# Chapter 4 Self-Inflicted Violence

José Manoel Bertolote and Diego de Leo

## Introduction

Contemporary views of suicide see it as self-inflicted violence. It constitutes 1 of the 3 unnatural (or violent) causes of death, the other 2 being homicide and accidents. However, the relation between suicide and violence is unidirectional, inwards directed, in which the individual causes and receives the violence. Along the path of suicidal processes, different forms of external violence can be identified that contribute to the development of that process.

Concepts and social perceptions behind suicide have changed greatly over the ages. In some of the most aged manuscripts that reached us – usually mythical, theogonic or religious texts, such as Gilgamesh, the Upanishads, the Bhagavad Gita, the Theogony, the Torah (or Pentateuch) – suicide is presented as an heroic act, whose outcome not only redeems the hero of some previous misdeed but also brings some good to his people (Minois 1995).

Those books describe, among many other things, the creation of the World and of Man, and, with the exception of the Torah, gave origin to different polytheistic religions. However, as religions moved towards monotheism, being (or wishing to be) like God became anathema in many parts of the world, more particularly in Christian, Muslim and Jewish societies, this evolved into a theological credo according to which suicide became a major sin, a serious offense to God, and dealt with accordingly. In parallel, many philosophical schools also kept alive a

J.M. Bertolote  $(\boxtimes)$ 

Australian Institute for Suicide Research and Prevention (AISRAP), Griffith University, Brisbane, Australia

AISRAP, Griffith University, Brisbane, Australia

e-mail: bertolote@gmail.com

D. de Leo

Australian Institute for Suicide Research and Prevention (AISRAP), Griffith University,

Brisbane, Australia

e-mail: d.deLeo@griffith.edu.au

great interest in suicide, along their interest both in issues related to live and death, and on the topic of free will.

From the eighteenth century on, however, suicide became to be perceived increasingly as a pathological event to such an extent that during the nineteenth century, eminent psychiatrists such as Philippe Pinel, Jean-Étienne Esquirol and Sigmund Freud stated that suicide was the consequence of some form of mental disorder, anchoring it clearly in the field of psychopathology.

Nevertheless, at the end of the nineteenth century, Emile Durkheim, one of the fathers of sociology, advanced the thesis that suicide was a predominantly sociological phenomenon. Around the same time there was a renewed interest in it from several important philosophers (e.g., Kierkegaard, Nietzsche) that continued into the twentieth century, when, particularly Sartre and Camus wrote extensively on it. Camus, who was awarded a Nobel Prize in Literature in 1957, stated that suicide was the one truly serious philosophical problem (Camus 1942).

At any rate, suicide remained also a matter of interest for medicine, and, in view of its impact on mortality, gradually it caught the attention of public health, along with other forms of violent deaths (i.e., homicide and accidents) (World Health Organization 1998). In 2002, the publication of the WHO World Report on Violence and Health made it worldwide clear that suicide represented a form of violence – self-inflicted – with a great relevance for Public Health (De Leo et al. 2002).

#### Definition

Given the multifaceted characteristics of suicide, it has received several definitions, some of them of an operational nature. In the World Report on Violence and Health there is a detailed discussion on different proposed definitions, highlighting advantages and limitations of each. It also discusses proposed synonyms or alternatives, such as the one employed in the International Classification of Diseases (self-inflicted injury).

De Leo and collaborators (2006) have proposed a much-used definition that takes into account limitations of previous ones. They stated: Suicide is an act with a fatal outcome, which the deceased, knowing or expecting a potentially fatal outcome, has initiated and carried out with the purpose of bringing about wanted changes.

# **Suicide Attempts**

In addition to suicide – as an extreme form of self-injury – there are other non-fatal forms of self-injury that deserves mention, where the outcome in not death, varying from suicide attempts (or parasuicide) to different degrees of self-mutilation. However, the information on suicide attempts and these other forms of self-harm does not match the quantity and quality of that on mortality due to suicide. While

information about suicide is based on periodic reports submitted by countries to the World Health Organization, and carefully checked for its accuracy, no records exist equivalent to suicide attempts. What is known about it comes from specific and circumstantial clinical/pathological studies, most of which cover relatively circumscribed geographic areas, generally a city or catchment area of a given hospital or emergency room.

