

JPIC 220 - Economics and People

Part 2 - Unit 6

Assignment

Part 1

Pick a country (preferably your own) to research. Referring to the mortality rate, the change in the mortality rate over time, incidence of major diseases over time, number of hospitals over time, spending on health care over time, and major health care issues, describe both the state of health care in the country and major improvements (or declines) in the quality of health care.

Keeping in mind the principles you have learned, comment on efforts undertaken in the country to improve health care.

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Health care in the Netherlands: spendings and results

Like almost every western country health care spendings are increasing year by year. Measures to stop the increase can only delay cost risings, but not stop them. For a large part, this development is a result of the success of the health care system. Progress in medical treatment, along with steady awareness raising campaigns about health issues, have led to an increase of life expectancy, and to a population that reaches very high ages.

Results: an aging population

In the table below the development in the population and in mortality is recorded. Source is the government bureau of statistics CBS. The mortality rate (number of deaths per 1,000 persons) increased between 1950 and 2014 from 7.5 to 8.4. In the meantime the average age of the population rose more than 10 years, and the average age at the time of death even more than 16 years. The achievements of health care (and other measures to protect life, such as legislation about traffic safety) can be seen by looking at the age standardised mortality rate. This rate dropped dramatically: from 13.2 to 6.1.

year	population	average age	deaths	average age of death	mortality rate	age stand. mortality rate
1950	10,026,773	30.3	75,929	61.2	7.5	13.2
1960	11,417,254	31.2	87,825	66.1	7.6	11.6
1970	12,957,621	32.0	109,619	68.5	8.4	11.3
1980	14,091,014	33.9	114,279	71.4	8.1	9.4
1990	14,892,574	36.1	128,824	73.7	8.6	8.6
2000	15,863,950	37.7	140,527	75.1	8.8	8.0
2014	16,829,289	40.5	141,245	77.6	8.4	6.1

source: CBS

In causes of death, we see the following figures. The percentages are related to the total number of deaths in the mentioned year.

	1950	1980	2013
cardiovascular diseases	37.6%	44.8%	27.2%
cancer	20.3%	27.3%	31.3%
respiratory diseases	7.0%	6.1%	8.7%
infections and parasites	4.1%	0.5%	2.3%
nerve system and senses	1.7%	1.5%	4.8%
psychic diseases	1.8%	0.3%	7.4%
new-born children	4.0%	0.6%	0.2%
mothers in childbirth	0.3%	0.0%	0.0%
other diseases	18.5%	13.5%	13.6%
external causes (accidents, violence)	4.8%	5.3%	4.6%
	100.0%	100.0%	100.0%

When we relate the incidence of causes of death to the entire population the picture gets a bit different. In this case we do not compare death causes with each other, but with the living population. This shows progress of health care better. In the next table we see how many people died of a specific cause per 10,000 persons:

	1950	1980	2013
cardiovascular diseases	28.1	36.2	22.9
cancer	15.1	22.0	26.3
respiratory diseases	5.2	5.0	7.3
infections and parasites	3.1	.4	1.9
nerve system and senses	1.3	1.2	4.0
psychic diseases	1.3	.2	6.2
new-born children	3.0	.5	.2
mothers in childbirth	.2	.0	.0
other diseases	13.8	10.9	11.4
external causes (accidents, violence)	3.6	4.3	3.8

Major health issues are typical for rich countries: cardiovascular diseases and cancer are the major causes of death. A very large portion of medical treatments is concentrated on these two types of illness. Another aspect is caring for the very old. There are so many old people and so few young that costly arrangements for the old are needed.

Remarkable is the decline of the number of deaths of cardiovascular diseases between 1980 and 2013, after an increase from 1950. The number of deaths by cancer increases steadily, probably mostly as a result of the aging of the population. The nerve system has become more vulnerable, but the most important increase has been the deaths by psychic diseases, from 0.2 to 6.2 per 10,000 persons. It is not quite clear what is the cause of this increase.

Issues that were important in the past and that still are in many countries: infections, infant mortality, are of marginal importance.

Institutions

A lot of things have changed a lot in the way health care is organised. When people were admitted to a hospital in 1970, staying there for two weeks was not exceptional. Now it is. Even when people are very ill, they are sent home as soon as possible. The hospital is not a place to stay, but one to get treatment.

The number of hospitals decreased as a result of concentration. People are used to travelling further, and do not stay very long in hospital, so the distance is less a problem than it used to be.

