

Reception June 16, 2015 - Acceptance February 2, 2016

Violent deaths in Mexico, a synthesis of two recent decades

Laura Elena Trujillo Olivera
elena2_333@hotmail.com

Álvaro José Villafaña Trujillo
villafanetrujillo85@gmail.com

Mario Fu Espinosa
mariofuespinosa@hotmail.com

Néstor Rodolfo García Chong
nes26g@hotmail.com

Autonomous University of Chiapas (UNACH)



ABSTRACT

Death is considered a maximum degree of damage to the individual's life is a useful indicator to describe the risks in populations, particularly when it comes to violent or cause-specific death. The proposal of the work was to measure death by violence in Mexico during the last two decades: 1990-2011, delving into what happened during the preceding six years. Information on mortality was obtained from the National Health Information System (SINAIS) and denominators from National Institute for Statistic and Geography (INEGI). Specific rates were calculated by sex and date; also the incidence ratios, which indicate excess risk among subgroups were estimated.

The results show that between 1990 and 2005, the risk of dying in Mexico rose from 14.2 to 9.68, ie, the trend was downward; however, the period 2010 to add the behavior is clearly observed up to 23.07 deaths per hundred thousand. Between 2006 and 2011 a sharp rise in the risk of death was observed, about 10 times higher for men than for women, which implies high vulnerability in the family and society.

Keywords: Death, power, structural violence.

Violence is a historical phenomenon. It can be argued that as work transformed human societies, violence constantly reconfigures it. As such, it can be analyzed from different disciplinary perspectives: social, criminal and recently from public health sciences. Violence, according to Reiss (1997), is defined as visible and obvious facts of physical assault that intentionally cause damage capable of producing temporary or permanent damage or even lead to death. However, the intentional use of physical force against such an order to hurt, abuse, rob, humiliate, dominate, reviling, torture, kill or cause death including suicide is a violent action sometimes motivated by a desire for revenge. In addition, “... it must be understood as the interaction between factors that have to do with the psychosocial development of individuals, their neurological and hormonal differences and social processes that occur around them.” (Hijar, Lopez and White, 1997: 2) That is, it has a biological substrate but also a strong social determinant.

Some authors describe forms of violence, defining them according to the victims: children, women, the elderly (Londoño and Guerrero, 1999); the perpetrator: criminal, military, the State (Maldonado, 2014; Pereyra, 2014); Type: manifest and structural (Hijar et al., 1997). In any case, it is the exercising of force / power over another person, on a community or on oneself.

The concept of structural violence stems from the proposal of Galtung (La Parra and Tortosa, 2003), a model similar to an iceberg, where only direct violence is perceived, although its hidden origins are linked to the unmet needs of a sector the population, which is socially unfair because it could be addressed with appropriate decisions. The phenomenon could be understood as an expression of social injustice, inequality, inequity, exclusion and poverty. The concept of structural violence is privileged because:

“I) Both structural violence and direct violence are reasons why an important sector of humanity cannot meet their basic human needs. ii) The term structural violence is useful to investigate the relationship between structural violence situations and forms of direct violence. iii) The term structural violence is useful to introduce the mechanisms of the exercising of power as causes of processes of deprivation of basic human needs. Social injustice, poverty and inequality, derived from dynamics produced by economic relationships, also can be explained starting from political oppression using disparate mechanisms as institutional discrimination, exclusionary legislation of certain groups or fiscal policy and regressive public spending, to name a few. Speaking of violence we are in the semantic field of power. iv) The term structural violence has a burden of a determining and explanatory valuation : Deprivation is defined as the result of a conflict between two or more parties in which the distribution, access or possibility of the use of resources is systematically resolved in favor of some of the parties and to the detriment of others. The term structural violence thus serves as

a reminder that the efficiency occurs in any case at the expense of a form of distribution that is systematically unfavorable to certain parties, that this is controversial and that there are reasons to believe that the situation is imposed by winners and is not wanted by the losers “(La Parra and Tortosa, 2003: 61-62).

Violence as a cause of death is high in Latin America, where homicides are reported as 27.5 per hundred thousand inhabitants, a figure which led in 2005 to define it as the second most violent region in the world (Buvinic, Morrison and Orlando, 2005). Although the greatest regions that are affected are in some regions, as reported by Briceno (2002) by placing greater violence in big cities, which include Rio de Janeiro (Brazil), San Salvador El Salvador), Caracas (Venezuela) and Cali (Colombia). The figures from that report show that Mexico has a lower incidence of death from violence.

