently concentrated in a few key hospitals and there is little left to provide for the poor in rural areas. As a result access to essential drugs for basic treatment is low. Even in Brazil, one of the wealthier developing countries, only 35 per cent of the population have access to the drugs they might need.

Many essential medicines remain inaccessible to those most in need.
in need. This is a result of poverty and impoverished healthcare systems but also the international commercialization of health. Drugs and medicines are disproportionately developed for rich country populations and the pharmaceutical companies concentrate on the development of 'lifestyle drugs' such as Viagra and Prozac. Of the 1,393 new drugs or medicines developed by the companies between 1975 and 1999 only 16 were for 'tropical diseases'. There is a critical shortage of effective drugs for the treatment of the diseases of the poor such as malaria, leishmaniasis, sleeping sickness and tuberculosis. One explanation for this may be that poor communities offer pharmaceutical companies reduced opportunities to make a profit.

An unfair trade in health workers
Another problem for governments trying to provide healthcare services in developing countries is training and retaining workers. In Malawi, for example, there is one doctor for every 88,000 people, the worst ratio in the world. This compares to one per 300 in the UK, one per 400 in Australia and one per 470 in Canada. To make matters worse, countries with a high disease burden, like Malawi, have to watch as the health workers they train leave to work in developed countries. According to one researcher: 'The predominant flow of health professionals is from developing countries, where they are scarce relative to needs, to developed countries, where they are more plentiful.' The number of non-European nurses registering with the Irish Nursing Board, for example, rose from less than 200 per year to more than 1,800 per year between 1990 and 2001. In contrast, it is estimated that 550 of the 600 doctors trained in Zambia since independence (1964) have moved to developed countries.

A number of issues help to drive this trend. There is an increasing demand for health workers to look after the ageing populations that are a demographic feature of the rich world and there is active recruitment in poorer countries by agencies working for the rich world health providers. In addition, the internet makes information on job vacancies available internationally and health workers who are often witnessing the collapse of health systems in their own countries are inevitably attracted by prospects overseas.

Profiting from health
In recent decades, the World Bank has made it a policy to promote the privatization of the health sector, internationally and in developing countries. In Africa the privatization of health care has reduced access to services for huge numbers of poor and sick people. When infectious diseases are the major health issue, public health services are essential. Private healthcare cannot make the necessary interventions at community or village level. The introduction of the market has transformed healthcare from a public service, designed for all, to a private commodity, available only to those who can pay. Those that are poor are effectively denied access to basic health as a result. The introduction of payment for treatment has succeeded in driving the poor away from healthcare in many countries. Privatization often means the promotion of medical insurance schemes which are totally unsuited to an African context where less than 10 per cent of the labour force is formally employed.
The influence of the pharmaceutical industry
The power and influence of the pharmaceutical industry has also become a source of concern for many people interested in development issues. The combined annual turnover of the world’s top five drug companies is twice the gross national income of all sub-Saharan countries combined.

The top 10 pharmaceutical companies in the US’s Fortune 500 (the country’s 500 most profitable companies) earned $269 billion in sales in 2008 and made combined profits of $49 billion. They also spent $83 billion dollars on sales and administration – more than twice the amount they spent on research and development. Their wealth makes it possible for them to influence the rules of world trade through their close relationships with Western governments and this does not always benefit the world’s poorest or least healthy. The influence of the companies is particularly strong in the US where there are six pharmaceutical lobbyists for each of the 535 members of Congress. Rules on drug patents in the European Union are subject to the same sort of pressure.

There are some signs of changing attitudes amongst the pharmaceutical companies, which have come under economic pressure to find new markets for their drugs and also public pressure for them to show more corporate responsibility. One of the potential impacts of President Obama’s attempt to bring in healthcare legislation is a lowering of the prices that pharmaceutical companies are allowed to charge for their drugs in the US. This is forcing companies to re-assess the value of markets in the developing world. Pfizer is one of the large companies which has started selling branded drugs in poorer countries even though these are more expensive than the generic drugs that are also available.

The impact of generic drugs
A 2003 agreement brokered by the WTO concerning the selling of cheaper generic drugs in developing countries was initially greeted as a step forward but has also been criticized because of the protection it continues to give the big pharmaceutical companies in the developed world. Under the agreement developing countries are allowed to export home-produced generic drugs to other countries where there is a national health problem as long as the drugs are not part of a commercial or industrial policy. The drugs have to be packaged or coloured differently to prevent them from prejudicing markets in the developed world. Cheaper generic drugs have been very important in making anti-retroviral treatment available for larger numbers of AIDS sufferers in developing countries, particularly in Africa.

For the first time in a half-century, sales of prescription drugs are forecast to decline this year in the US, historically the industry’s biggest and most profitable market. The Obama administration and Congress’s attempt to pass legislation overhauling the healthcare system, including provisions that could lower the cost of medicine, could put drug makers’ US businesses under further pressure.