### Potential Causes of Suicide

Suicide is a multifactorial phenomenon for which no single cause can be identified. Generally speaking, suicide is a process affecting different domains of the life of an individual, i.e. physical, psychological, social and cultural.

It is believed that constitutional and genetic factors might play a role, but so far no specific mechanism has been pinpointed. There is room to believe that a chain of reactions mediated by noradrenergic and serotonergic systems end up by creating a given physiological tonus (more or less reactive, more or less impulsive) that will help in shaping terminal behaviours. Mann and collaborators have demonstrated the presence of the same genetic markers for violent behaviours in both people who died from suicide employing very violent methods and extremely violent homicides (Mann et al. 2009).

On the other hand, it is well known that hopelessness, helplessness and despair were present in most cases of suicide studied in this respect. Those feeling can arise from a variety of reasons, but are almost always present in some forms of mental disorders, among them, depression, alcoholism and schizophrenia. Indeed, psychological autopsy studies have shown that those 3 forms of mental disorders were present in about 80.0 % of all those who died from suicide. Sadly, the majority of them did not receive appropriate treatment and care – which is another form of violence.

The social domain provides numerous situations of violence that constitute risk factors for suicidal behaviours. From child, physical and sexual abuse to negative interpersonal experiences (e.g., rejection, affective breakdowns, social and professional ruptures) there is host of events that can combine with the previous one to facilitate specific forms of suicidal behaviour.

Finally, there are cultural factors that more than presenting a risk can act as protective factors. Some cultural factors, such as religiosity or spirituality, and social connectedness, can act as potent protective factors against suicidal behaviors, thus offsetting even the presence of strong risk factors active in one of the other domains (Bertolote and Fleischmann 2002).

Thus, in suicidology, instead of analyzing "causes" solely, it is preferable to consider that suicidal behaviors result from a balance between risk (predisposing and precipitating) factors and protective factors. Table 4.1 shows a non-exhaustive list of factors often found in people who engage in self-injurious behaviours, whereas some factors found to be protective against suicidal behaviours are presented in Table 4.2. Importantly, with the current level of knowledge there is

**Table 4.1** Factors usually found in people at risk of suicidal behaviours

Predisposing (distal) factors	Precipitating (proximal) factors			
Socio-demographic and individual factors	Environmental factors	Recent stressors		
Previous attempt(s) Psychiatric disorders (mainly depression, alcoholism, schizophrenia and some types of personality disorders)	Easy access to methods of sui- cide (e.g. firearms, poisons, high places)	1		
Medical diseases (terminal, painful, debil- itating, disabling, socially rejected (e.g., AIDS)) Family history of suicide, alcoholism or other psychiatric disorders		Family conflict Change in employment or financial situation Rejection from a		
Being divorced, widow or single Social isolation Being unemployed or retired		significant other		
Child/sexual abuse Recent discharge from a psychiatric hospital		Shame and fear of being found guilty		

Table 4.2 Some factors considered to be protective against suicidal behaviours

Cognitive style and personality	Family standards	Cultural and social factors	Environmental factors
Self esteem	Good family relationships	Adherence to positive values, norms and traditions	Good nutrition
Self-assurance	Support from family members	Good relationships with friends, workmates and neighbors	Good sleeping habits
Help-seeking when needed	Good parenting in childhood	Support from relevant others	Sunlight
Openness to get advice		Friends who do not use drugs	Physical activities
Openness to others' experiences		Social integration at work, church and sports activities, clubs etc.	Tobacco and drug- free
Openness to acquire new knowledge		Clear goals in life	environments
Good communica- tion skills			

no way of ascertaining the relative weights of each of them. Only in post-mortem analysis of individual cases one can make sense of the interplay of several factors, none of which in isolation could have produced that outcome.

## Magnitude

The International Classification of Diseases – 10th Version (ICD-10) classifies deaths primarily into those due to natural causes (i.e., diseases, communicable or otherwise, and malformations) and those due to unnatural causes. The latter can be subdivided further into: Unintentional injuries (i. e., accidents not involving motor vehicles), road traffic accidents, intentional (interpersonal) injuries (i.e., homicides), self-inflicted injuries (i.e., suicide) and violence (i.e., collective violence such as wars, terrorism).

Currently, only slightly over 100 countries provided updated information on mortality to WHO (out of its 194 membership). According to the most recent data provided by those Member States, in 2011 there were nearly 850,000 deaths due to suicide. Table 4.3 lists suicide mortality rates (per 100,000) for males and females in those countries.