Even though in Mexico during the decade of 1990 there was a slight decending tendency in the number of deaths by violence (Lopez; Hijar, Rascon, and Blanco, 1996; Hijar et al, 1997; Londoño and Guerrero, 1999; Garzón, 2010) the phenomenon was not homogenous. However Garzón (2010) states that this reduction does not necessarily reflect the reduction of crime, but rather it may well be due to the consolidation of certain structures of organized crime.

In Mexico in 1979, 17.5 deaths were registered as a result of violence-for every hundred thousand inhabitants. In 1992 it reached just under 20 deaths (19.1) by the same population constant. The differences between entities were clear. In the Yucatan , only three were reported, while in Guerrero there were 57 deaths for the same amount of population. The occurrence was 10 times higher among men, more sharply from 35 years of age. A figure greater than a 15 - fold increased risk in this age group (Lopez, et al, 1996; Hijar et al . , 1997) was estimated. Obviously, heterogeneity in the distribution of the phenomenon pointed to big cities, such as the Federal District (Londoño and Guerrero, 1999; Briceño, 2002), assuming a fact that violence in rural areas was lower, which is contrary to what was identified by Maldonado (2012), referring to Michoacan, where rural areas represent different forms of violence and the resulting deaths are not always recorded.

The independent work Hijar (1997) and Lopez (1996) highlight the effect on vulnerable groups (children and the elderly), and the fact that violence against women is reported in private spaces, while in the case of men it occurs in public spaces. While violence against women is not a minor matter, it will not be treated in this article.

Starting in 2000 there was documented in Mexico, particularly in certain regions of the country, increasing death by violence linked to organized crime and the state’s reaction to it. Although data on violence appears daily in the

media, the magnitude that is recorded is not objectively dimensioned by citizens, who the majority are terrified by the phenomenon.

In light of the events that are shaking the country, this work aims to document the violent deaths in Mexico and highlight some aspects of health in its different dimensions. Also, the data seen in the context of the “war on drugs” declared during the six years (2006-2012) of President Calderon, to discern roughly how the official discourse legitimizes the use of force by the state, with permanent human rights violations, manipulating of public opinion, displacing other need claimed by the population within the national agenda: education and health coverage and higher quality services, more and better jobs and, in general, better quality of life for Mexicans.

METHODOLOGY

A transversal study was done taking as an event of interest the deaths in Mexico during the period between 1998-2011. The digitally based data of the National System of Health Information (*Sistema Nacional de Información Salud* -SINAIS) was recovered, discriminating the causes reported in the International Classification of Diseases (ICD) contained in Chapter XX - External Causes of Mortality - ninth and tenth revision, respectively: *attacks and killings* (E960-E969; X85-Y09) *Suicides and self - inflicted injury* (E950-E959; X60-X84) and *events of undetermined intent* (E980-E989; Y10-Y34).¹

To build the cumulative incidence (IA) of the event, it was defined as:

$$IA = \frac{\text{No.de muertes registradas en el país durante el período}}{\text{Población registrada en el país durante el período}} \times K,$$

The number of events corresponds to the numerator; the denominators were calculated based on data from the Institute of Geography and Statistics (INEGI), and the National Census of Population and Housing, 1990, 2000 and 2010. The population growth was estimated between each period arithmetically, using the average annual growth rate available from the same source. Masculinity reasons were calculated ($R_M = \text{Def. in men} / \text{Def. in women}$) Reasons of incidence $RI = I_m / I_w$ ($I_m = \text{Incidence in men}$, $I_w =$

¹CIE Revisions 9a and 10a. Available at: www.ine.es/daco/daco42/sanitarias/listas_02.doc

Incidence in women) And differences in incidence (where R_m is the ratio of masculinity and RI is the ratio of incidents, which estimates excess risk of dying associated with being male (Hernandez, 2009).

RESULTS

Between 1998 and 2011, 294,791 deaths were recorded under codes of Chapter XX, External Causes of Mortality of the International Classification of Diseases (ICD). The distribution of the event occurs in three main categories or codes: Attacks and killings; Suicides and unidentified intention events.

