# World report on violence and health

## SUMMARY

World Health Organization
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# Contents

# Foreword

The twentieth century will be remembered as a century marked by violence. It burdens us with its legacy of mass destruction, of violence inflicted on a scale never seen and never possible before in human history. But this legacy – the result of new technology in the service of ideologies of hate – is not the only one we carry, nor that we must face up to.

Less visible, but even more widespread, is the legacy of day-to-day, individual suffering. It is the pain of children who are abused by people who should protect them, women injured or humiliated by violent partners, elderly persons maltreated by their caregivers, youths who are bullied by other youths, and people of all ages who inflict violence on themselves. This suffering – and there are many more examples that I could give – is a legacy that reproduces itself, as new generations learn from the violence of generations past, as victims learn from victimizers, and as the social conditions that nurture violence are allowed to continue. No country, no city, no community is immune. But neither are we powerless against it.

Violence thrives in the absence of democracy, respect for human rights and good governance. We often talk about how a ''culture of violence'' can take root. This is indeed true – as a South African who has lived through apartheid and is living through its aftermath, I have seen and experienced it. It is also true that patterns of violence are more pervasive and widespread in societies where the authorities endorse the use of violence through their own actions. In many societies, violence is so dominant that it thwarts hopes of economic and social development. We cannot let that continue.

Many who live with violence day in and day out assume that it is an intrinsic part of the human condition. But this is not so. Violence can be prevented. Violent cultures can be turned around. In my own country and around the world, we have shining examples of how violence has been countered. Governments, communities and individuals can make a difference.

I welcome this first *World report on violence and health*. This report makes a major contribution to our understanding of violence and its impact on societies. It illuminates the different faces of violence, from the ''invisible'' suffering of society's most vulnerable individuals to the all-too-visible tragedy of societies in conflict. It advances our analysis of the factors that lead to violence, and the possible responses of different sectors of society. And in doing so, it reminds us that safety and security don't just happen: they are the result of collective consensus and public investment.

The report describes and makes recommendations for action at the local, national and international levels. It will thus be an invaluable tool for policy-makers, researchers, practitioners, advocates and volunteers involved in violence prevention. While violence traditionally has been the domain of the criminal justice system, the report strongly makes the case for involving all sectors of society in prevention efforts.

We owe our children – the most vulnerable citizens in any society – a life free from violence and fear. In order to ensure this, we must be tireless in our efforts not only to attain peace, justice and prosperity for countries, but also for communities and members of the same family. We must address the roots of violence. Only then will we transform the past century's legacy from a crushing burden into a cautionary lesson.

Nelson Mandela

# Preface

Violence pervades the lives of many people around the world, and touches all of us in some way. To many people, staying out of harm's way is a matter of locking doors and windows and avoiding dangerous places. To others, escape is not possible. The threat of violence is behind those doors – well hidden from public view. And for those living in the midst of war and conflict, violence permeates every aspect of life.

This report, the first comprehensive summary of the problem on a global scale, shows not only the human toll of violence – over 1.6 million lives lost each year and countless more damaged in ways that are not always apparent – but exposes the many faces of interpersonal, collective and self-directed violence, as well as the settings in which violence occurs. It shows that where violence persists, health is seriously compromised.

The report also challenges us in many respects. It forces us to reach beyond our notions of what is acceptable and comfortable – to challenge notions that acts of violence are simply matters of family privacy, individual choice, or inevitable facets of life. Violence is a complex problem related to patterns of thought and behaviour that are shaped by a multitude of forces within our families and communities, forces that can also transcend national borders. The report urges us to work with a range of partners and to adopt an approach that is proactive, scientific and comprehensive.

We have some of the tools and knowledge to make a difference – the same tools that have successfully been used to tackle other health problems. This is evident throughout the report. And we have a sense of where to apply our knowledge. Violence is often predictable and preventable. Like other health problems, it is not distributed evenly across population groups or settings. Many of the factors that increase the risk of violence are shared across the different types of violence and are modifiable.

One theme that is echoed throughout this report is the importance of primary prevention. Even small investments here can have large and long-lasting benefits, but not without the resolve of leaders and support for prevention efforts from a broad array of partners in both the public and private spheres, and from both industrialized and developing countries.

Public health has made some remarkable achievements in recent decades, particularly with regard to reducing rates of many childhood diseases. However, saving our children from these diseases only to let them fall victim to violence or lose them later to acts of violence between intimate partners, to the savagery of war and conflict, or to self-inflicted injuries or suicide, would be a failure of public health.

While public health does not offer all of the answers to this complex problem, we are determined to play our role in the prevention of violence worldwide. This report will contribute to shaping the global response to violence and to making the world a safer and healthier place for all. I invite you to read the report carefully, and to join me and the many violence prevention experts from around the world who have contributed to it in implementing its vital call for action.

Gro Harlem Brundtland
Director-General
World Health Organization

# Violence — a universal challenge

No country or community is untouched by violence. Images and accounts of violence pervade the media; it is on our streets, in our homes, schools, workplaces and institutions. Violence is a universal scourge that tears at the fabric of communities and threatens the life, health and happiness of us all. Each year, more than 1.6 million people worldwide lose their lives to violence. For everyone who dies as a result of violence, many more are injured and suffer from a range of physical, sexual, reproductive and mental health problems. Violence is among the leading causes of death for people aged 15–44 years worldwide, accounting for about 14% of deaths among males and 7% of deaths among females (*1*).

Because it is so pervasive, violence is often seen as an inevitable part of the human condition – a fact of life to respond to, rather than to prevent. Moreover it is commonly considered a ''law and order'' issue, in which the role of health professionals is limited to dealing with the consequences. But these assumptions are changing, encouraged by the success of public health approaches to other environmental and behaviour-related health problems such as heart disease, smoking and human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS). The focus is broadening, with increasing emphasis on prevention and addressing the root causes of violence. At the same time, the efforts of the police, courts and criminologists are being augmented by the contributions of other institutions and disciplines, from child psychologists to epidemiologists.

A substantial proportion of the costs of violence result from its impact on victims' health and the burden it places on health institutions (*2*). This gives the health sector both a special interest in prevention and a key role to play. The Surgeon General of the United States of America was the first to spell this out clearly, in 1979, in a report entitled *Healthy people* (*3*). The report stated that the consequences of violent behaviour could not be ignored in the effort to improve the nation's health, and made tackling the roots of violence a top priority for the health community.

Since then, a wide range of public health practitioners and researchers in the United States and around the world have set themselves the task of understanding violence and finding ways to prevent it (*4*). The issue was put on the international agenda when the World Health Assembly, at its meeting in Geneva in 1996, adopted a resolution declaring violence a leading worldwide public health problem (see Box 1).

Raising awareness of the fact that violence can be prevented is, however, only the first step in shaping the response to it. Violence is an extremely sensitive issue. Many people have difficulty confronting it in their professional lives because it raises uncomfortable questions about their personal lives. Talking about violence means touching upon complex matters of morality, ideology and culture. There is, thus, often resistance at official as well as personal levels to open discussion of the topic.

The purpose of the first *World report on violence and health*[1] is to challenge the secrecy, taboos and feelings of inevitability that surround violent behaviour, and to encourage debate that will increase our understanding of this hugely complex phenomenon. While individual initiative and leadership are invaluable in overcoming apathy and resistance, a key requirement for tackling violence in a comprehensive manner is for people

[1] Krug EG et al., eds. *World report on violence and health.* Geneva, World Health Organization, 2002.

**BOX 1**

## Preventing violence: a public health priority (Resolution WHA49.25)

The Forty-ninth World Health Assembly,

Noting with great concern the dramatic worldwide increase in the incidence of intentional injuries affecting people of all ages and both sexes, but especially women and children;

Endorsing the call made in the Declaration of the World Summit for Social Development for the introduction and implementation of specific policies and programmes of public health and social services to prevent violence in society and mitigate its effect;

Endorsing the recommendations made at the International Conference on Population and Development (Cairo, 1994) and the Fourth World Conference on Women (Beijing, 1995) urgently to tackle the problem of violence against women and girls and to understand its health consequences;

Recalling the United Nations Declaration on the elimination of violence against women;

Noting the call made by the scientific community in the Melbourne Declaration adopted at the Third International Conference on Injury Prevention and Control (1996) for increased international cooperation in ensuring the safety of the citizens of the world;

Recognizing the serious immediate and future long-term implications for health and psychological and social development that violence represents for individuals, families, communities and countries;

Recognizing the growing consequences of violence for health care services everywhere and its detrimental effect on scarce health care resources for countries and communities;

Recognizing that health workers are frequently among the first to see victims of violence, having a unique technical capacity and benefiting from a special position in the community to help those at risk;

Recognizing that WHO, the major agency for coordination of international work in public health, has the responsibility to provide leadership and guidance to Member States in developing public health programmes to prevent self-inflicted violence and violence against others;

1. DECLARES that violence is a leading worldwide public health problem;
2. URGES Member States to assess the problem of violence on their own territory and to communicate to WHO their information about this problem and their approach to it;
3. REQUESTS the Director-General, within available resources, to initiate public health activities to address the problem of violence that will:
   (1) characterize different types of violence, define their magnitude and assess the causes and the public health consequences of violence using also a ''gender perspective'' in the analysis;
   (2) assess the types and effectiveness of measures and programmes to prevent violence and mitigate its effects, with particular attention to community-based initiatives;
   (3) promote activities to tackle this problem at both international and country level including steps to:
      (a) improve the recognition, reporting and management of the consequences of violence;
      (b) promote greater intersectoral involvement in the prevention and management of violence;
      (c) promote research on violence as a priority for public health research;
      (d) prepare and disseminate recommendations for violence prevention programmes in nations, States and communities all over the world;

**BOX 1 *(continued)***

(4) ensure the coordinated and active participation of appropriate WHO technical programmes;

(5) strengthen the Organization's collaboration with governments, local authorities and other organizations of the United Nations system in the planning, implementation and monitoring of programmes of violence prevention and mitigation;

4. FURTHER REQUESTS the Director-General to present a report to the ninety-ninth session of the Executive Board describing the progress made so far and to present a plan of action for progress towards a science-based public health approach to violence prevention.

to work together in partnerships of all kinds, and at all levels, to develop effective responses.