Spendings

When we look at spendings in the Netherlands, it is difficult to make a clear distinction between medical treatment, care for old and ill people, and welfare. In daily life, there sometimes are no clear boundaries between cure and care, and between care and welfare. That is why we will present the figures for both. The government makes a distinction between medical costs and welfare spendings. It would take a lot of research to see exactly what belongs to what. Is a social worker in a hospital paid from medical spendings or from welfare? Is domestic help for very old people always welfare, even if the maid does some simple medical treatments? For our goal, these questions are not very important, so we did not go into that in detail.

In the table below we see spendings in a forty-year period. The amounts of money are converted into euros, the European currency since 2002. The lower four lines in the table indicate relative developments of the spendings: in percentage of the GDP; spendings compared to the level of 1972, corrected for inflation; spendings compared to the level of 1972, per person.

Spendings	1972	1980	1990	2000	2012
(amounts in mln euro)					
spendings in health care	4,052	10,228	15,649	26,801	52,787
spendings in welfare	2,175	6,491	9,934	18,080	36,771
overhead	223	590	1,075	2,039	3,210
total	6,450	17,310	26,658	46,919	92,767
Funding					
government	1,615	4,065	5,018	6,585	12,306
health insurances	2,081	5,525	7,241	13,138	36,895
national insurance (AWBZ)	1,003	3,485	6,940	14,580	28,070
other	1,751	4,235	7,459	12,616	15,496
spendings in percentage of GDP	8.7	10.6	10.9	10.5	14.5
comparison in time (1972=100)					
spendings corrected for inflation	100	127	153	203	315
spendings per person	100	253	368	609	1,144

The spendings went through the ceiling in this period, although it is not as bad as the figures in euros suggest. In some periods inflation was high, so the figures at the lower end give a more accurate view of the increase in spendings. Very remarkable is the sharp increase since 2000. The proportion of the GDP spent for health care did not increase between 1980 and 2000, but went up since. It is unclear why. Many austerity measures were taken, but without result.

It is important to look at one detail. In 2006 a new system of health insurance was introduced. Before that, there was a mandatory insurance for people with an income under a certain level. This mandatory insurance was provided by non-profit insurances. People earning more were free to take an insurance or not, at a commercial insurance company. Although the rich were not obliged, almost everybody had an insurance. The new system was mandatory for every citizen. The non-profit insurances were converted into commercial companies or taken over. When we look at the funding of health care in 2000, 2005 and 2011, we see the enormous growth in the portion that is funded by health insurance:

- 2000: 13,138 million euros
- 2005: 17,554
- 2011: 35,871

These figures suggest that the new system of health insurance has caused health care to get even more expensive. More research into this would be needed to prove this.

Part 2

Respond to a health care issue in the country you selected. Think about the following questions in your response:

What is the issue? What are the implications of the issue? How many people are affected by the issue? What measures are being done to resolve the issue (or what measures have been enacted to previously resolve the issue)?

Cardiovascular diseases: treatment, research, prevention

Cardiovascular diseases are real killers in countries like the Netherlands. Nearly everybody is either suffering from them, or has close relatives suffering from them, or killed by them. People are often hit by cardiovascular diseases in the years they are economically productive, in their forties or fifties. That is probably an extra reason that enormous amounts of money are invested in research, prevention and treatment. Not only the government is doing this. Charities that fund research on cardiovascular diseases, are very popular.

As stated in part 1, the number of deaths from these diseases per 10,000 persons in the living population developed as follows:

1950: 28.1

1980: 36.2

2013: 22.9

Only the deaths of cancer have overtaken the cardiovascular diseases in numbers of casualties.

Treatment

Cardiovascular diseases have been a major cause of death for a long time. The figures of 1950 show this. Cardiologists and cardiological surgeons are the best paid medical professionals. Treatment of these diseases always have high priority. A wide range of treatments, medicine as well as surgery, has been developed. The way in which somebody in 2015 is treated, is incomparable to the way this happened in 1990.

According to statistics of 2011 10,136 were treated in the Netherlands, of which 2,093 were hospitalised, and 8,043 were treated as outpatients. This figures represents 77 persons per 10,000.

Research

The development in treatment is made possible by a lot of research. Beside the better treatment, research has also taught us a lot about the causes of cardiovascular diseases. Lifestyle was identified a long time ago as a root cause: a bad diet, lack of physical exercise, smoking. More recent is the discovery of the relevance of heredity.

Prevention

It is only a small step from research to prevention. Awareness raising about lifestyle started in the seventies already. People can get good council on what to eat, what not to eat, how to improve their physical exercise. Many employers encourage their workers to subscribe to a gym. Smoking is discouraged, and people who try to give up smoking, are helped.

The matter of heredity is tackled by doing preventive body check-ups of people that have a lot of cardiovascular diseases among their relatives.

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