Table 1. Percentage distribution of cause of death by violence according to main categories (CIE). Mexico. 1998-2011.

Año	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total de defunciones	20424	18815	16738	16451	16754	16852	16393	17153	17516	15633	21250	27909	34359	38544
Agresiones / Homicidios (%)	66.9	65.1	64.1	62.5	60.2	59.9	56.9	57.8	59.7	56.7	65.9	71.0	75.0	70.6
Suicidios (%)	16.4	17.7	20.8	23.2	23.1	24.3	25.1	25.1	24.4	28.1	22.0	18.6	14.6	14.8
Eventos de Intención no determinada (%)	16.8	17.2	15.1	14.3	16.7	15.8	18.0	17.0	15.9	15.2	12.1	10.5	10.5	14.6

Source: National Health Information System (SINAIS).

It should be noted that when comparing 1998 and 2011, the number of deaths due to *homicide* practically doubles; the proportion of this peaks in 2010, when three out of four deaths were reported due to violence. A turning point is also observed in 2007, after which the trend is clearly upward-65.3% of all deaths due to homicide. For this reason the emphasis of this work is located in this category. The phenomenon of suicide has its own characteristics and complexity. In cases of death resulting from events whose intention was not possible to determine only one could speculate.

ATTACKS AND MURDERS

Table 2 shows the behavior of deaths due to assault / homicide. The references to the years 1990 and 1995 are added as a comparison parameter in the approximation of the risks of dying from violent causes.

Table 2. Behavior of mortality due to homicide. Mexico.

Año	Incidencia Acumulada*			R _M
	General	Hombres	Mujeres	
1990	14.8	25.4	3.04	8.2
1995	17.02	31.11	3.27	9.2
2000	11.05	20.28	2.62	7.2
2005	9.68	17.29	2.45	6.7
2006	9.92	17.82	2.4	7
2007	8.28	14.9	1.98	7.1
2008	13.05	24.6	2.58	8.9
2009	17.82	32.94	3.4	9.2
2010	23.07	42.72	4.22	9.7
2011	22.88	41.77	4.43	9

Source: SINAIS and INEGI. * Deaths per 100, 000 people

R_M = Ratio of masculinity

The cumulative incidence -equivalent to the probability of dying from homicide-shows a downward trend until 2006, during the six years of the presidency of Felipe Calderon it increased 2.2 times. Among men, the same behavior is maintained (2.3 times increase), and even among women is not as pronounced (1.8 times) following the same trend. This set of data shows that the phenomenon occurs predominantly among men. As an example, in 2010, 9.7 male deaths occurred for every female victim of homicide in Mexico.

It should be noted that the behavior of the frequency of homicides over 15 years, between 1990 and 2005, show irregular variations. However, the trend during the six years of Calderon shows clear evidence of a steadily upward trend, increasing more than twice the risk of dying violently in Mexico.

The reasons of incidence and the differences between them -proportionally show the risks of dying by sex of the victim - that the probability of being a victim of homicide is ten times higher among men compared to women, as occurred in 2010 (Table 3) when the maximum expression was reported during the described period.

Continuing with the description, Figure 1 illustrates that the behavior of death by homicide in Mexico has had a dramatic increase, consistently over the described period, where 2010 reports the maximum figure.

Table 3. Behavior of the reasons and differences in the cumulative incidence of homicide. Mexico.

Año	RI	DI
1990	8.5	22.76
1995	9.5	27.84
2000	7.8	17.66
2005	7.1	14.84
2006	7.4	15.42
2007	7.5	12.92
2008	9.3	22.02
2009	9.7	29.54
2010	10.1	38.5
2011	9.4	37.34

Source: calculations based on INEGI and SINAIS

Figure 1. Distribution of deaths between 1990 and 2010 in Mexico, according to age groups. The frequency is controlled in absolute numbers. The frequency of the event doubles between 2000 and 2010.