This summary is addressed primarily to those responsible for public health decisions and policies at the national level, and those working in public health at the local level who are most closely in touch with community problems and needs. The views expressed and the conclusions drawn in this summary are based on the *World report on violence and health* and on the many studies to which that report refers.

- Violence is often seen as an inevitable part of the human condition – a fact of life to respond to, rather than to prevent. Encouraged by the success of public health approaches to other environmental and behavioural-related health problems, these assumptions are changing.
- The health sector has both a special interest and a key role to play in preventing violence.
- A key requirement for addressing violence in a comprehensive manner is for people to work together in partnerships of all kinds, and at all levels, to develop effective responses.

## The public health approach to violence

Generally speaking, the response of the health sector to violence is largely reactive and therapeutic. Because that response tends to be fragmented into areas of special interest and expertise, the wider picture and the connections between different forms of violence are often ignored. Violence, however, is a complex phenomenon and needs to be addressed in a more comprehensive and holistic manner.

Public health, by definition, does not focus on individual patients, but rather on the health of communities and populations as a whole. Public health interventions focus, wherever possible, on populations at greatest risk of disease or injury. The fundamental goals of public health are to preserve, promote and improve health. Public health places emphasis on preventing disease or injury from occurring or reoccurring, rather than on treating the health consequences.

Traditionally, the public health approach to dealing with any threat to well-being involves the following four steps (*5*):

— defining and monitoring the extent of the problem;
— identifying the causes of the problem;
— formulating and testing ways of dealing with the problem;
— applying widely the measures that are found to work.

The public health approach is science-based. Everything – from identifying the problem and its causes, to planning, testing and evaluating responses – must be based on sound research and informed by the best evidence. The public health approach is also multidisciplinary. Public health officials work in partnership with a wide range of people and organizations and make use of a wide range of professional expertise, from medicine, epidemiology and psychology to sociology, criminology, education and economics.

As far as violence is concerned, public health practitioners and their partners start with the strong

conviction – based on evidence – that violent behaviour and its consequences can be prevented. The public health approach does not replace criminal justice and human rights responses to violence; rather, it complements their activities and offers them additional tools and sources of collaboration.

## Defining violence

One reason why violence has largely been ignored as a public health issue is the lack of a clear definition of the problem. Violence is an extremely diffuse and complex phenomenon. Defining it is not an exact science but a matter of judgement. Notions of what is acceptable and unacceptable in terms of behaviour, and what constitutes harm, are culturally influenced and constantly under review as values and social norms evolve. A generation ago, for instance, the cane was a regular part of discipline in British schools, used to beat pupils on the buttocks, legs or hands. Today a teacher in Great Britain can be prosecuted for using physical restraint of any kind on a child.

The wide variety of moral codes throughout the world makes the topic of violence one of the most challenging and sensitive to address in a global forum. But the need to do so is urgent. An effort must be made to reach consensus and set universal standards of behaviour through the elaboration of human rights in order to protect human life and dignity in our fast-changing world.

There are many possible ways to define violence, depending on who is defining it and for what purpose. A definition for the purposes of arrest and conviction, for example, will be different from one for social service interventions. As far as public health is concerned, the challenge is to define violence in such a way that it captures the range of acts by perpetrators and the subjective experiences of the victims without becoming so broad that it loses meaning – or so broad that it describes the natural vicissitudes of everyday living in terms of pathology. Furthermore, global consensus is needed so that data can be compared between countries and a sound base of knowledge built up.

The World Health Organization defines violence (*4*) as:

> The intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation.

The definition encompasses interpersonal violence as well as suicidal behaviour and armed conflict. It also covers a wide range of acts, going beyond physical acts to include threats and intimidation. Besides death and injury, the definition also includes the myriad and often less obvious consequences of violent behaviour, such as psychological harm, deprivation and maldevelopment that compromise the well-being of individuals, families and communities.

## Typology of violence

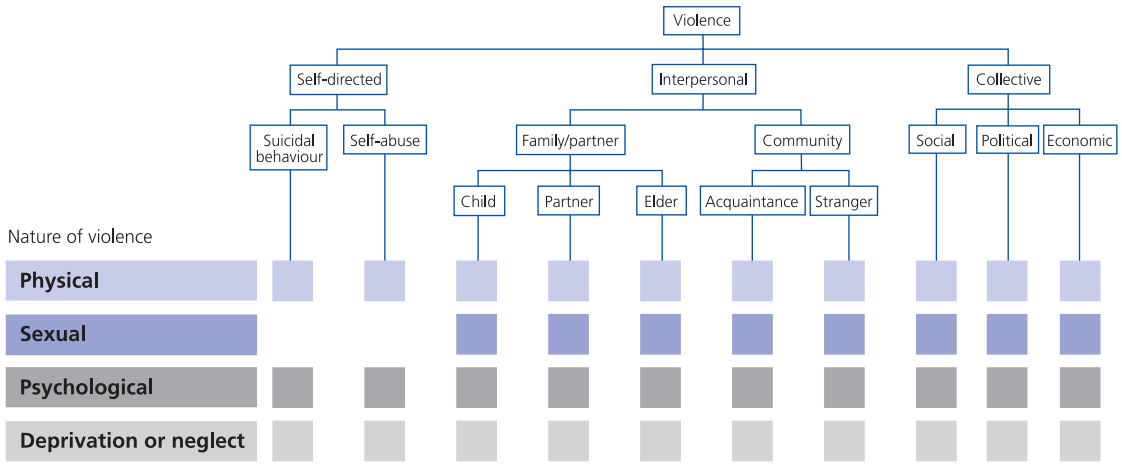
The complexity, pervasiveness and variety of violent acts prompt feelings of powerlessness and apathy. An analytical framework or typology is needed to separate the threads of this intricate tapestry so that the nature of the problem – and the action required to deal with it – become clearer. Up to now, work to counter violence has been fragmented into specialized areas of research and action. To overcome this shortcoming, the analytical framework should emphasize the common features and linkages between different types of violence, leading to a holistic approach to prevention. Few such typologies exist, and none is comprehensive or universally accepted (*6*).

The typology used in the *World report on violence and health* divides violence into three broad categories, according to who commits the violent act: self-directed violence; interpersonal violence; and collective violence.

This initial categorization differentiates between violence a person inflicts upon himself or herself, violence inflicted by another individual or by a small group of individuals, and violence inflicted by larger groups such as states, organized political groups, militia groups and terrorist organizations (see Figure 1).

These three broad categories are each divided further to reflect more specific types of violence.

FIGURE 1
A typology of violence




Self-directed violence includes suicidal behaviour and self-abuse such as self-mutilation. Suicidal behaviour ranges in degree from merely thinking about ending one's life, to planning it, finding the means to do so, attempting to kill oneself, and completing the act. However, these should not be seen as different points on a single continuum. Many people who entertain suicidal thoughts never act on them, and even those who attempt suicide may have no intention of dying.

Interpersonal violence is divided into two subcategories:

- Family and intimate partner violence – that is, violence largely between family members and intimate partners, usually, though not exclusively, taking place in the home.
- Community violence – violence between individuals who are unrelated, and who may or may not know each other, generally taking place outside the home.

The former group includes forms of violence such as child abuse, violence by an intimate partner and abuse of the elderly. The latter includes youth violence, random acts of violence, rape or sexual assault by strangers, and violence in institutional settings such as schools, workplaces, prisons and nursing homes.

Collective violence is the instrumental use of violence by people who identify themselves as members of a group against another group or set of individuals, in order to achieve political, economic or social objectives. It takes a variety of forms: armed conflicts within or between states; genocide, repression and other human rights abuses; terrorism; and organized violent crime.

The typology also captures the nature of violent acts, which can be physical, sexual or psychological or involve deprivation or neglect. The typology also considers the relevance of the setting, the relationship between the perpetrator and victim, and – in the case of collective violence – the possible motives for the violence.

## Measuring violence

Action on the public health front requires measuring the extent of the particular health problem being addressed. Such knowledge is vital as a basis for sound policy-making. Reliable data on violence are important, not only for planning and monitoring purposes, but also for advocacy. Without information, there is little pressure on anyone to acknowledge or respond to the problem.

Measuring violence presents many challenges. Countries are at varying stages in the development of their data systems, so there is great variation in the completeness, quality, reliability and usefulness

of available information. Many acts of violence are never recorded because they do not come to the attention of authorities. Others do come to the attention of authorities, but the records do not capture all of the information relevant for understanding the problem. Since the way in which a form of abuse is defined affects what data are gathered, inadequate definitions in many places serve to obscure important aspects of the problem. Finally, lack of consistency in definitions and data collection makes it difficult to compare data across communities or nations.

