

Homicide mortality in Latin America

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The epidemiologic transition as originally proposed by Omran describes the shift in the relative importance of two main groups of causes of death. These two groups of causes of death are infectious and parasitic diseases on one hand, and on the other, chronic and degenerative ailments¹. Before the transition the former are the most important causes of death. As the transition advances the latter gain relative importance as transmissible diseases lose importance.

The epidemiologic transition runs parallel to the demographic transition. More specifically to the decline of mortality, that usually precedes fertility decline. In different societies at different moments it has been possible to attain some degree of control over infectious diseases. Developed countries on the whole have managed to reach a high degree of control of most transmissible illnesses, whereas in developing countries there is a wide variety of situations concerning the prevalence and lethality of infectious diseases. However there is no doubt that every single country in the world has been or is going through some of the stages of the process of the epidemiologic transition.

Many people who did not die (in most cases prematurely) due to an infectious disease eventually die, and in most cases due to a degenerative disease. Apart from the causes of death analysed by Omran in this group (heart diseases, and cancer) in this group are diabetes mellitus and cerebrovascular diseases. In most (perhaps all) currently developed countries these causes of death are among the most important five. This situation applies also to many developing countries with an intermediate degree of development.

The dichotomy infectious/degenerative diseases is by all means an over-simplification. Indeed, there is at least another important group of causes of death: External causes. There must be no confusion because infectious diseases can be provoked by "external agents". External causes of death (E47 through E56 according to the 9th revision of the International Classification of Diseases) refer basically to accidents, suicide, homicide and other violent causes of death.

How fit external causes of death within the epidemiologic transition? There is not a neat answer to this question. However there are some patterns associated with different stages of development.

Among accidents, motor vehicle accidents are the first within these causes of death. Very poor societies with relatively few motor vehicles cannot have many road accidents. Therefore the so called "4th World countries" present low level of accident mortality. In developed countries, accident prevention deter mortality due to this cause. Then countries with an intermediate degree of development, where there are enough vehicles maybe many of them in a not very good state, and where the culture of prevention and respect to the pedestrian create a setting for high mortality due to accidents.

Homicide and suicide are to some extent complementary. A very general trend shows, although with remarkable exceptions², that the more developed the country, the lower the homicide mortality, and the higher the suicide mortality.

Homicide mortality presents a great deal of variation around the world, however some geographical "regularities" can be observed in a group of selected countries (Table 1). In Western Europe homicide mortality rates fluctuate around 1 per 100 000. Thus, Iceland, Ireland, Italy, Norway, Spain and th U.K. for instance, have homicide rates below 1 per 100 000, whereas France, Germany, Grece, Belgium and Portugal the rates are between 1 and

¹ Omran (1971) refers to only two of such degenerative diseases: circulatory diseases and cancer.

² One of these exceptions is with the most powerful (economically, militarily, etc.) country, namely the USA where both suicide and homicide mortality are high. Another exception is the until recently powerful USSR, where the economic problems as well as the disenchantment of the desintegration and the crumbling of the socioeconomic system has also created a setting in which also suicide and homicide mortality have increased recently.

2 per 100 000. Similar levels in homicide rates can also be observed in Australia, some Asian countries such as Japan, China, and the *Asian Tigers*. In the Americas the only country that falls in this category is Canada.

In Eastern Europe planned economy, social benefits and political restrictions gave way to market economy, reduced social policy protection and increased ways of political participation. For wide sectors of the population this changes may have produced some disadjustments that are probably reflected in violence. Within these countries two large groups can be identified. The Varsovia pact countries on one hand, and on the other, the former Soviet Republics.

In Eastern Europe countries the the political, social and economic changes were associated with the lack of the protection to vast sectors of the population accustomed to full employment, free medical services, etc. Typical of the former regime. The new conditions after the Berlin Wall fall may have created a setting were ivolence became more frequent. Thus, in Albania, Cratia, Hungary Poland an Slovenia there were significant rises in homicide mortality comparing before and ater 1989 (see table 2).

The disenchantment provoked by the collapse of the Soviet Union was even more dramatic, as far as this is refelected in the increase of homicide mortality. Another factor that might explain this phenomenon is the fraility of the new institutions that cannot cope with well organised criminal groups, and the mafias. In the former Soviet Republics there has been a more dramatic increase in homicide mortality (compared to Eastern Europe countries) after the threshold of 1991. Indeed in Estonia, Latvia, Lithuania and Russia homicide mortality has inceeased more than threefold., whereas in Belarus,

Ukraine has rose more than the double pf the levels before the disintegration of the USSR. It should be noticed the very high homicide mortality of Russia: 32 per 100 000 (table 3).

Latin America with intermediate levels of mortality is also at an intermediate stage within the epidemiologic transition. It still faces mortality from infectious diseases as well as chronic ailments. On top of this there is an important participation of deaths due to external causes, homicide among them.