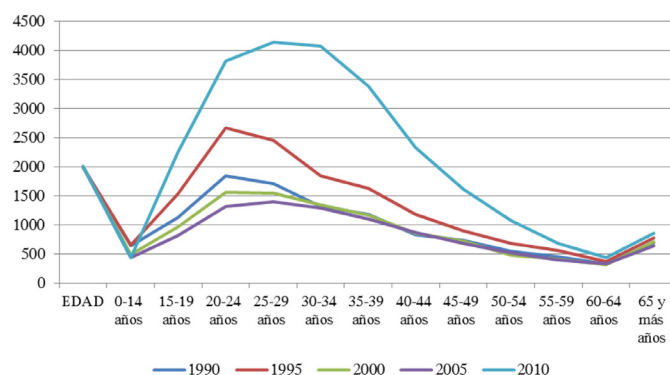
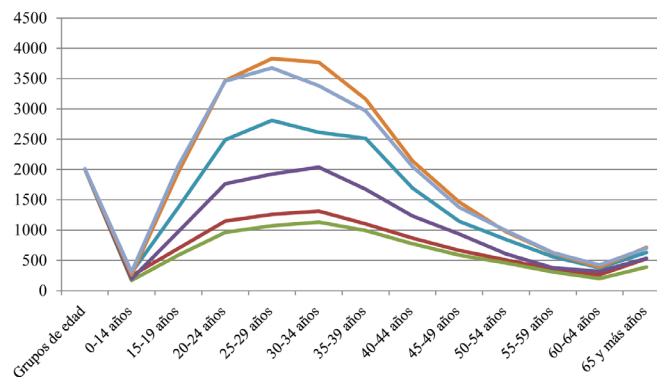


Figura 2. Behavior of male mortality due to homicide, by age, in Mexico, during the six year period of 2006-2011. Note the dramatic increase from the age of 14, with a peak between 20-24 and up until 40 years of age, when the most obvious decline begins.



During the six years of the Calderon presidency (2006-2011) deaths from homicide of an unspecified age increased from 188 to 1,594, meaning that multiplied 8.5 times. When comparing the behavior of this data, the average for the period between 1990-2005 is 202 unidentified men. The age group they belong to was not reported. During the period 2006-2011, the average was 567, which means that it multiplied nearly three times (2.8), which states that at least 95 people each year were placed in a common grave and their families are uncertain of their loss. This figure corresponds to the recorded events, which is distinct to the number of *missing persons*, for which a report is not known.

On the basis of that death was due to homicide occurs during the productive age and considering that every death recorded during the last presidency was on average at least 30 years of healthy life lost (Lozano, Franco-Marina and Solis, 2007) a value can be obtained of 3,182,760 years of productive life disappeared- a regrettable loss in every way possible. The indicator of Healthy Life Years Lost (HLYL) is used, with a purely economic basis, to estimate the potential loss of production time of goods that were not achieved. It is not intended that this aspect is what matters in the described phenomenon.

DISCUSSION

The term structural violence refers to a conflict between power groups. The alarming increase in mortality recorded in Mexico due to killings during the described six - year period inevitably refers to the government 's decision to “*declare war on narcos*” in late 2006 (García, 2011; Bartolotta, 2011). Briceno (2002) argues that in Latin America we do not live in war, but there are

more orphaned children and widowed women today due to violence if there were one. They are called collateral damage, which undoubtedly disrupts the dynamics of the family group, would have been more contributors to microeconomics, greater dropouts rate and the end of opportunities (Garcia & Pacheco, 2000) which is understood as unsatisfied basic needs.

Although, as (Rubio, 1998, cited by Garzon, 2010: 4) state, “The monopolization of illegal markets, a recurrent idea in the literature on mafias and organized crime, is more consistent [to explain the levels of homicide] ... that the notion of a society in which the average citizen is a criminal. “It is essential to consider homicide mortality from a historical and political perspective. That is, unsatisfied basic needs that upsets people.

Contrary to the claims of Zepeda, the most common cause of death from violent causes are not accidents but murders, representing about seven out of ten deaths in the past presidency. We believe that talk of reckless violence is an understatement. This author reports that in 2001, the homicide rate was 40% within Chapter XX of the International Classification of Diseases (10th revision), a figure surpassed by Colombia and Brazil with 76% and 52%, respectively. Ten years later Mexico has 65% of deaths from homicide, which is an indicator of insecurity and unrest among citizens. The incidence of death by homicide in Mexico is comparable to that of Colombia, which reported 26 deaths from this cause, per hundred thousand inhabitants (Zepeda, 2007).