At present, mortality data are the most widely collected and readily available. Sources of information include: death certificates, registries of vital statistics and coroners' reports. Data on mortality, however, represent only the tip of the iceberg. For everyone who is killed, very many more are injured, psychologically undermined or disabled for life. Given that non-fatal outcomes are much more common than fatal outcomes (*7–11*), other types of data are needed to help complete the picture of violence. These include:

— health data on diseases, injuries and other health conditions;
— self-reported data on attitudes, beliefs, behaviours, cultural practices, victimization and exposure to violence;
— community data on population characteristics and levels of income, education and employment;
— crime data on the characteristics and circumstances of violent events and violent offenders;
— economic data related to costs of treatment, social services and prevention activities;
— policy and legislative data.

These data can come from a variety of sources including individuals, agency or institutional records, local programmes, community and government records, and population-based and other surveys, as well as special studies. All of these sources can be useful in understanding the problem, and further illustrate why multisectoral partnerships are key elements of the public health approach.

- Public health is about communities and populations as a whole, and focuses on those at greatest risk of disease or injury. The public health approach is science-based – policies and activities must be backed by sound research. It is also multidisciplinary.
- Action on the public health front requires a clear definition of violence and a framework for understanding its many forms and contexts.
- Reliable data on violence are vital for understanding the problem of violence. Reliable data are also important for advocacy purposes. Without data, there is little pressure on anyone to acknowledge or respond to the problem.

## The impact of violence — lives lost and health harmed

In 2000, an estimated 1.6 million people worldwide lost their lives to violence – a rate of nearly 28.8 per 100 000 (see Table 1). Around half of these deaths were suicides, nearly one-third were homicides, and about one-fifth were casualties of armed conflict.

Of course not everyone is equally at risk from violence, and a closer look at the problem reveals who the principal victims were and where they lived. Males accounted for three-quarters of all victims of homicide, and had rates more than three times those among females. The highest homicide rates in the world – at 19.4 per 100 000 – were found among males aged 15–29 years (see Table 2). Homicide rates among males tend to decline with age; however, for women, the rate is around 4 per 100 000 across all age groups, with the exception of the group aged 5–14 years, where it is about 2 per 100 000.

Rates for suicide, in contrast, tend to increase with age for both sexes (see Table 2). The highest rates of suicide – 44.9 per 100 000 – were found among men aged 60 years and older, more than double the rates among women of the same age (22.1 per 100 000). In contrast, in the 15–29-year-old age group, the rate was 15.6 per 100 000 among males and 12.2 per 100 000 among females.

TABLE 1

Estimated global violence-related deaths, 2000

| Type of violence | Number[a] | Rate per 100 000 population[b] | Proportion of total (%) |
|---|---|---|---|
| Homicide | 520 000 | 8.8 | 31.3 |
| Suicide | 815 000 | 14.5 | 49.1 |
| War-related | 310 000 | 5.2 | 18.6 |
| Total[c] | 1 659 000 | 28.8 | 100.0 |
| Low- to middle-income countries | 1 510 000 | 32.1 | 91.1 |
| High-income countries | 149 000 | 14.4 | 8.9 |

*Source:* WHO Global Burden of Disease project for 2000, Version 1.

[a] Rounded to the nearest 1000.

[b] Age-standardized.

[c] Includes 14 000 intentional injury deaths resulting from legal intervention.

TABLE 2

Estimated global homicide and suicide rates by age group, 2000

| Age group (years) | Homicide rate (per 100 000 population) | | Suicide rate (per 100 000 population) | |
|---|---|---|---|---|
| | Males | Females | Males | Females |
| 0–4 | 5.8 | 4.8 | 0.0 | 0.0 |
| 5–14 | 2.1 | 2.0 | 1.7 | 2.0 |
| 15–29 | 19.4 | 4.4 | 15.6 | 12.2 |
| 30–44 | 18.7 | 4.3 | 21.5 | 12.4 |
| 45–59 | 14.8 | 4.5 | 28.4 | 12.6 |
| ⩾60 | 13.0 | 4.5 | 44.9 | 22.1 |
| Total[a] | 13.6 | 4.0 | 18.9 | 10.6 |

*Source:* WHO Global Burden of Disease project for 2000, Version 1.

[a] Age-standardized.

Rates of violent death also vary according to country income levels. Rates of violent death in the low- to middle-income countries are more than twice as high (32.1 per 100 000) as those in high-income countries (14.4 per 100 000). These overall rates conceal wide variations. For example, there are large differences in rates among the WHO regions (see Figure 2). In the African Region and the Region of the Americas, homicide rates are nearly three times greater than suicide rates. However, in the South-East Asia and European Regions, suicide rates are more than double homicide rates, and in the Western Pacific Region, suicide rates are nearly six times greater than homicide rates.

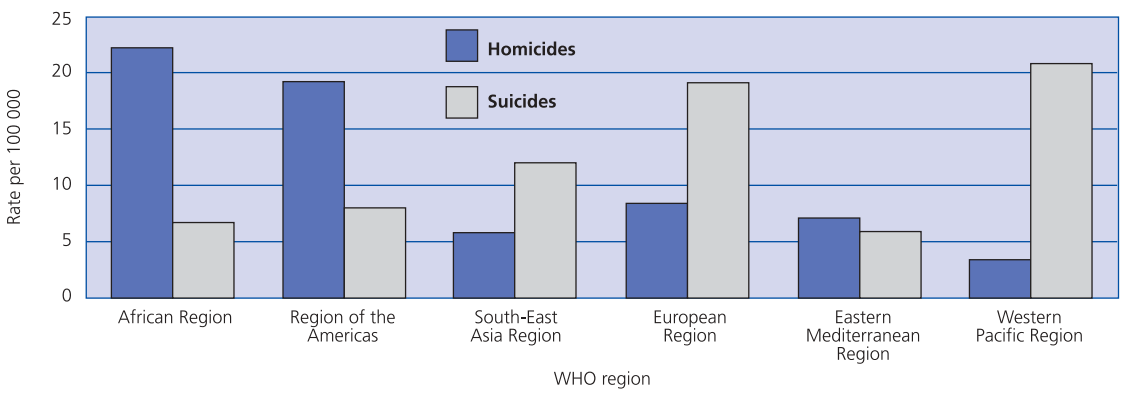
The overall rates also conceal wide variations within countries – between urban and rural populations, between rich and poor communities, and between different racial and ethnic groups. In Singapore, for example, people of Chinese and Indian ethnic backgrounds have higher suicide rates than ethnic Malays (*12*). In the United States in 1999, African-American youths aged 15–24 years were victims of homicide at a rate more than twice that of their Hispanic counterparts, and over 12 times that of their Caucasian, non-Hispanic counterparts (*13*).

The figures for violent death, however, tell only part of the story. Physical, sexual and psychological abuse occur in every country on a daily basis, undermining the health and well-being of many millions of people, in addition to costing nations vast sums each year in health care, legal costs, absenteeism from work and lost productivity (*14–21*) (see Box 2). Moreover, the health effects of violence can last years beyond the initial abuse, and may include permanent disability such as spinal cord injuries, brain damage and loss of limbs.

In addition to direct physical injury, victims of violence are at increased risk of a wide range of psychological and behavioural problems, including

FIGURE 2

Homicide and suicide rates by WHO region, 2000



**BOX 2**

## Counting the costs of violence

In addition to the toll of human misery, violence puts a massive burden on national economies.

For example, studies sponsored by the Inter-American Development Bank between 1996 and 1997 on the economic impact of violence in six Latin American countries calculated that expenditures on health services alone amounted to 1.9% of the gross domestic product in Brazil, 5.0% in Colombia, 4.3% in El Salvador, 1.3% in Mexico, 1.5% in Peru and 0.3% in Venezuela (*14*). A 1992 study in the United States put the annual cost of treating gunshot wounds at US$ 126 billion (*15*). Cutting and stab wounds cost an additional US$ 51 billion.

The evidence shows that, as a general rule, victims of domestic or sexual violence have more health problems, significantly higher health care costs and more frequent visits to hospital emergency departments throughout their lives than those without a history of abuse. The same is also true for victims of child abuse and neglect.

In calculating the costs of violence to a nation's economy, a wide range of factors need to be taken into consideration besides the direct costs of medical care and criminal justice. Indirect costs may include, for example:

— the provision of shelter or other places of safety and long-term care;
— lost productivity as a result of premature death, injury, absenteeism, long-term disability and lost potential;
— diminished quality of life and decreased ability to care for oneself or others;
— damage to public property and infrastructure leading to disruption of services such as health care, transport and food distribution;
— disruption of daily life as a result of fears for personal safety;
— disincentives to investment and tourism that hamper economic development.

The costs of violence are rarely evenly distributed. Those with the least options for protecting themselves against economic hardship will be most seriously affected.

depression, alcohol abuse, anxiety and suicidal behaviour, as well as reproductive health problems such as unwanted pregnancy, sexually transmitted diseases and sexual dysfunction (*22–25*).

It is important to note, however, that there is rarely a simple cause-and-effect relationship between a violent act and its impact, particularly where psychological abuse is concerned. Even in extreme cases, a range of reactions and effects are possible since people respond to adversity in highly individual ways. The age and temperament of the person, and whether or not he or she has emotional support, will influence the outcome of violent events. People who are active in response to violence tend to be more resilient than those who remain passive. In order to provide a sound basis for treatment and prevention programmes, much more detailed research is needed into the health consequences of violence and the mediating factors.

