Chapter 3

Adult ill-health in the Russian Federation

The Russian Federation is one of only a few countries where life expectancy is falling. However, the situation in the Russian Federation and its ex-Soviet neighbours differs from some other countries where life expectancy is also falling, such as in sub-Saharan Africa, where the declines have been driven by the HIV/AIDS epidemic. In the former, both the recent declines and the current low level of life expectancy were driven largely by increasing mortality among people of working age, with the greatest contribution from NCD and injuries (Shkolnikov et al. 2004; Nolte, McKee and Gilmore 2005). As a consequence, the global development agenda, driven by the pursuit of the Millennium Development Goals (MDGs), may not be perfectly appropriate for the Russian case (and for most other eastern European countries). A recent World Bank report showed how reducing mortality from CVD and injury would have a much greater impact on life expectancy than achieving the health-related MDGs (child and maternal mortality, reductions in HIV/AIDS and tuberculosis (TB)) (Lock et al. 2002; Rechel, Shapo and McKee 2004).

The scale of the challenge is apparent from Table 3.1, which shows that although male life expectancy at birth in the Russian Federation is about two years less than in Brazil or Poland, the probability that a 15-year-old Russian boy will die before he reaches 60 is over 40%, about 16 percentage points higher than in Brazil, double the rate of Turkey, and quadruple that of the United Kingdom.

The fact that a major determinant of a population's health is its country's level of economic development may in part explain some of the differences in mortality rates depicted in Table 3.1. However, as Figure 3.1 shows, even if we take income differences into account, Russian male mortality rates are still

Table 3.1 *Life expectancy and adult mortality in selected countries*

Country	*Life expectancy at birth (years) total (2001)*	*Probability of dying between ages 15 and 60 (% males) (2000 to 2001)*	*Probability of dying between ages 15 and 60 (% females) (2000 to 2001)*
Russian Federation	**66**	**42.4**	**15.3**
Japan	81	9.8	4.4
France	79	13.7	5.7
United States	78	14.1	8.2
Germany	78	12.6	6.0
United Kingdom	77	10.9	6.6
Denmark	77	12.9	8.1
Mexico	73	18.0	10.1
Poland	70	22.8	8.8
Turkey	70	21.8	12.0
Brazil	68	25.9	13.6
Kyrgyzstan	66	33.5	29.9

Source: World Bank 2003.

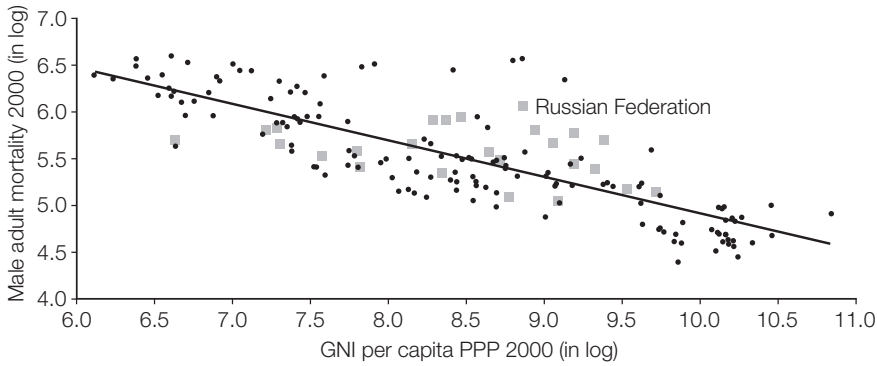

Figure 3.1 *Male adult mortality and gross national income (GNI) per capita in 2000*

Note: Squares indicate countries in eastern Europe and central Asia. PPP: purchasing power parity
Source: World Bank 2004.

substantially higher than those of other countries with a similar level of per-capita income. The only countries that are on a still higher trajectory than the Russian Federation are those that have suffered some of the worst HIV/AIDS crises (e.g. Botswana, South Africa, Namibia, Swaziland).

The social consequences of this high toll of avoidable mortality are bound to be significant. The widely held view that NCDs exclusively strike people that have passed retirement age is mistaken. In the Russian Federation the young and the middle-aged are by far more affected than in western Europe. Figure 3.2 illustrates this point by displaying the ratio of mortality in the Russian Federation from CVD in different age groups to that in Sweden. While the death rate is between two and three times higher in older ages, it is a remarkable 12 times higher in the 30–34 age group. A similar, slightly less acute difference is seen for deaths from injuries (Figure 3.3).