As a result, developing countries like Venezuela have begun to look more attractive to the industry. Sales of prescription drugs in emerging markets reached $152.7 billion in 2008, up from $67.2 billion in 2003, according to IMS Health.

Pfizer (pharmaceutical company) is benefiting from a belief in Venezuela and in much of the developing world that branded medicines are worth paying a premium for because they’re safer and more effective than generics. Pfizer’s prices in Venezuela tend to be about 30 per cent under US prices, but are still 40 per cent to 50 per cent more than generics, which are widely available here since patents aren’t usually enforced.

Wall Street Journal July 2009
Developing countries paid a high price for this agreement. But what have they received in return? Drug companies spend more on advertising and marketing than on research, more on research on lifestyle drugs than on life-saving drugs, and almost nothing on diseases that affect developing countries only. This is not surprising. Poor people cannot afford drugs, and drug companies make investments that yield the highest returns.


**Witness**

India ranks 171 out of 175 in public health spending, says WHO study.

India ranks 171 out of the 175 countries in the world in public health spending. This is less than some of the sub-Saharan African countries, a World Health Organization (WHO) study of 2007-08 has revealed.

For a country of one billion, India spends 5.2% of the GDP on healthcare. While 4.3% is spent by the private sector, the government continues to spend only 0.9% on public health. When the economic growth index is moving forward, the wellness index is dipping.

Public health spending as a percentage of GDP is minuscule. Due to this India is being overly dependent on the private sector. With low insurance penetration people are forced to spend out of their resources. In fact, neighbouring China ranks among the leading developing countries in public health spending, almost 6% of the GDP, said Vishal Bali, CEO, Wockhardt hospitals.

While India ranks among the top 10 countries for communicable disease, it is today, world leader for chronic diseases like diabetes, hypertension and coronary artery disease.

Said Dr H Sudarshan who was part of WHO Commission on Macro Economics and Health: ‘There has been a marginal increase in public health spending with the National Rural Health Mission, but there is a need for increasing the health budget and also simultaneously to build the capacity of the state to use the allocated budget efficiently in public health.’

Dr N Devadasan, Director of Institute of Public Health, Bangalore, said: ‘There is growth in GDP but there has been no increase in healthcare spending. This inadequate public health spending has forced the public to depend on the private sector.’

How should public healthcare be funded?

India has one of the fastest-growing economies in the world but how it looks after the health of its population causes considerable controversy within the country. The government spends less on public healthcare as a percentage of gross domestic product (GDP) than almost all other countries and there is a high dependency on the private sector (see box). There are many issues which are raised by such a policy and it is worth spending some time thinking about the advantages and disadvantages of a public healthcare system with these characteristics.

The tension between public and private provision of healthcare is the subject of heated debate in both developing and developed
countries. In the UK in July 2010, the Health Secretary of the coalition government, Andrew Lansley, announced the transfer of £80 billion from the annual healthcare budget to general practitioners (GPs) to give them responsibility to make decisions about patient care. The administration of such huge sums of money would require assistance, almost certainly from the private sector, and the move is widely seen as a way of increasing private sector involvement in the NHS.

The proportion of healthcare costs paid for by the government varies a lot from one country to another. The models that countries have adopted are the result of many economic, cultural and political factors but more countries seem to be turning to a model that requires private health insurance from potential patients – regardless of whether they can afford it or not.

There is much more that needs to be said about global health issues. Child and maternal health issues play a vital part in development and these are discussed in more detail in Chapter 10 on the Millennium Goals, as are issues related to HIV and AIDS. For many people, nothing epitomizes the need for greater equality in global wealth more than the gulf between rich and poor in terms of health.

There is no universal system of health care in the US and it is easier to understand its structure if you are acquainted with some of the basic premises of American politics. Any provision of services by the state is associated with ‘socialism’ – seen by many in the US as verging on communism – and virtually impossible to get through Congress. There are federally funded programmes for some of the poor (Medicaid) and those over 65 (Medicare) as well as other schemes for the disabled and war veterans but generally it is up to individuals to obtain health insurance. Most are covered through their employers, but others sign up for private insurance schemes.
as a deductible) before the insurer covers the expense. The amount paid into the insurance plan each month varies according to their plan. At least 15 per cent of the population (over 46 million people) are uninsured and a further 35 per cent are ‘under-insured’, meaning that the terms of their insurance plans do not cover the cost of their treatment.

Ownership of healthcare facilities in the US is also mainly in private hands although federal, state, county and city facilities also exist. Many hospitals (about 70 per cent) are owned by non-profit organizations but there are also a significant number of ‘for profit’ hospitals. There is no nationwide system of government-owned hospitals but there are some medical facilities owned by local government that are open to the general public. Those without insurance are treated in emergency rooms at some locally run hospitals.

An expensive system

The US spends more on healthcare per person ($7,681) and also more of its total national income (16.2% in 2008) than any other nation. Although most of its citizens rely on private health insurance, the US government still spent $800 billion on the Medicare and Medicaid programmes in 2008, and that amount increases each year. The high cost of medical care is reinforced by the fact that medical debt is responsible for over 50 per cent of all bankruptcies in the US.