- An estimated 1.6 million people lost their lives to violence in 2000. About half were suicides, one-third were homicides, and one-fifth were casualties of armed conflict.
- In 2000, the rate of violence-related death in low- to middle-income countries as a whole was more than twice that in high-income countries, although rates vary between regions and even within countries.
- The majority of violence is non-fatal and results in injuries, mental health and reproductive health problems, sexually transmitted diseases and other problems. Health effects can last years, and may include permanent physical or mental disability.
- Besides the toll of human misery, violence exacts social and economic costs which – though hard to quantify – are substantial.

## The roots of violence — an ecological model

There is no single factor to explain why one person and not another behaves in a violent manner, nor why one community will be torn apart by violence while a neighbouring community lives in peace. Violence is an extremely complex phenomenon that has its roots in the interaction of many factors – biological, social, cultural, economic and political.

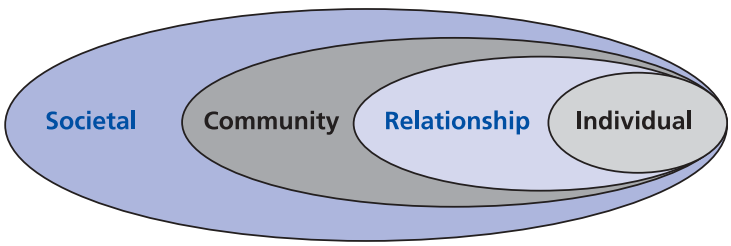
While some risk factors may be unique to a particular type of violence, more often the various types of violence share a number of risk factors. Fragmentation of the field into different areas of expertise and interest, and lack of collaboration between the various groups tends to obscure this fact and to encourage a piecemeal approach to violence prevention. This is at odds with the requirements of public health, which needs to see the different types of violence in their broader context and to be aware of the common patterns.

The *World report on violence and health* uses an ecological model to try to understand the multifaceted nature of violence. First introduced in the late 1970s for the study of child abuse (*26, 27*) and subsequently used in other fields of violence research (*28–32*), the ecological model is still being developed and refined as a conceptual tool. Its strength is that it helps to distinguish between the myriad influences on violence while at the same time providing a framework for understanding how they interact (see Figure 3).

The model assists in examining factors that influence behaviour – or which increase the risk of committing or being a victim of violence – by dividing them into four levels.

- The first level identifies biological and personal history factors that influence how *individuals* behave and increase their likelihood of becoming a victim or perpetrator of violence. Examples of factors that can be measured or traced include demographic characteristics (age, education, income), psychological or personality disorders, substance abuse, and a history of behaving aggressively or experiencing abuse.
- The second level looks at close *relationships* such as those with family, friends, intimate partners and peers, and explores how these relationships increase the risk of being a victim or perpetrator of violence. In youth violence, for example, having friends who engage in or encourage violence may increase a young person's risk of being a victim or perpetrator of violence (*33, 34*).
- The third level explores the *community* contexts in which social relationships occur, such as schools, workplaces and neighbourhoods, and seeks to identify the characteristics of these settings that increase the risk for violence. Risk at this level may be influenced by factors such as residential mobility (for example, whether people in a neighbourhood tend to stay for a long time or move frequently), population density, high levels of unemployment, or the existence of a local drug trade.
- The fourth level looks at the broad *societal* factors that help create a climate in which violence is encouraged or inhibited. These include the availability of weapons and social and cultural norms. Such norms include those that give priority to parental rights over child welfare, those that regard suicide as a matter of individual choice instead of a preventable act of violence, those that entrench male dominance over women and children, those that support the use of excessive force by police against citizens, and those that support political conflict. Larger societal factors also include the health,

FIGURE 3
Ecological model for understanding violence



economic, educational and social policies that help to maintain economic or social inequality between groups in society.

The overlapping rings in the model illustrate how factors at each level are strengthened or modified by factors at another. Thus, for example, a person with an aggressive personality is more likely to act violently in a family or community that habitually resolves conflict through violence than if he or she were in a more peaceable environment. Social isolation, which is a widely found community factor in the mistreatment of the elderly, may be influenced both by societal factors (for example, less respect for the elderly in general) and relationship factors (the loss of friends and family members).

Besides helping to clarify the causes of violence and their complex interactions, the ecological model also suggests that in order to prevent violence it is necessary to act across several different levels at the same time. This includes, for example:

- Addressing individual risk factors and taking steps to modify individual risk behaviours.
- Influencing close personal relationships and working to create healthy family environments, as well as providing professional help and support for dysfunctional families.
- Monitoring public places such as schools, workplaces and neighbourhoods and taking steps to address problems that might lead to violence.
- Addressing gender inequality, and adverse cultural attitudes and practices.
- Addressing the larger cultural, social and economic factors that contribute to violence and taking steps to change them, including measures to close the gap between the rich and poor and to ensure equitable access to goods, services and opportunities.

- No single factor explains why one person and not another behaves in a violent manner. Violence is a complex problem rooted in the interaction of many factors – biological, social, cultural, economic and political.
- While some risk factors may be unique to a particular type of violence, more often the various types of violence share a number of risk factors.
- Besides clarifying the causes of violence and their complex interactions, the ecological model also suggests what needs to be done at the various levels to prevent violence.

## From analysis to action

A general model of the roots of violence gives useful insights and identifies possible avenues for research and prevention. There is, however, often a huge gulf between observing an effect and understanding how it operates. Public health programmes need to guard against acting on assumptions or anecdotal evidence alone. To be effective, prevention strategies need to be based on sound understanding, backed by high-quality research, of the factors influencing violence and how they interact.

Public health interventions are traditionally characterized in terms of three levels of prevention:

- Primary prevention – approaches that aim to prevent violence before it occurs.
- Secondary prevention – approaches that focus on the more immediate responses to violence, such as pre-hospital care, emergency services or treatment for sexually transmitted diseases following a rape.
- Tertiary prevention – approaches that focus on long-term care in the wake of violence, such as rehabilitation and reintegration, and attempts to lessen trauma or reduce the long-term disability associated with violence.

These three levels of prevention are defined by their temporal aspect – whether prevention takes place before violence occurs, immediately afterwards or over the longer term. While these levels of prevention have traditionally been applied to victims of violence and within health care settings, they are also relevant to the perpetrators of violence, and have been used to characterize judicial responses to violence.

Researchers have increasingly turned to a definition of violence prevention that focuses on the target group of interest (*35*). This definition groups interventions as follows:

- Universal interventions – approaches aimed at groups or the general population without regard to individual risk; examples include violence prevention curricula delivered to all pupils in a school or children of a particular age and community-wide media campaigns.
- Selected interventions – approaches aimed at those considered at heightened risk for violence (having one or more risk factors for violence); an example of such an intervention is training in parenting provided to low-income, single parents.
- Indicated interventions – approaches aimed at those who have already demonstrated violent behaviour, such as treatment for perpetrators of domestic violence.

In both industrialized and developing countries, priority is usually given to dealing with the immediate consequences of violence – providing support to victims and punishing offenders. While such responses are important and should be strengthened wherever possible, there needs to be much greater investment in primary prevention of violence – that is, measures to stop violence from occurring in the first place.

In developing the response to violence, many different sectors and agencies should be involved, and programmes should be tailored to suit different cultural settings and population groups. A major weakness in efforts to date is the lack of rigorous evaluation of responses. Evaluation should be an integral part of all programmes so that lessons can be learnt and shared about what does and does not work in terms of preventing violence.

- Greater priority should be given to primary prevention of violence – that is, measures to stop it from occurring in the first place.
- Many different sectors and agencies should be involved in prevention activities, and evaluation should be an integral part of all programmes.

# The forms and contexts of violence

There are many different types of violence, and they occur in a wide array of contexts. There is a need to consider the magnitude and dynamics of interpersonal, self-directed and collective violence, and discuss their linkages in order to provide a basis for taking preventive action against them.

## Interpersonal violence

In 2000, an estimated 520 000 people were killed in acts of interpersonal violence worldwide – a rate of 8.8 per 100 000. But official homicide statistics do not tell the whole story. Many deaths are concealed as accidents or attributed to natural or unknown causes. In India, for instance, public health officials suspect that many deaths of women recorded as ''accidental burns'' were actually murders in which women were deliberately doused with kerosene and set alight by their husbands or other family members (*36*). In places where the deaths of babies and elderly people are not routinely investigated or where autopsies are not carried out, cases may be wrongly attributed to illnesses or other natural causes (*37*).

For every person who is killed by violence, many more are physically injured or psychologically damaged. Official data about non-fatal cases are often incomplete, particularly for types of interpersonal violence that carry social stigma. This is illustrated in Table 3, which shows that in both developing and industrialized countries, women who have been abused by intimate partners are more likely to tell friends and family than the police about their experiences and many tell no one (*25*).

The patterns of interpersonal violence differ markedly across the world. While the abuse of children and elderly people, as well as violence between intimate partners are common problems in every country, the rates of youth violence are exceptionally high in Africa and Latin America compared with other regions. Certain forms of sexual violence, such as child marriage and trafficking, are more evident in Africa and South Asia than elsewhere (*38, 39*).