The potential impact of violence on health transcends the physical dimension, with assault causing more absenteeism and direct costs for medical care. It also has an effect on mental health - fear of travelling in certain public spaces in some areas of the country causes tension and sustained stress-undermining peoples quality of life and development opportunities. Recent reports point out that medical and paramedical staff, particularly those from public institutions, have a greater risk of being victims of direct violence.

According to Garcia (2011) the resources generated by drug trafficking are the second source of financing in Mexico (29 billion USD / year), slightly exceeded by oil ² . This would be impossible without the complicity and corruption of institutions and governments. It is paralleled that the estimated collateral damage amounted to 35,000 dead in five years, very close to what is reported in this study figure. According to this author, the alleged drug war has different aspects, but both should be highlighted. First, during the PAN period the State issued speeches to legitimize government inefficiency, which, in turn, is used to justify the escalation of death and permanent violation

2 Esta afirmación es correcta únicamente previo al desplome de los precios del petróleo, a finales del año 2015.

of human rights, particularly in the states in the northern border, which also promoted militarization throughout the national territory. In addition, there was a strengthening of repressive force in the Unified Police Command. Secondly, the adverse effect of introducing the culture of drug trafficking, which has different edges, was emphasized: first the whitewashing of resources through the big screen (film and television) presenting an apology on the lifestyles of criminals and as narco-corridos (songs), that show an easy and immediate alternative for the thousands of unemployed people who yearn to have access to goods that advertising spreads. Both manage the reproduction of the phenomenon in this study. In this regard, we agree with Maldonado (2012) and they can be seen as further evidence of social decay.

In this interplay of interests, where the state legitimizes its ineffectiveness and inefficiency, drug trafficking “conquests public squares” and whitewashing of resources, generates fear among citizens and more than three million years of life are lost during a single presidency due to homicide, it reduces the age at which young people join the ranks of organized crime, and family groups lose parents and children, it leaves orphaned children and widows, which, in turn, disrupts domestic organization, already pauperized by economic policy. In this scenario the public is the big loser.

The number of registered homicides of women, which were much less in this study, should be viewed with reserve as collateral damage, without pretending that women avoid getting involved in crime, since it is known that drug trafficking progresses to the arms market and sex trade (Maldonado, 2012). It is not known how many of these women were also victims of trafficking and sexual slavery. One could even say that the links between death from violence and gender violence are seen most clearly in both border areas of the country. Everything indicates that this violence violates certain, disadvantaged social groups.

Although the criminal violence that affects men more often occurs in public spaces, gender - based violence that occurs in the private area is not addressed in this study, where the victims are mainly women but also include children (Buvinic, 2005), which warrants a particular analysis. In homicide cases, women and children are indirectly affected, which deteriorates not only their physical integrity and economic stability, but also the welfare that domestic groups might have.

The beginning of twenty first century coincided with the change of the political party in power in Mexico, and the fragile balance that the State held with other forces (Garcia, 2011; Bartolotta, Fuentes and Gaggio, 2011) was disrupted, inducing the transition of the overt physical violence and everyday low frequency violence towards a marked expression of structural violence

associated with the exclusion of large sectors of the population ,accentuated poverty and increased vulnerability of a socioeconomic order.

According to the presented data the solution is not glimpsed in increasing repressive forces, nor in reducing the age to prosecute juvenile offenders as adults; Nor, in the establishment of the death penalty or the increase in prison sentences. To this effect, it could consider prevention, although through alternative pathways: i) indisputably rethink the viability of regressive reforms on health, education, and finance; ii) generate more jobs with decent wages, appointed by the International Labour Organization; iii) combat impunity for white collar criminals; iv) punish politicians and officials who inexplicably enrich themselves and those that launder money derived from drug trafficking. Among many others, they represent special interests involved in the group in power.

It is not easy to offer alternatives to address the described phenomenon, but considering that the killing in these two decades is an expression of structural violence requires more effective forms of intervention, redirecting (unfocused) economic policies may be a step in the right direction.