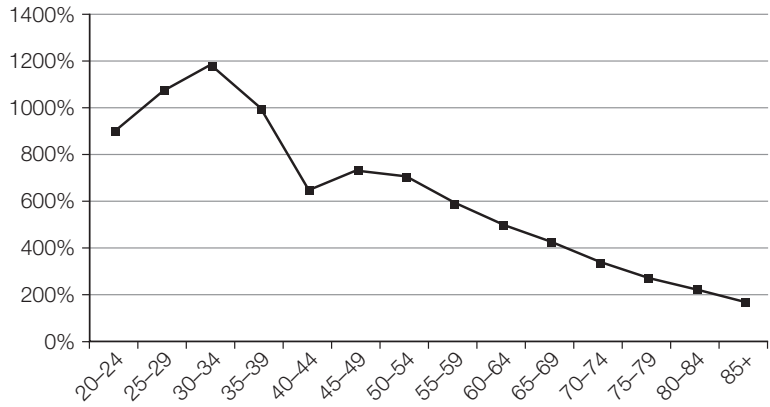

Figure 3.2 *Cardiovascular mortality rates in the Russian Federation as a percentage of those of Sweden*

Source: WHO Regional Office for Europe 2006.

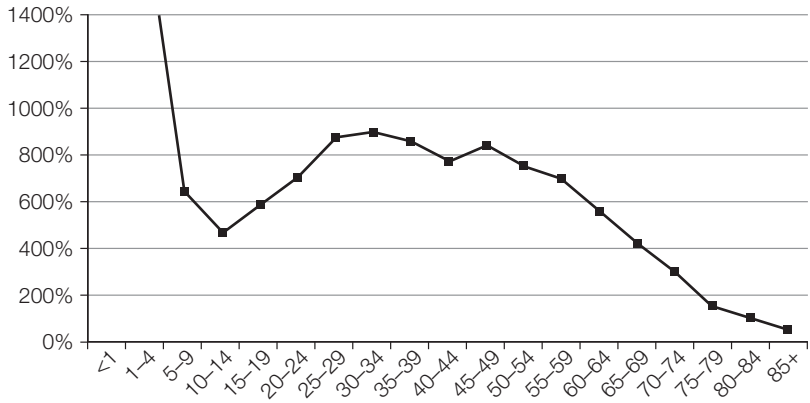

Figure 3.3 *Injury mortality rates in the Russian Federation as a percentage of those of Sweden*

Source: WHO Regional Office for Europe 2006.

The difference between the Russian Federation and western Europe is even greater when their morbidity rates are compared (Table 3.2). An analysis of healthy life expectancy – i.e. life expectancy augmented by a morbidity component – demonstrates the less well-recognized phenomenon of a high level of ill-health among women, in particular those of working age. Indeed, the difference in healthy life expectancy between the Russian Federation and western Europe is even higher than that for life expectancy alone. This confirms that morbidity data contain important information not captured by mortality/life expectancy data. If the Russian health crisis is not merely a health crisis of men, as these findings very strongly suggest, then the economic costs of ill-health are most likely also felt among women.

Table 3.2 *Life expectancy and healthy life expectancy in the Russian Federation*

	Country/Region	*At age 20*		*At age 40*		*At age 65*	
		LE	*HLE*	*LE*	*HLE*	*LE*	*HLE*
Males	Russian Federation	41.9	36.7	22.4	17.3	11.4	6.7
	Western Europe	54.5	50.4	31.2	27.6	15.0	12.5
Females	Russian Federation	54.2	40.6	31.1	18.5	15.2	5.8
	Western Europe	60.2	53.7	36.0	30.3	18.1	14.0
Female–male gap (years)	Russian Federation	12.3	3.9	8.7	1.2	3.9	-0.9
	Western Europe	5.7	3.3	4.8	2.7	3.1	1.5

Notes: HLE (healthy life expectancy) is calculated by Sullivan's method (Sullivan 1971); LE: life expectancy.
Source: Andreev, McKee and Shkolnikov 2003.

In sum, this chapter shows that the health challenges facing the Russian Federation affect not only the retired, but also working-age people – and very much so. Moreover, in contrast to what mortality data alone tell us, women's health has been seriously affected, too. This purely epidemiological evidence alone would suggest that ill-health during middle age has a substantial impact on economic outcomes at the individual and aggregate levels. Chapter 4 examines this issue in depth.