There are many reasons for the high cost of healthcare in the US but one of the main reasons is the high cost of drugs purchased from the pharmaceutical companies. The high revenue generated by the sale of drugs has meant that 82 per cent of the world’s facilities for research and development in biotechnology are based in the US. The patents available on new drugs allow the companies to charge high prices for drugs for a 20-year period during which other companies are banned from producing the same drug. This allows the companies to recover the very high costs of research and development – and to make very large profits!

What are the problems with the US system?

The huge amounts of money spent on healthcare in the US do not result in positive achievements on some important health indicators. Average life expectancy is 79 years, which is good in global terms but places the US behind 21 other countries. Infant mortality (7 per thousand births) is also higher than in most other rich countries and the US is only ranked 43rd in the world – behind even its socialist bugbear Cuba.

President Obama promised the reform of healthcare in his presidential campaign but it has been difficult to achieve because of the vested interests of the health insurance and pharmaceutical companies.

Key features of the Healthcare Reform Bill

Cost: $940 billion over 10 years; this would reduce the budget deficit by $143 billion.

Coverage: Expanded to 32 million currently uninsured Americans.

Medicare: Prescription drug ‘coverage gap’ will be closed – meaning the poor do not have to pay high ‘deductible’ costs; those affected who are over 65 will also be helped with rebates and discounts on brand-name drugs.

Medicaid: Expanded to include families under 65 with a gross income of up to 133% of federal poverty level ($30,000 for a family of four) and childless adults.

Insurance reforms: Insurers can no longer deny coverage to those with pre-existing conditions.

Insurance exchanges: Uninsured and self-employed will be able to purchase insurance through state-based exchanges.

Subsidies: Low-income individuals and families wanting to purchase their own health insurance will be eligible for subsidies.

Individual mandate: Those not covered by Medicaid or Medicare must be insured or face a fine.

High-cost insurance: Employers can offer workers pricier plans subject to tax being paid on the excess premium.
cost of healthcare on the US economy eventually allowed a bill to be passed by Congress on 21 March 2010. It was opposed by all Republican members of the House of Representatives and by 34 Democrat members. It will allow healthcare to be extended to tens of millions of poorer US citizens who were previously uninsured.

Despite a lot of investment in recent years, Uganda has one of the worst healthcare records in the world and is ranked 186th out of the 191 nations. Healthcare funding is the most obvious problem. The Ministry of Health had a budget of $210 million in 2008 and 60% of the money came from overseas donors. By comparison, the province of Quebec in Canada spent $178,000 million on 7 million people – equivalent to $2,550 per capita spent on health care compared with just $7 per capita in Uganda.

Organizing healthcare on such a limited budget is obviously difficult. There are not enough doctors for health centres to function properly and there is only one doctor for every 20,000 people in the country. Only 38 per cent of healthcare posts are filled in Uganda and it is obvious that new funding and investment will be needed to improve the situation.
and health workers have little incentive to work in poor rural areas. Some 70 per cent of Ugandan doctors and 40 per cent of nurses and midwives are based in urban areas, serving only 14 per cent of the Ugandan population. Only 50 per cent of the population lives within five kilometres of a health centre, a problem caused by the overwhelmingly rural nature of the population distribution in Uganda (86 per cent). The challenges for healthcare are massive; from an inadequate infrastructure that makes travelling to health centres very difficult, to a population where malaria is the biggest cause of death and seven per cent of the population are HIV-positive. Around 60 per cent of mothers still deliver their babies at home, mostly because transport difficulties make it impossible to refer them to health centres. When people who are seeking medical attention do make it to a health centre or hospital there is a very high chance that they will be unable to see a doctor or to obtain the medicines they need. There have been some successes. The number of deaths from common measles has been reduced by more than 95 per cent in the last 10 years and the prevalence of HIV reduced from 30 per cent in the mid-1990s to 7 per cent in 2008. In addition, over 80,000 people are receiving anti-retroviral treatment for AIDS. There have been no cases of polio for the last 10 years and the model of successful vaccinations carried out by primary healthcare workers and other trained volunteers is an example of what can be achieved with very few resources. The wider implementation of basic PHC measures such as hand washing, improved sanitation, wearing shoes and improved nutrition could prevent 90 per cent of diseases, while improved personal and social education in schools could lead to healthier behaviour and eventually reduce the fertility rate.

A vicious circle
How underfunding and understaffing afflict poor countries such as Uganda

Health facilities in Uganda are arranged in a linear hierarchical manner:
- Health centres – this is the lowest level, serving a population of 30,000-100,000
- District general hospitals – serving 500,000
- Regional referral hospitals – serving 2 million
- National referral hospital – serving 32 million

Key features

Underfunding by donors and government
Recruitment freeze
Disrupted services
Poor working environment
Low salaries
Decreasing motivation
Increasing workload
Skilled staff tempted overseas
Mounting public distrust

PUBLIC HEALTH DISASTER