It can be seen that there are huge differences across countries but, although some variation in the quality and reliability of the data are to be expected, those figures represent a clear and informative picture of the world situation. In general, rates for males are 2–4 times higher than those for females and while the highest rates for males are usually observed in members of the former Soviet Union, the highest female rates are found in Asia. Yet, what is not visible in this table is the huge variation according to age, a serious inequity problem that will be discussed later on.

By comparison with other causes of death (Table 4.4), suicide ranked 14th in 2002, and WHO projections indicate that in 2030 it will raise to 12th, when it will reach more than a million deaths (Mathers and Loncar 2006), which is more than those due to homicides, terrorism and wars combined. It is noticeable that of all other unnatural causes of death, only road injury will kill more persons than suicide.

# **Inequity: A Special Form of Violence**

In addition to the overall violence associated with suicide, there are other, more subtle forms of violence related to it: the disproportioned share affecting the elderly.

Age-adjusted suicide mortality rates were extracted from the WHO mortality data bank (2004 onwards) concerning people aged 65 years and above. In view of the disproportionate weight of individual cases of relatively rare events (such as suicide mortality) in small populations, countries with less than 100,000 inhabitants, those with very low overall suicide rates (less than 5 per 100,000) or less than 50 cases of suicide per year for both males and females aged 65 and plus years were not included in the analyses. The final sample, shown in Table 4.5, comprised of 65 countries, of which 22 were located in the American Region, 37 in the European

**Table 4.3** Suicide rates per 100,000 by country, year and sex. Most recent year available; as of 2011

Country	Year	Males	Females
Albania	2003	4.7	3.3
Antigua and Barbuda	1995	0.0	0.0
Argentina	2008	12.6	3.0
Armenia	2008	2.8	1.1
Australia	2006	12.8	3.6
Austria	2009	23.8	7.1
Azerbaijan	2007	1.0	0.3
Bahamas	2005	1.9	0.6
Bahrain	2006	4.0	3.5
Barbados	2006	7.3	0.0
Belarus	2007	48.7	8.8
Belgium	2005	28.8	10.3
Belize	2008	6.6	0.7
Bosnia and Herzegovina	1991	20.3	3.3
Brazil	2008	7.7	2.0
Bulgaria	2008	18.8	6.2
Canada	2004	17.3	5.4
Chile	2007	18.2	4.2
China (selected rural and urban areas)	1999	13.0	14.8
China (Hong Kong SAR)	2009	19.0	10.7
Colombia	2007	7.9	2.0
Costa Rica	2009	10.2	1.9
Croatia	2009	28.9	7.5
Cuba	2008	19.0	5.5
Cyprus	2008	7.4	1.7
Czech Republic	2009	23.9	4.4
Denmark	2006	17.5	6.4
Dominican Republic	2005	3.9	0.7
Ecuador	2009	10.5	3.6
Egypt	2009	0.1	0.0
El Salvador	2008	12.9	3.6
Estonia	2008	30.6	7.3
Finland	2009	29.0	10.0
France	2007	24.7	8.5
Georgia	2009	7.1	1.7
Germany	2006	17.9	6.0
Greece	2009	6.0	1.0
Grenada	2008	0.0	0.0
Guatemala	2008	5.6	1.7
Guyana	2006	39.0	13.4
Haiti	2003	0.0	0.0
Honduras	1978	0.0	0.0
Hungary	2009	40.0	10.6
Iceland	2008	16.5	7.0
India	2009	13.0	7.8

(continued)

Table 4.3 (continued)