Homicide is an important cause of death among young adults as well as adolescents and middle age adults. In all Latin American countries homicide mortality rates (table 4) are several times higher than in Western Europe, Australia, China, Japan or Canada. They are also higher than in Eastern European countries before 1989, and with a few exceptions even after the change of the regime in those countries.

Three countries in the South of South America are "the most civilised" (as far as homicide is concerned). These are Chile (2.9), Argentina (4.4) and Uruguay (4.4) with homicide mortality rates of less than 5 per 100 000. Other countries with rates below 10 are Costa Rica, Cuba, Nicaragua, Panama, and Paraguay..

Three Latin American countries with more than half of the population of the region present very high levels of homicide mortality. These are Brazil Colombia and Mexico. Mexico (17.2) and Brasil (19.0) have levels higher than those observed in the Soviet republics before the disintegration of the USSR, and comparable with current levels there. Another country with high

homicide mortality is El Salvador (27.4), at a similar level observed currently in Russia (32.4).

Colombia in particular present extremely high mortality levels that seem to be associated with social problems such as narco traffic, guerrilla movements and a setting of generalised violence. The mortality rate of 80 per 100 000 is not been observed anywhere else in the entire world.

For the analysis of mortality apart from more traditional tools as mortality rates, years of life lost due to specific causes can be used (Arriaga). Table 5 shows the years of life lost due to homicide by sex. Men lose in some cases 5 to 10 times years due to homicide.

On top of the list is of course Colombia where men lose 3.42 years of life only for homicide. That figure may seem not too high. However it is 100 times the years of life lost due to homicide in Spain.

A great deal of the lost of lives of adolescents, young adults and middle age adults is due to homicide in Latin America. This is one of the reasons why the region is behind developed countries in mortality levels.

Table 1. Homicide Mortality rates (per 100 000) for selected countries

Country and year Homicide mortality
Rate

Austria 1994	0.7
Belgium 1992	1.7
France 1994	1.1
Germany 1995	1.1
Grece 1995	1.1
Iceland 1993	0.4
Ireland 1993	0.6
Italy 1993	0.8
Netherlands 1995	1.2
Norway 1994	0.8
Portugal 1995	1.7
Spain 1994	0.9
Sweden 1995	1.0
U.K. 1992	0.9
Australia 1994	1.8
China 1995	1.2
Japan 1994	0.6
Korea 1994	1.6
Singaour 1992	1.8

Source: UN *Demographic Yearbok 1996*

Table 2. Homicide Mortality Rates (per 100 000) for selected Eastern Europe countries, before and after the Berlin Wall Fall.

Country	Year	Rate	Year	Rate
Albania	1988	1.6	1993	5.5
Bulgaria			1994	5.1
Hungary	1987	2.5	1993	4.1
Poland	1987	1.7	1994	3.0
Slovenia	1987	1.6	1995	2.4

Table 3. Homicide Mortality Rates (per 100 000) for selected former Soviet Republics, before and after the collapse of the USSR.

Country	Year	Rate	Year	Rate
Belarus	1987	4.5	1993	10.4
Estonia	1989	7.8	1994	28.2
Kazakhstan	1988	7.1	1995	19.4
Kyrgystan	1988	4.8	1995	12.1
Latvia	1988	5.9	1993	24.7
Lithuania	1988	4.6	1994	13.4
Moldova	1990	9.1	1995	16.5
Russia	1988	9.8	1994	32.4
Ukraine	1988	5.4	1992	11.3

Table 4. Homicide Mortality Rates (per 100 000) for selected countries in The Americas.

Country and year	Rate
Canada 1995	1.7
Costa Rica 1994	5.6
Cuba 1995	7.8
El Salvador 1991	27.4
Mexico 1995	17.2
Nicaragua 1994	5.5
Panama 1989	5.2
Puerto Rico 1992	23.8
United States 1994	9.4
Argentina 1993	4.4
Brazil 1992	19.0
Chile 1994	2.9
Colombia 1994	80.0
Ecuador 1995	13.4
Paraguay 1994	9.8
Uruguay 1990	4.4
Venezuela 1994	15.7

Table 5. Years of life lost due to homicide for selected countries

Country	Both sexes	Male	Female
Colombia	2.05	3.42	0.41
Puerto Rico	0.63	1.14	0.11
Brasil	0.57	0.97	0.11
Paraguay	0.35	0.75	0.08
Venezuela	0.43	0.72	0.07
Ecuador	0.40	0.66	0.08
USA	0.27	0.43	0.11
Nicaragua	0.32	0.42	0.14
Mexico	0.26	0.42	0.07
Cuba	0.21	0.29	0.11
Argentina	0.12	0.19	0.04
Chile	0.08	0.13	0.02
Canada	0.03	0.03	0.03
Spain	0.02	0.03	0.01

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