BIBLIOGRAPHY

- Banco Interamericano de Desarrollo**, BID/FUNSAUD/CIDE (1997). Análisis de la magnitud y costos de la violencia en la ciudad de México. Washington, DC: Banco Interamericano de Desarrollo, 60 pp.
- Bartolotta L**, Fuentes A. y Gago I. (2011). Violencia social, crisis estatal, y políticas de excepción: Notas sobre la “guerra al narcotráfico en México”. Observatorio Latinoamericano. Dossier México, Buenos Aires. Abril 2011. p 48-52. Disponible en: <http://www.plataformademocratica.org/Publicacoes/18983.pdf> [Consultado en febrero 2014]
- Buvinic M**, Morrison AS, Orlando MB. (2005). Violencia, crimen y desarrollo social en América Latina y el Caribe. *Papeles de Población*: 2005; 043: 167-21. Disponible en: <http://www.iom.int/seguridad-fronteriza/lit/land/aproximacionesalaviolenciaencentroam%C3%A9rica1.pdf> [Consultado en enero 2014]
- Briceño R**. (2002). La nueva violencia urbana de Latinoamérica. *Sociologías*, Porto Alegre, 2002; 4 (8):34-51. Disponible en: <http://seer.ufrgs.br/index.php/sociologias/article/view/5792/3399> [Consultado en enero 2014]
- García O**. (2011) ¿Se ha convertido México en un Narco-Estado? *Observatorio Latinoamericano. Dossier México*, 2011. Buenos Aires. Abril. p 53-58. Disponible en: <http://www.plataformademocratica.org/Publicacoes/18983.pdf> [Consultado en febrero 2014]
- García, B.**, & Pacheco, E. (2000). Esposas, hijos e hijas en el mercado de trabajo de la Ciudad de México en 1995. *Estudios Demográficos y Urbanos*, 15 (1 (43)), 35–63. Disponible en: <http://www.jstor.org/stable/40315021>
- Garzón JC**. (2010) Narcotraficantes, carteles y otros demonios: violencia e ilegalidad en México y Colombia, Serie Policy Briefs, 2010 (10). Consorcio Global para la Transformación de la Seguridad. Disponible en: http://www.securitytransformation.org/esp/gc_publications [Consultado en diciembre 2013]
- Hernández M**. Epidemiología. (2009). *Diseño y análisis de estudios*. México: INSP/ Editorial Médica Panamericana. 2009. 385 pp.
- Híjar-Medina M**, López-López MV, Blanco-Muñoz J. (1997). La violencia y sus repercusiones en la salud; reflexiones teóricas y magnitud del problema en México. *Sal Pub Mex* 1997; 39: 565-572. Disponible en: <http://www.redalyc.org/articulo.oa?id=10639610>. [Consultado en diciembre 2013]
- La Parra D**, Tortosa JM. (2003). Violencia estructural: una ilustración del concepto *Documentación Social* (3) 131: 57-72. Disponible en: <http://www.ugr.es/~fentrena/Violen.pdf>

- Londoño JL, Guerrero R. (1999).** Violencia en América Latina. Epidemiología y costos. Documento de trabajo R-375. Washington, DC: Banco Interamericano de Desarrollo. 1999, 54 pp. Disponible en: <http://www.utp.edu.co/~porlapaz/docs/violencia/pxp2.pdf> [Consultado en enero 2014]
- López MV, Híjar M, Rascón R, Blanco J. (1996).** Muertes por homicidio, consecuencia fatal de la violencia. El caso de México, 1979-1992. *Rev. Saúde Pública*, 1996; 30 (1): 46-52. Disponible en: <http://www.scielo.br/pdf/rsp/v30n1/5041.pdf> [Consultado en octubre 2013]
- Lozano R, Franco-Marina F, Solís P. (2007).** El peso de la enfermedad crónica en México. *Salud Pública Méx*; Vol. 49 (Sup 1):283-287
- Maldonado S. (2012).** Drogas, violencia y militarización en el México rural. El caso de Michoacán. *Rev. Mex. Sociol* 2012; 74 (1) México ene./mar.
- Pereyra G. (2012).** México: violencia criminal y “guerra contra el narcotráfico”. *Rev. Mex. Sociol* 2012; 74 (3) México jul./sept
- Zepeda G. (2007)** ¿Cómo prevenir la violencia imprudencial y los daños a la salud derivadas de ella? *Sal Pub Mex* 2007: (49), edición especial. 148-150. Disponible en: <http://www.redalyc.org/articulo.oa?id=10649060> [Consultado en enero 2014]