Country	Year	Males	Females
Iran	1091	0.3	0.1
Ireland	2009	19.0	4.7
Israel	2007	7.0	1.5
Italy	2007	10.0	2.8
Jamaica	1990	0.3	0.0
Japan	2009	36.2	13.2
Jordan	2008	0.2	0.0
Kazakhstan	2008	43.0	9.4
Kuwait	2009	1.9	1.7
Kyrgyzstan	2009	14.1	3.6
Latvia	2009	40.0	8.2
Lithuania	2009	61.3	10.4
Luxembourg	2008	16.1	3.2
Maldives	2005	0.7	0.0
Malta	2008	5.9	1.0
Mauritius	2008	11.8	1.9
Mexico	2008	7.0	1.5
Netherlands	2009	13.1	5.5
New Zealand	2007	18.1	5.5
Nicaragua	2006	9.0	2.6
Norway	2009	17.3	6.5
Panama	2008	9.0	1.9
Paraguay	2008	5.1	2.0
Peru	2007	1.9	1.0
Philippines	1993	2.5	1.7
Poland	2008	26.4	4.1
Portugal	2009	15.6	4.0
Puerto Rico	2005	13.2	2.0
Republic of Korea	2009	39.9	22.1
Republic of Moldova	2008	30.1	5.6
Romania	2009	21.0	3.5
Russian Federation	2006	53.9	9.5
Saint Kitts and Nevis	1995	0.0	0.0
Saint Lucia	2005	4.9	0.0
Saint Vincent and the Grenadines	2008	5.4	1.9
Sao Tome and Principe	1987	0.0	1.8
Serbia	2009	28.1	10.0
Seychelles	2008	8.9	0.0
Singapore	2006	12.9	7.7
Slovakia	2005	22.3	3.4
Slovenia	2009	34.6	9.4
South Africa	2007	1.4	0.4
Spain	2008	11.9	3.4
Sri Lanka	1991	44.6	16.8
Suriname	2005	23.9	4.8
Sweden	2008	18.7	6.8

(continued)

Table 4	<b>.3</b> (c	ontinued)
---------	--------------	-----------

Country	Year	Males	Females
Switzerland	2007	24.8	11.4
Syrian Arab Republic	1985	0.2	0.0
Tajikistan	2001	2.9	2.3
Thailand	2002	12.0	3.8
TFYR Macedonia	2003	9.5	4.0
Trinidad and Tobago	2006	17.9	3.8
Turkmenistan	1998	13.8	3.5
Ukraine	2009	37.8	7.0
United Kingdom	2009	10.9	3.0
USA	2005	17.7	4.5
Uruguay	2004	26.0	6.3
Uzbekistan	2005	7.0	2.3
Venezuela	2007	5.3	1.2
Zimbabwe	1990	10.6	5.2

Source: WHO Mortality Data Bank

**Table 4.4** Expected changes in rankings for 15 leading causes of death, 2002 and 2030

Disease or injury	2002 Rank	2030 Rank
Ischaemic heart disease	1	1
Cerebrovascular disease	2	2
Lower respiratory infections	3	5
HIV/AIDS	4	3
COPD	5	4
Perinatal conditions	6	9
Diarrhoeal diseases	7	16
Tuberculosis	8	23
Trachea, bronchus, lung cancers	9	6
Road traffic accidents	10	8
Diabetes mellitus	11	7
Malaria	12	22
Hypertensive heart disease	13	11
Self-inflicted injuries	14	12
Stomach cancer	15	10

Source: Mathers and Loncar (2006)

Region and 6 in Australasia. No countries from other parts of the world (i.e. Africa, East Mediterranean and South-East Regions) met the inclusion criteria.

Those rates were then compared with the overall national average suicide mortality rate by sex. Those rates at least 50.0 % above the overall national average for the same sex were considered as 'disproportionally' high; similarly, those rates 50.0 % or less below the overall national average for the same sex were considered as 'disproportionally' low. Tables 4.6 and 4.7 show the results of this comparison, for males and females, respectively.

It can be see that for males, with the exception of the Dominican Republic, suicide rates are disproportionately high among those aged 65 and plus. For

**Table 4.5** Frequency and rate (per 100,000) of suicide mortality in selected countries among people aged 65 years and over, by sex. Most recent year available