- In 2000, some 520 000 people were killed in acts of interpersonal violence.
- Official homicide statistics may, however, not fully capture all violent deaths. Many violent deaths, particularly among women, children and the elderly, may be attributed to illnesses or other natural causes.

### Young people and violence

Youth violence (involving people between the ages of 10 and 29 years) includes a range of aggressive acts from bullying and physical fighting, to more serious forms of assault and homicide. In all countries, young males are both the principal perpetrators and victims of homicide.

In 2000, violence among young people left an estimated 199 000 youths dead – a rate of 9.2 per 100 000. The highest rates of youth homicide are found in Africa and Latin America and the lowest rates in Western Europe and parts of Asia and the Pacific (see Figure 4). With the notable exception of the United States, most countries with youth homicide rates above 10 per 100 000 are either developing countries or countries caught up in the turmoil of social and economic change. For every young person killed by violence, an estimated 20–40 receive injuries that require hospital treatment. In some countries, including Israel, New Zealand and Nicaragua, the ratio is even greater (*8–10*).

Some children exhibit problem behaviour in early childhood that gradually escalates to more severe forms of aggression as they enter adolescence, and typically continues into adulthood (*40–42*). The majority of young people who engage in violent behaviour, however, do so over more limited periods of time, during adolescence, having shown little or no evidence of problem behaviour as children (*43*). Such ''adolescence-limited offenders'' are often looking for excitement (*44*) and their violent acts are often committed in the company of a group of friends. Young people also tend to be involved in a wide range of antisocial behaviour, committing more non-violent offences than violent offences (*45, 46*). Among young people involved in violent and delinquent behaviour, the presence of alcohol, drugs or weapons enhances the likelihood that injuries or deaths will be associated with violence.

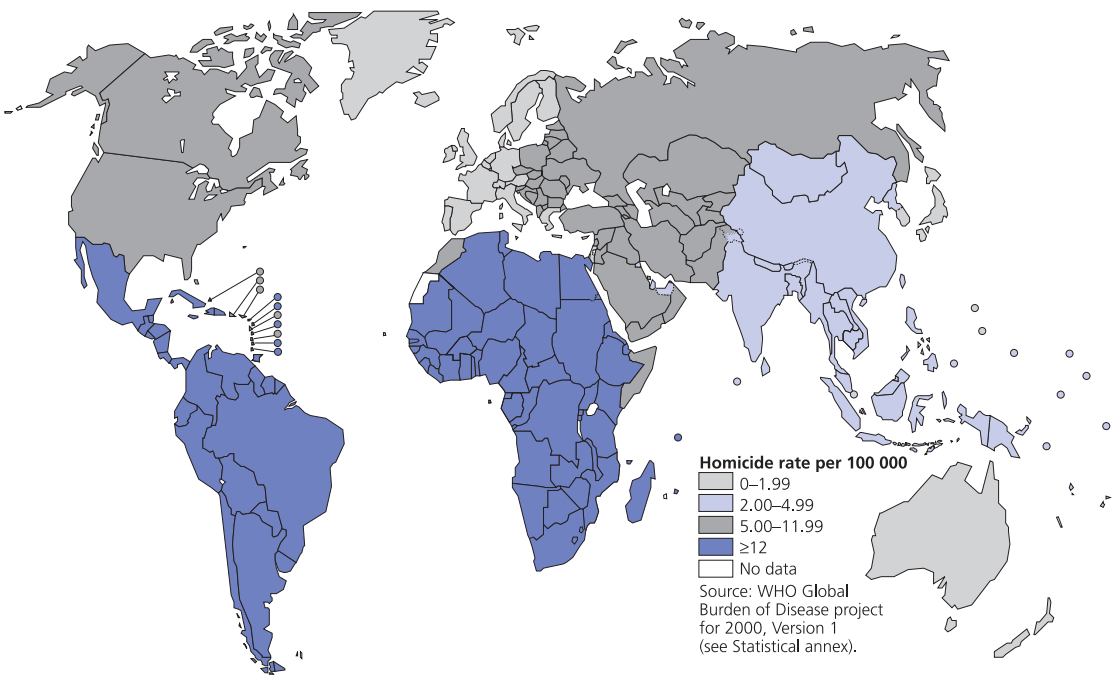
The factors contributing to youth violence cover all levels of the ecological model. Involvement in violent or delinquent behaviour before the age of 13 years is a significant individual factor (*47, 48*), along with impulsivity, aggressive attitudes or beliefs, and low educational achievement (*34, 49*). Experiencing harsh physical punishment or witnessing violence in the home, lack of supervision and monitoring by parents, and associating with delinquent peers are important relationship factors (*33, 34, 50*).

On the community and societal levels, there is some evidence to suggest that exposure to media violence produces short-term increases in aggression, although the evidence is inconclusive with respect to the impact of the media on the more serious forms of violence (such as assault or homicide) and in the long term (*43*).

Research on other community and societal factors shows that youngsters who live in neighbourhoods and communities with high levels of crime and poverty are at greater risk of violence (*33, 51*). Moreover, rates of youth violence rise in times of armed conflict and repression, and when the whole of society is caught up in social and political change

FIGURE 4

Estimated homicide rates among youths aged 10–29 years, 2000[a]




[a] Rates were calculated by WHO region and country income level and then grouped according to magnitude.

TABLE 3

**Proportion of physically abused women who sought help from different sources, selected population-based studies**

| Country or area | Sample (*M*) | Proportion of physically abused women who: | | | |
|---|---|---|---|---|---|
| | | Never told anyone (%) | Contacted police (%) | Told friends (%) | Told family (%) |
| Australia[a] | 6 300 | 18 | 19 | 58 | 53 |
| Bangladesh | 10 368 | 68 | — | — | 30 |
| Canada | 12 300 | 22 | 26 | 45 | 44 |
| Cambodia | 1 374 | 34 | 1 | 33 | 22 |
| Chile | 1 000 | 30 | 16 | 14 | 32[b]/21[c] |
| Egypt | 7 121 | 47 | — | 3 | 44 |
| Ireland | 679 | — | 20 | 50 | 37 |
| Nicaragua | 8 507 | 37 | 17 | 28 | 34 |
| Republic of Moldova | 4 790 | — | 6 | 30 | 31 |
| United Kingdom | 430 | 38 | 22 | 46 | 31 |

*Source:* reproduced from reference *25* with the permission of the publisher.

[a] Women who were physically assaulted in the past 12 months.

[b] Refers to the proportion of women who told their family.

[c] Refers to the proportion of women who told their partners' family.

(*52, 53*). Rates of youth violence are also higher in countries where social protection policies are weak, income inequality is high, and where a culture of violence prevails (*54–56*).

- In 2000, violence among young people left an estimated 199 000 youths dead.
- For every young person killed, 20 to 40 receive injuries that require hospital treatment.

## Violence against intimate partners

Violence against intimate partners occurs in all countries, all cultures and at every level of society without exception, although some populations (for example, low-income groups) are at greater risk of violence by an intimate partner than others (*57–60*). As well as acts of physical aggression such as hitting or kicking, violence by intimate partners includes forced intercourse and other forms of sexual coercion, psychological abuse such as intimidation and humiliation, and controlling behaviours such as isolating a person from family and friends or restricting access to information and assistance.

Although women can be violent towards their male partners and violence occurs also between partners of the same sex, the overwhelming burden of partner violence is borne by women at the hands of men. In 48 population-based surveys from around the world, 10–69% of women reported being physically assaulted by an intimate male partner at some point in their lives (*25*).

Most victims of physical aggression are subjected to multiple acts of violence over extended periods of time (*61, 62*). They also tend to suffer from more than one type of abuse. For example, a study of 613 abused women in Japan found that less than 10% were victims of physical violence alone, while 57% had suffered physical, psychological and sexual abuse (*63*). A study in Mexico found that over half of the women who had been physically assaulted had also been sexually abused by their partners (*64*).

Around the world, the events that trigger violence in abusive relationships are remarkably consistent (*65–69*). They include disobeying or arguing with the man, questioning him about money or girlfriends, not having food ready on time, not caring adequately for the children or the home, refusing to have sex, and the man suspecting the woman of infidelity.

Many factors have been linked to a man's risk of physically assaulting an intimate partner. Among individual factors, a history of violence in the male partner's family (particularly having seen his own mother beaten) and alcohol abuse by the male partner stand out in many studies (*58, 70–73*). At an interpersonal level, the most consistent markers to emerge for partner violence are conflict or discord in the relationship and low income (*57, 58, 73, 74*). It is as yet unclear why low income increases the risk of violence. It may be because low income provides ready material for marital disagreements or makes it more difficult for women to leave violent or otherwise unsatisfactory relationships; it may also be a result of other factors that accompany poverty, such as overcrowding or hopelessness.

Women are particularly vulnerable to abuse by their partners in societies where there are marked inequalities between men and women, rigid gender roles, cultural norms that support a man's right to sex regardless of a woman's feelings, and weak sanctions against such behaviour (*75, 76*). These factors may make it difficult or dangerous for a woman to leave an abusive relationship. Yet leaving an abusive relationship does not guarantee safety – violence can sometimes continue, and may even escalate, after a woman leaves her partner (*77*). This pattern is found in all countries.

- In surveys from around the world, 10–69% of women report being physically assaulted by an intimate male partner at some point in their lives.

## Child abuse and neglect by parents and other caregivers

Children are abused and neglected by their parents or other caregivers everywhere in the world. As with violence against intimate partners, child abuse includes physical, sexual and psychological abuse, as well as neglect.