		65–74	years of	age		75+ ye	ars of ag	e	
		Males		Female	es	Males		Female	es
Country	Year	N	Rate	N	Rate	N	Rate	N	Rate
Argentina	2008	203	19.9	36	2.7	208	32.7	36	3.0
Australia	2006	92	13.6	31	4.4	90	17.8	34	4.6
Austria	2009	134	36.3	59	13.8	186	78.7	68	15.8
Belarus	2007	213	71.0	81	15.3	122	77.4	70	16.5
Belgium	2005	161	36.5	75	14.5	170	55.1	69	12.8
Brazil	2008	442	12.7	110	2.6	318	15.6	52	1.8
Bulgaria	2008	103	32.0	66	11.4	132	60.4	66	18.7
Canada	2004	165	15.7	64	5.5	154	20.7	44	3.7
Chile	2007	111	29.5	14	3.1	63	28.3	9	2.5
China (Hong Kong)	2009	77	33.2	40	17.9	85	46.6	74	28.9
Colombia	2007	120	18.6	4	0.5	67	18.1	3	0.6
Costa Rica	2009	12	14.7	2	2.3	6	11.3	0	0.0
Croatia	2009	87	46.1	34	13.5	107	97.2	53	24.5
Cuba	2008	136	36.4	67	16.8	199	82.8	37	13.1
Czech Rep.	2009	94	24.1	27	5.4	135	56.2	42	9.3
Denmark	2006	75	35.2	25	14.1	79	54.5	25	10.6
Dominican Rep.	2005	12	7.3	1	0.6	2	2.0	1	1.0
Ecuador	2009	44	17.5	5	1.8	20	12.4	9	4.5
El Salvador	2008	9	7.9	1	0.7	19	24.9	1	1.0
Estonia	2008	15	31.0	4	4.9	18	65.4	12	16.5
Finland	2009	74	33.5	20	7.8	57	38.2	20	7.3
France	2007	755	33.3	317	11.8	1,315	68.0	461	13.7
Georgia	2009	22	15.0	8	3.7	18	19.9	10	5.8
Germany	2006	1,215	27.9	448	9.1	1,160	49.8	611	13.7
Greece	2009	28	5.6	9	1.5	49	11.3	9	1.6
Guatemala	2008	11	6.2	1	0.5	9	8.6	1	0.0
Guyana	2006	9	65.3	0	0.0	3	43.5	0	0.0
Hungary	2009	240	65.3	93	16.8	214	90.5	91	18.4
Ireland	2009	26	19.2	10	7.0	5	5.8	1	0.8
Israel	2007	19	11.2	8	3.9	27	20.4	6	3.0
Italy	2007	450	15.7	143	4.3	596	28.3	171	4.8
Japan	2009	2,993	41.8	1,431	17.8	2,216	42.8	1,648	19.4
Kazakhstan	2008	143	47.7	41	8.3	86	73.6	47	16.8
Korea (South)	2009	1,498	99.5	647	34.2	1,006	173.9	920	77.2
Kyrgyzstan	2009	7	9.8	5	5.1	4	10.3	3	4.3
Latvia	2009	42	50.5	7	4.9	30	67.8	26	21.4
Lithuania	2009	91	80.6	21	11.1	57	83.5	40	24.1
Mexico	2008	187	9.8	12	0.6	139	12.2	13	0.8
Netherlands	2009	85	13.3	52	7.5	96	32.2	48	6.9
New Zealand	2007	19	13.8	0	0.0	23	23.2	7	4.9
Nicaragua	2006	8	11.5	1	1.3	5	12.9	1	2.0
Norway	2009	35	20.2	12	6.4	36	26.4	7	3.2
y			<b>_</b>		٧٠.				inued)

(continued)

Table 4.5 (continued)

	65–74	65-74 years of age				75+ years of age				
		Males		Females		Males	Males		Females	
Country	Year	N	Rate	N	Rate	N	Rate	N	Rate	
Panama	2008	11	16.8	2	2.9	3	7.8	2	4.5	
Paraguay	2008	8	8.4	1	1.0	7	13.5	1	1.5	
Peru	2007	10	2.1	5	0.9	13	5.2	3	0.9	
Poland	2008	370	31.7	102	6.2	260	33.8	86	5.5	
Portugal	2009	116	25.7	43	7.7	202	60.1	58	10.7	
Puerto Rico	2005	29	23.3	6	3.9	20	23.1	3	2.4	
Rep. Moldova	2008	43	47.9	15	11.1	9	18.5	9	9.6	
Romania	2009	258	32.8	60	5.6	159	31.0	53	6.3	
Russian Federation	2006	3,104	70.0	1,048	13.3	1,701	86.5	1,401	24.8	
Serbia	2009	161	51.0	80	20.0	204	96.2	92	28.4	
Singapore	2006	19	21.1	15	14.7	14	30.0	19	28.1	
Slovakia	2005	36	24.3	11	5.0	40	45.3	11	6.2	
Slovenia	2009	41	49.0	21	20.4	38	78.2	21	20.6	
Spain	2008	339	19.4	118	5.8	484	32.9	154	6.6	
Sweden	2008	110	34.2	33	7.7	108	43.2	42	8.7	
Switzerland	2007	126	42.7	64	18.8	191	86.5	122	32.7	
Trinidad and Tobago	2006	8	36.1	2	6.1	3	29.7	0	0.0	
UK	2009	219	8.7	81	2.9	195	10.2	97	3.3	
Ukraine	2009	862	53.3	313	11.2	532	66.3	313	15.4	
Uruguay	2004	46	43.2	8	5.6	67	95.9	14	10.8	
USA	2005	1,935	22.7	403	4.0	2,603	37.8	448	4.0	
Uzbekistan	2005	42	12.0	12	2.9	13	8.4	7	2.7	
Venezuela	2007	37	8.6	7	1.5	40	17.2	7	2.4	

Source: WHO Mortality Data Bank

females, the tables show a similar situation, with the exception of the age groups 65–74 years in Latvia and in Estonia.

This is clearly a situation of a double violence: the self-inflicted violence that resulted in death and a long way of neglect and disguised violence towards the elderly that contribute to this outcome, and this is not fully acknowledged.

We know that many, perhaps most, cases of suicide can be prevented equally across all age groups, but there is a perverse tendency to accept suicide in late age as "normal". There is no justification for the presence of more than 300.0~% more cases of suicide in some age groups than in others.

	National overall male	65–74 years	% of	75+ years	% of
Country	rate (A)	old	(A)	old	(A)
Austria (2009)	23.8	36.3	151.0	78.7	330.0
China (Hong Kong) (2009)	19.0	33.2	174.0	46.6	245.0
Colombia (2007)	7.9	18.6	235.0	18.1	229.0
Croatia (2009)	28.9	46.1	159.0	97.2	336.0
Cuba (2008)	19.0	36.4	191.0	82.8	435.0
Denmark (2006)	17.5	35.2	201.0	54.5	311.0
Dominican Republic (2005)	3.9	7.3	187.0	2.0	- 51.0
Georgia (2009)	7.1	15.0	211.0	19.9	280.0
Panama (2008)	9.0	16.8	186.0	7.8	86.0
Portugal (2009)	15.6	25.7	165.0	60.1	385.0
Serbia (2009)	28.1	51.0	181.0	96.2	342.0
Slovenia (2009)	36.4	49.0	135.0	78.2	215.0
South Korea (2009)	39.9	99.5	249.0	173.9	436.0
Switzerland (2007)	24.8	42.7	172.0	86.7	349.0
Trinidad and Tobago (2006)	17.9	36.1	201.0	29.7	166.0
Uruguay (2004)	26.0	43.2	166.0	95.9	367.0

**Table 4.6** Countries with the highest suicide mortality rates (per 100,000) among 65+ years old males, as compared to the national same-sex overall rate

## **Suicide Prevention**

The first well-documented systematic efforts for suicide prevention date back to the early twentieth century (1906), when the Salvation Army launched in London its program for suicide prevention while in the same year, the US National League started in New York the operations of "Save a Life" (Bertolote 2004).

These first steps to prevention were inspired by religious, humanitarian and philanthropic principles, conducted by society groups. They did not have a scientific basis. Several initiatives aimed at the prevention of suicide ensued, most of them inspired by clinical principles – usually individual approaches that reflected ideological and theoretical orientations, not always with a scientific basis.

The methodological weaknesses, and above all, limited results, of these initial programs did not fit the requirements of public health, particularly when compared to others with better scientific validation and more satisfactory results, both in terms of efficacy and cost-benefit.

In 1998, based on the available evidence, WHO identified, with the help of a distinguished panel of experts from different regions of the world, the following 3 priority areas for the development of suicide prevention activities:

- Treatment of people with mental disorders.
- Restricting access and methods used in suicidal behavior.
- Appropriate approach by the media when covering news and information related to suicidal behavior.