Although reliable data are extremely scarce, it is estimated that there were 57 000 homicides among children under 15 years of age worldwide in 2000. Very young children are at greatest risk: homicide rates among children aged 0–4 years are more than twice those among children aged 5–14 years (5.2 per 100 000 compared with 2.1 per 100 000). The most common cause of death is head injury, followed by abdominal injuries and intentional suffocation (*78–80*).

Reliable data on non-fatal child abuse are equally scarce, but studies from various countries suggest that children below the age of 15 years are frequently victims of abuse or neglect that requires medical care and intervention by social services. In the Republic of Korea, for example, 67% of parents in a recent study admitted whipping their children to discipline them and 45% reported hitting, kicking or beating them (*81*). A study in Ethiopia found that 21% of urban schoolchildren and 64% of rural schoolchildren reported bruises or swellings on their bodies from parental punishment (*82*). The numbers of children who suffer sexual abuse worldwide is unknown, though research suggests that about 20% of women and 5–10% of men have suffered sexual abuse as children (*83, 84*).

Among individual factors, age and sex play a significant part in victimization. Generally, young children are most at risk of physical abuse, whereas the highest rates of sexual abuse are among children who have reached puberty or adolescence (*78, 84–89*). In most places, boys are the victims of beatings and physical punishment more often than girls, while girls are at higher risk of infanticide, sexual abuse, neglect and being forced into prostitution (*83, 90–92*). Other factors that increase a child's vulnerability to abuse include being raised by a single parent or by very young parents without the support of an extended family (*90, 93, 94*). Household overcrowding or the presence of other violent relationships in the home (for example, between parents) are also risk factors (*91, 95–97*).

Research suggests that, in many places, women report using more physical punishment than men – probably because they spend the most time with their children (*91, 98–100*). However, when physical violence leads to serious or fatal injury, men are more often the perpetrators (*101–103*). Men are also far more likely to be the perpetrators of sexual abuse (*83, 104*). Some of the factors that increase the likelihood of a parent or other caregiver abusing a child include having unrealistic expectations about child development, poor impulse control, stress and social isolation (*90, 93, 102, 105, 106*). Many studies also suggest that child abuse is related to poverty and to the lack of ''social capital'' – the social networks and neighbourhood relationships that have been shown to protect children (*107–109*).

- Some 57 000 children were killed in 2000, with those aged 0–4 years at greatest risk. Many more are victims of non-fatal abuse and neglect. About 20% of women and 5–10% of men have suffered sexual abuse as children.

## Abuse of the elderly

Abuse of elderly people by their relatives or other caregivers is increasingly being recognized as a serious social problem. It is also a problem that may continue to grow as many countries experience rapidly ageing populations. Between 1995 and 2025, for example, the number of people over the age of 60 years worldwide is expected to double from 542 million to about 1.2 billion (*110*).

Like child abuse, abuse of the elderly includes physical, sexual and psychological abuse, as well as neglect. Elderly people are especially vulnerable to economic abuse, in which relatives or other caregivers make improper use of their funds and resources.

Information on the extent of abuse in elderly populations is scant. The few population-based surveys that have been conducted suggest that between 4% and 6% of elderly people experience some form of abuse in the home (*111–115*) and that mistreatment in institutions may be more extensive than generally believed. In a survey in the United States, for example, 36% of nursing-home staff in one state reported having witnessed at least one incident of physical abuse of an elderly patient in the previous year, 10% admitted having committed at least one act of physical abuse themselves, and 40% said that they had psychologically abused patients (*116*). Abusive acts in institutions for the elderly include physically restraining patients, depriving them of dignity and choice over daily affairs, or providing insufficient care (for example, allowing them to develop pressure sores) (*117, 118*).

A number of situations appear to put the elderly at special risk of violence (*112, 119–122*). In some cases, strained family relationships may worsen as a result of stress and frustration as the older person becomes dependent. In others, a caregiver's dependence on an older person for accommodation or financial support may be a source of conflict. Social change may also play an important role. In some societies, family or community networks that once supported older generations are being weakened by rapid socioeconomic change. In the countries of the former Soviet Union, for example, growing numbers of elderly people are being left to fend for themselves, often in communities where instability has fuelled high rates of crime and violence.

Older men are at risk of abuse by spouses, adult children and other relatives in about the same proportion as women (*111, 112*). But in cultures where women have inferior social status, elderly women are at special risk – for instance, of being abandoned when they are widowed and having their property seized (*123, 124*). Some traditional beliefs also put elderly women at risk of physical violence. In the United Republic of Tanzania, for example, some 500 elderly women, accused of witchcraft, are murdered each year (*125*).

Within institutions such as hospitals and nursing homes, abuse is more likely to occur where care standards are low, staff are poorly trained or overworked, interactions between staff and residents are difficult, the physical environment is deficient, and where policies operate in the interests of the institution rather than of the residents (*117*). As well, few doctors or nurses have been trained to diagnose abuse in elderly people, and health systems do not always regard care of elderly people as a priority (*126*). Addressing discriminatory attitudes and practices in health care systems is an important step in preventing abuse of the elderly.

- Between 4% and 6% of elderly people experience some form of abuse in the home, and mistreatment in institutions may be more extensive than generally believed.

## Sexual violence

Sexual violence encompasses a wide range of acts, including coerced sex in marriage and dating relationships, rape by strangers, systematic rape during armed conflict, sexual harassment (including demands for sexual favours in return for jobs or school grades), sexual abuse of children, forced prostitution and sexual trafficking, child marriage, and violent acts against the sexual integrity of women, including female genital mutilation and obligatory inspections for virginity. Women and men may also be raped when in police custody or in prison.

Most acts of sexual violence are experienced predominantly by women and girls and perpetrated by men and boys. Nevertheless, rape of men and boys by men is an identified problem, and coercion of young men into sex by older women is also reported.

Available data suggest that in some countries nearly one in four women report sexual violence by an intimate partner, and up to one-third of adolescent girls report forced sexual initiation (*61, 62, 127–129*). For instance, 23% of women in North London, England, reported having been the victim of either an attempted or a completed rape by a partner during their lifetime (*62*). Similar figures have been reported for Guadalajara, Mexico, and Lima, Peru (23%), and for the Midlands Province in Zimbabwe (25%) (*25, 130*). Available data also suggest that hundreds of thousands of women and girls throughout the world are bought and sold into prostitution or sexual slavery each year (*39, 131–134*), or subjected to sexual violence in schools, workplaces and health care and refugee settings (*135–140*). For example, a recent national survey in South Africa that included questions about experience of rape before the age of 15 years found that schoolteachers were responsible for 32% of disclosed child rapes (*141*).

Sexual violence has a profound impact on the physical and mental health of the victims. As well as injuries, it is associated with increased risk of a range of sexual and reproductive health problems, with consequences that are seen both immediately and many years after the assault (*28, 128, 142*). Mental health consequences are just as serious as the physical consequences and may also be very long lasting. Mortality associated with sexual violence may occur through suicide, HIV infection, and murder, either during the attack or subsequently in ''honour killings'' (*22–24, 143–145).*

There are a number of factors that increase the risk of someone being forced into sex. There are also a number of factors that increase the risk of an individual forcing sex on another person. Furthermore, there are factors within the social environment that influence the likelihood of rape and the reaction to it. Previous research shows that sexually violent men are more likely to have coercive sexual fantasies, to have a preference for impersonal sexual relationships, and are generally more hostile towards women than men who are not sexually violent (*146–150*). Sexually violent behaviour in men has also been linked to witnessing family violence and having emotionally distant and uncaring fathers (*150–153*). Poverty or living in a community with a general tolerance for sexual violence and weak sanctions against it are also contributory factors (*154–156*). Sexual violence is also more likely to occur where beliefs in male sexual entitlement are strong, where gender roles are more rigid, and in countries experiencing high rates of other types of violence (*157–159*).

- Available data suggest that in some countries one in four women report sexual violence by an intimate partner, and up to one-third of girls report forced sexual initiation. Hundreds of thousands more are forced into prostitution or subjected to violence in other settings, such as schools, workplaces and health care institutions.

## The dynamics of interpersonal violence

The different forms of interpersonal violence share many common underlying risk factors. Some are psychological and behavioural characteristics such as poor behavioural control, low self-esteem, and personality and conduct disorders. Others are tied to experiences, such as lack of emotional bonding and support, early exposure to violence in the home (whether experiencing or witnessing family violence), and family or personal histories marked by divorce or separation. Abuse of drugs and alcohol is frequently associated with interpersonal violence, and poverty as well as income disparities and gender inequality stand out as important community and societal factors.

The different types of violence are also related in important ways. For example, the experience of being rejected, neglected or suffering harsh physical punishment at the hands of parents leaves children at greater risk for engaging in aggressive

and antisocial behaviour, including abusive behaviour as adults. Children are at increased risk of being abused in families in which the adults are violent towards one another. In general, it appears that early childhood factors cut across most types of interpersonal violence, and therefore offer opportunities for prevention that could prove widely beneficial.

There are also key differences between the types of interpersonal violence. While aggressive behaviour in the community, including youth violence, tends to be highly visible, abuse and neglect within the family or between intimate partners is notoriously secretive and hidden from public view. The weapons used differ substantially from one type of violence to another. For example, fists, feet and objects are used more frequently in the different forms of family violence, as well as in intimate partner and sexual violence; in contrast, cases of youth violence are more likely to feature lethal weapons, such as firearms or knives.