	National overall female	65–74 years	% of	75+ years	% of
Country	rate (A)	old	(A)	old	(A)
Austria (2009)	7.1	13.8	194.0	15.8	225.0
Bulgaria (2008)	6.2	11.4	184.0	18.7	301.0
China (Hong Kong) (2009)	10.7	17.9	174.0	28.9	167.0
Croatia (2009)	7.5	13.5	180.0	24.5	326.0
Cuba (2008)	5.5	16.8	305.0	13.1	238.0
Denmark (2006)	6.4	14.1	220.0	10.6	166.0
Estonia (2008)	7.3	4.9	67.0	16.5	226.0
Georgia (2009)	1.7	3.7	218.0	5.8	341.0
Germany (2006)	6.0	9.1	152.0	13.7	228.0
Israel (2007)	1.5	3.9	260.0	3.0	200.0
Latvia (2009)	8.2	4.9	60.0	21.4	260.0
Lithuania (2009)	10.4	11.1	107.0	24.0	231.0
Moldova (2008)	5.6	11.1	198.0	9.6	171.0
Panama (2008)	1.9	2.9	153.0	4.5	236.0
Portugal (2009)	4.0	7.7	193.0	10.7	267.0
Puerto Rico (2005)	2.0	3.9	195.0	2.4	120.0
Russian Federation (1995)	9.5	13.3	140.0	24.8	261.0
Serbia (2009)	10.0	20.0	200.0	28.4	284.0
Singapore (2006)	7.7	14.7	191.0	28.1	365.0
Slovenia (2009)	9.4	20.4	217.0	20.6	219.0
South Korea (2009)	22.1	34.2	155.0	77.2	349.0
Switzerland (2007)	11.4	18.8	165.0	32.7	286.0

**Table 4.7** Countries with the highest suicide mortality rates (per 100,000) among 65+ years old females, as compared to the national same sex overall rate

In 2004, a group of experts from 15 countries from all continents gathered in Salzburg, Austria, under the auspices of the International Association for Suicide Prevention in order to conduct a systematic review of the scientific evidence on the effectiveness of virtually all strategies and interventions already proposed for the prevention of suicide (Mann et al. 2005).

This high level group of experts confirmed the relevance of the 3 above proposed areas, and added 2 more, whose evidence had arisen subsequently namely:

- Appropriate education and information for schools, the general public and workers in the health and social sectors.
- Active and systematic screening of people at high risk for suicidal behavior.

The report of this meeting was published in 2005 by the Journal of the American Medical Association (Mann et al. 2005).<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> More recently, the World Health Organization has released the report Preventing Suicide: A Global Imperative www.who.int/mental\_health/suicide-prevention/world\_report\_2014

## Conclusion

Suicide is an immemorial, multifarious, complex and challenging form of violence. Due to the individual, family and collective suffering it creates, coupled with personal, material and economic losses it causes, it has become a serious public health problem. In addition, it hits in an unequal proportion different segments of society adding another layer of violence to an already tragic condition.

Although we have already an impressive armamentarium to prevent and cope with it, not always, not everywhere, and not for everybody it is sufficiently articulated and implemented. Well-conducted efforts, organized around national strategies, can make a real difference in order to reduce this avoidable form of violence.

## References

Bertolote, J. (2004). Suicide prevention: At what level does it work? World Psychiatry, 3, 147–151.

Bertolote, J., & Fleischmann, A. (2002). A global perspective in the epidemiology of suicide. Suicidology, 2, 6–8.

Camus, A. (1942). Le mythe de Sysiphe. Paris: Gallimard.

De Leo, D., Bertolote, J., & Lester, D. (2002). Self-directed violence. In E. G. Krug et al. (Eds.), World report on violence and health. Geneva: World Health Organization.

De Leo, D., Burgis, S., Bertolote, J. M., Kerkhof, A. J., & Bille-Brahe, U. (2006). Definitions of suicidal behavior: Lessons learned from the WHO/EURO multicentre study. *Crisis*, 27, 4–156.

Mann, J., Apter, A., Bertolote, J., et al. (2005). Suicide prevention strategies: A systematic review. *Journal of the American Medical Association*, 294, 2064–2074.

Mann, J., Arango, V., Avenevoli, S., et al. (2009). Candidate endophenotypes for genetic studies of suicide behavior. *Biological Psychiatry*, 65, 556–563.

Mathers, C., & Loncar, D. (2006). Projections of global mortality and burden of disease from 2002 to 2030. *PLoS Medicine*, *3*, e442, 2011–2030.

Minois, G. (1995). Histoire du suicide. Paris: Fayard.

World Health Organization. (1998). *Primary prevention of mental, neurological and psychosocial disorders*. Geneva: World Health Organization.