There are also differences in the extent to which the various types of violence are seen as ''criminal'' and the authorities are prepared to take action against them. Police and courts are generally far more ready to target violent behaviour by young people and others in the community than violence within the family, whether it be child abuse, cruel treatment of the elderly or men abusing their partners. In many countries there is a marked reluctance to recognize or take action against sexual violence. Even where laws exist to protect people from violence, they are not always enforced. In some countries, law enforcement officials are also among the perpetrators of violence.

Culture plays a key role, setting the boundaries around what is acceptable behaviour and what is considered abusive, and in determining the response to violence. For example, attitudes to disciplining children vary enormously across the world (*160*). In some countries, girls and women who have been raped are not protected by the law, but may be killed by their relatives to preserve the family honour, or else forced to marry their violators to legitimize the sexual relationship.

- Some of the risk factors common to all forms of interpersonal violence include growing up in a violent or broken home, substance abuse, social isolation, rigid gender roles, poverty and income inequality, as well as personal characteristics such as poor behavioural control and low self-esteem.
- While violence in the community, particularly youth violence, is highly visible and generally labelled as ''criminal'', that within the family (including child and elder abuse or violence between intimate partners) is more hidden from public view. Police and courts in many places are less willing or prepared to target such violence, and to recognize or take action against sexual violence.

## Self-directed violence

In much of the world, suicide is stigmatized – condemned for religious or cultural reasons – and in some countries suicidal behaviour is a criminal offence punishable by law. Suicide is therefore a secretive act surrounded by taboo, and may be unrecognized, misclassified or deliberately hidden in official records of death.

### Magnitude of the problem

An estimated 815 000 people worldwide killed themselves in 2000 – roughly one person every 40 seconds – making suicide the thirteenth leading cause of death worldwide. The highest rates are found in Eastern European countries, and the lowest rates are found mainly in Latin America and a few countries in Asia.

In general, suicide rates increase with age. As can be seen in Figure 5, suicide rates among people aged 75 years and older are approximately three times those among people aged 15–24 years. The absolute numbers are, however, generally highest among those below the age of 45 years. Among those aged 15–44 years, self-inflicted injuries are the fourth leading cause of death and the sixth leading cause of ill-health and disability (*1*).

On average, there are three male suicides worldwide for every female suicide. Once again, there are

considerable variations between countries, the ratio of male to female suicides ranging from a low of 1:1 in China to a high of 10:1 in Puerto Rico.

Suicide rates also vary within countries, between urban and rural populations, and between different racial and ethnic groups. For example, suicide rates are often higher among indigenous peoples than among the rest of a country's population (*161–163*). In the Australian state of Queensland, for example, a suicide rate of 23.6 per 100 000 was recorded for the Aboriginal and Torres Strait Islander peoples between 1990 and 1995, compared with 14.5 per 100 000 for the state as a whole (*164*). Among the Inuit people who live in the Arctic Region of northern Canada, overall rates of between 59.5 and 74.3 per 100 000 have been reported, compared with around 15.0 per 100 000 for the Canadian population as a whole (*165*).

Only a minority of people who are suicidal actually take their own lives. On average, there are estimated to be 2–3 attempted suicides for every completed suicide among people over the age of 65 years, while among young people below 25 years of age, the ratio of non-fatal to fatal suicidal acts may reach 100–200:1 (*166, 167*). About 10% of those who attempt suicide do eventually kill themselves. An even greater proportion of people entertain suicidal thoughts – ''suicidal ideation'' in medical terminology – but never attempt to kill themselves. Women, on average, have more suicidal thoughts than men (*168*).

- Over 800 000 people killed themselves in 2000, making suicide the thirteenth leading cause of death worldwide. Among those aged 15–44 years, self-inflicted injuries are the fourth leading cause of death and the sixth leading cause of ill-health and disability.
- Rates of suicide tend to increase with age and are highest among people aged 75 years or more. Within countries, suicide rates may differ between racial and ethnic groups, and between rural and urban areas.
- On average, there are three male suicides for every female suicide.
- Among people who are suicidal, only a minority actually take their own lives. The majority entertain suicidal thoughts but never act on them, and even those who attempt suicide may have no intention of dying.

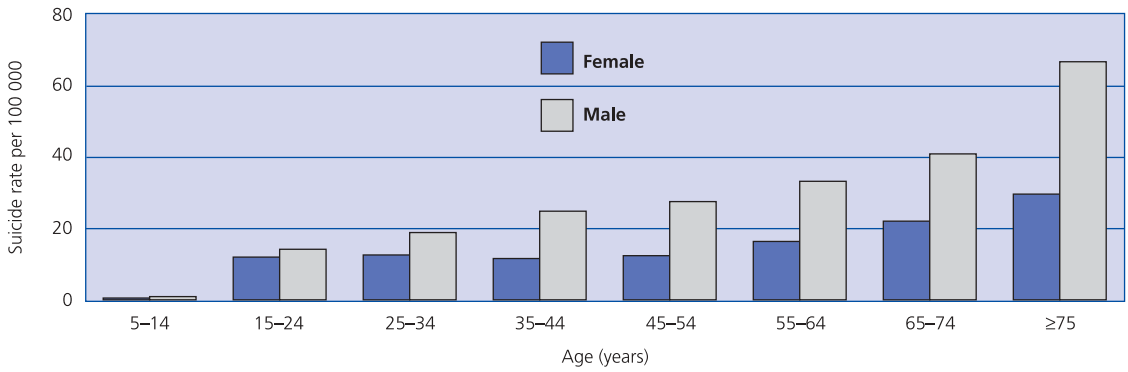
## The dynamics of suicide

A variety of stressful events or circumstances can put people at increased risk of harming themselves (*169–172*). Such factors include living in poverty, unemployment, loss of loved ones, arguments with family or friends, a breakdown in relationships and legal or work-related problems. While such events are common experiences, only a minority of people are driven to suicide. To act as precipitating factors, or ''triggers'' to suicide, they must happen to someone who is predisposed or otherwise especially vulnerable to self-harm.

As with interpersonal violence, predisposing risk factors include alcohol and drug abuse, a history of physical or sexual abuse in childhood, and social isolation (*173–176*). Psychiatric problems, such as depression and other mood disorders, schizophrenia and a general sense of hopelessness also play a role (*177–179*). Physical illnesses, particularly those that are painful or disabling, are also important factors (*180*). Having access to the means to kill oneself (most typically guns, medicines and agricultural poisons) is both an important risk factor in itself and an important determinant of whether an attempt will be successful or not (*181–183*). Having made a previous suicide attempt is a powerful predictor of subsequent fatal suicidal behaviour, particularly in the first 6 months after the first attempt (*184*).

A number of factors nevertheless appear to protect people against suicidal feelings or acts. They include high self-esteem and social ''connectedness'', especially with family and friends, having social support, being in a stable and happy marriage, and commitment to a religion (*185–188*).

FIGURE 5
Global suicide rates by age and sex, 1995




- Hardship and unhappy life events are common experiences, yet only a minority of people are driven to suicide. To act as ''triggers'' to suicide, such events must happen to someone who is predisposed or otherwise vulnerable to self-harm.
- Predisposing risk factors include alcohol and drug abuse, a history of abuse during childhood, and social isolation, as well as depression and other psychiatric problems. Other significant factors include having access to the means of self-harm, and a recent history of attempted suicide.

## Collective violence

Collective violence, in its multiple forms, receives a high degree of public attention. Violent conflicts between nations and groups, state and group terrorism, rape as a weapon of war, the movement of large numbers of people displaced from their homes, and gang warfare – all of these occur on a daily basis in many parts of the world. The effects of these different types of event on health in terms of deaths, physical illness, disabilities and mental anguish, are vast.

The world is still learning how best to respond to the various forms of collective violence, but it is now clear that public health has an important part to play. As the World Health Assembly declared in 1981 (*189*), the role of health workers in promoting and preserving peace is a significant factor for achieving health for all.

### Magnitude of the problem

The 20th century was one of the most violent periods in human history. An estimated 191 million people lost their lives directly or indirectly as a result of conflict, and well over half of them were civilians (*190*). Besides the First World War and the Second World War, two of the most catastrophic events in terms of lives lost were the period of Stalinist terror and the millions of people who perished in China during the Great Leap Forward (1958–1960). Both are still surrounded by uncertainty over the scale of human losses.

Many millions of people have died during conflicts, although the exact figures will never be known. Records of death and injury are poor in many parts of the world, and record-keeping is often disrupted in times of conflict (*191*). Moreover, there are many reasons why parties to a conflict may try to hide or manipulate evidence of the death and destruction they have caused.

Besides the many thousands killed each year in violent conflicts, there are huge numbers who are injured as a result, including some who are permanently disabled. Data on conflict-related disabilities are scarce, but a few figures underline the lasting impact of conflict. More than 30 years of armed conflict in Ethiopia, for instance, led to some 1 million deaths, around half of which were among civilians. About one-third of the 300 000 soldiers returning from the frontline after the end of the conflict had been injured or disabled and at least

40 000 people had lost one or more limbs in the conflict (*192*). In Cambodia, 36 000 people – that is, one person in every 236 of the population – have lost a limb after accidentally detonating a landmine (*193*). In some conflicts, civilians have been mutilated as part of a deliberate strategy to demoralize communities and destroy their social structures. Notable examples are the civil war in Mozambique in the 1980s and the more recent conflict in Sierra Leone, when many people had ears, lips or limbs severed by rebels fighting government forces (*194*).

Rape, too, has been used as a deliberate weapon in many conflicts, including in Korea during the Second World War, in Bangladesh during the war of independence, and in conflicts in Algeria, India (Kashmir), Indonesia, Liberia, Rwanda, Uganda and the former Yugoslavia. Soldiers rape the wives, daughters, mothers and sisters of their opponents, as acts of humiliation and revenge against the enemy as a whole. For instance, estimates of the number of women raped by soldiers during the conflict in Bosnia and Herzegovina range from 10 000 to 60 000 (*195*).

- The 20th century was one of the most violent periods in human history. More than half of the people who lost their lives to conflict throughout the world were civilians.

## Consequences of collective violence

In addition to the direct threats of death and injury posed by fighting, conflicts increase mortality and morbidity rates among civilians in a number of indirect ways. For example, conflicts destroy infrastructure and disrupt vital services such as medical care and public health, including immunization, thus increasing the risk of infectious diseases. In the conflict in Bosnia and Herzegovina, for example, fewer than 35% of children were immunized in 1994 compared with 95% before hostilities broke out (*196, 197*). As a general rule, infant mortality rates rise in times of conflict.

The violence and cruelty of conflict are associated with a range of psychological and behavioural problems, including depression and anxiety, suicidal behaviour, alcohol abuse and post-traumatic stress disorder. Furthermore, psychological trauma may become evident in disturbed and antisocial behaviour, such as family conflict and aggression towards others. This situation is often exacerbated by the availability of weapons and by people becoming inured to violence after long exposure to conflict. The impact of conflicts on mental health is, however, extremely complex and unpredictable. It is influenced by a host of factors such as the nature of the conflict, the kind of trauma and distress experienced, the cultural context, and the resources that individuals and communities bring to bear on their situation (*198*).

Conflicts disrupt trade and other business activities, and divert resources to defence from other vital services and sectors (*199, 200*). Food production and distribution are often specifically targeted in conflicts (*201*). Famine related to conflicts or genocide is estimated to have killed 40 million in the 20th century.

The social turmoil caused by conflicts creates the conditions for sexual violence and the forced migration of large population groups (*202, 203*). Such effects are not simply the unfortunate by-products of conflicts, but often the specific intent of those engaged in fighting to subdue or dominate a population.

- Infants and refugees are among the groups most vulnerable to disease and death in times of conflict. Increases in morbidity and mortality rates among these two groups can be dramatic.
- A range of health problems, including depression and anxiety, suicidal behaviour, alcohol abuse and post-traumatic stress disorder also occur during times of conflict.
- Conflicts destroy infrastructure and disrupt vital services such as medical care and also have an impact on trade, as well as food production and distribution, and displace thousands of people from their homes.

## The dynamics of violent conflict

The roots of violent conflict are generally deep and may be the result of long-standing tensions between groups. The Carnegie Commission on Preventing Deadly Conflict has identified a number of factors that put states at risk of violent conflict (*204*). They include:

- A lack of democratic processes and unequal access to power. The risk is especially high when power stems from ethnic or religious identity, and when leadership is repressive and disposed to the abuse of human rights.
- Social inequality marked by grossly unequal distribution of, and access to, resources. Conflict is most likely in situations where the economy is in decline, thus exacerbating social inequalities and intensifying competition for resources.
- Control by a single group of valuable natural resources, such as gems, oil, timber and drugs. In recent decades, struggles to control diamonds in central Africa, timber and gems in Cambodia, and drugs in Afghanistan, Colombia and Myanmar, have played a key role in violent conflicts.
- Rapid demographic change that outstrips the capacity of the state to provide essential services and job opportunities.

The availability of weapons, particularly in post-conflict situations where demobilization has not been accompanied by decommissioning of weapons or job creation for former soldiers, is also an important factor.

It appears that some aspects of globalization contribute to conflict (*205*). In particular, the fragmentation and marginalization of some countries and groups, the intense competition for resources, and the widening inequalities in some societies are likely to produce conditions that increase the likelihood of violent political conflict occurring. None of these factors may be sufficient alone to cause conflict, but in combination they may create conditions in which violence will erupt.

The Carnegie Commission on Preventing Deadly Conflict has identified a number of factors that put states at risk of violent conflict. They include:

- A lack of democratic processes and unequal access to power.
- Social inequality marked by grossly unequal distribution of, and access to, resources.
- Control of valuable natural resources by a single group.
- Rapid demographic change that outstrips the capacity of the state to provide essential services and job opportunities.

# What can be done to prevent violence?

Violence is a multifaceted problem with biological, psychological, social and environmental roots. There is no simple or single solution to the problem; rather, violence must be addressed on multiple levels and in multiple sectors of society simultaneously. Based on the perspective provided by the ecological model, violence prevention programmes and policies can be targeted at individuals, relationships, communities and whole societies, and delivered in collaboration with different sectors of society in schools, workplaces, other institutions and criminal justice systems. Violence prevention is most likely to be successful if it is comprehensive and scientifically based. In general, interventions that are delivered in childhood and those that are sustained over time are more likely to be effective than short-term programmes.

The following section gives just a brief glimpse of the great variety of programmes around the world aimed at curbing and responding to violence.

## Individual approaches

Preventing violence at the individual level focuses primarily on two objectives. First, it aims to encourage healthy attitudes and behaviour in children and young people in order to protect them as they grow up. Second, it aims to change attitudes and behaviour in individuals who have already become violent or are at risk of harming themselves. In particular, it aims to ensure that people can resolve differences and conflicts without resorting to violence.

Types of approaches that focus on individual beliefs and behaviours include:

- Educational programmes – such as incentives for pupils to complete secondary schooling, vocational training for underprivileged youths and young adults, and programmes providing information about drug abuse.
- Social development programmes – including those to prevent bullying, as well as preschool enrichment programmes. Such programmes are aimed at improving success at school and social relationships. Social development programmes, in particular, are designed to help children and adolescents develop social skills, manage anger, resolve conflicts and develop a moral perspective.
- Therapeutic programmes – including counselling for victims of violence or for those at risk of harming themselves, support groups, and behavioural therapy for depression and other psychiatric disorders associated with suicide.
- Treatment programmes – for people at risk of harming themselves, including medical treatment for those suffering from psychiatric disorders. There are also programmes for sex offenders and people who abuse their partners or children. Such programmes typically use a group format to discuss gender issues and teach skills such as anger management and taking responsibility for one's actions.

The effectiveness of these different approaches varies depending on a variety of factors. For example, social development programmes that emphasize competency and social skills are among the most effective strategies for preventing youth violence – but appear to be more effective when delivered to preschool and primary school children rather than to secondary school pupils (*206–208*).

Counselling programmes for men who abuse their partners have proved successful in helping

some men modify their behaviour (*209, 210*), but there is generally a very high drop-out rate and many who are referred to these programmes never attend sessions (*209, 211*). Behavioural therapy programmes for suicide, on the other hand, have demonstrated some benefits in reducing suicidal thoughts and behaviour (*212, 213*).

- Individual approaches focus primarily on encouraging healthy attitudes and behaviour in children and young people as they grow up, and changing attitudes and behaviour in individuals who have already become violent or are at risk of harming themselves.

## Relationship approaches

Relationship approaches focus mainly on influencing the types of relationships that victims and perpetrators have with the people with whom they most regularly interact. These approaches typically target problems within families – for example, marital conflict, lack of emotional bonding between parents and children, lack of discipline or supervision of children – and negative influences brought to bear by peers.

Types of approaches that target relationships include:

- Training in parenting – these programmes are aimed at improving the emotional bonds between parents and their children, encouraging parents to use consistent child-rearing methods, and helping them to develop self-control in bringing up children. Parenting programmes may be used in cases where children are at risk of being abused by their parents and also to try to prevent future delinquency, in cases where young children's behaviour is a cause for concern.
- Mentoring programmes – these programmes match a young person, particularly one at risk of developing antisocial behaviour, with a caring adult from outside the family who can act as a positive role model and guide.
- Family therapy programmes – these programmes are aimed at improving communications and interactions between family members, as well as teaching problem-solving skills to assist parents and children.
- Home visitation programmes – these programmes include regular visits from a nurse or other health professional to the homes of families in special need of support and guidance with child care or where there is an identified risk of child maltreatment. Such programmes are also used to avert later delinquent behaviour. Interventions can include counselling, training and referrals to specialists or other agencies.
- Training in relationship skills – these programmes typically bring together mixed groups of men and women with a facilitator to explore gender and relationship issues that play a part in violence, and to learn the life skills to deal with them.

All of the above types of programmes have proved effective in some settings. For example, in both developing and industrialized countries, home visitation programmes have proved effective in reducing abuse of children by parents, and are also one of the most promising interventions for producing long-term reductions in violence among young people (*214–216*). Training in parenting and family therapy programmes are also approaches with positive, long-term effects in reducing violent and delinquent behaviour and at lower costs over the long run than other treatment programmes (*43, 217–219*).

Well-known training programmes in relationship skills include Stepping Stones and Men as Partners, programmes that were originally developed for Africa but which have been adopted in many parts of the developing world (*220, 221*). Qualitative evaluations of the Stepping Stones programme in Africa and Asia found that it helped men to communicate, gave them new respect for women, and enabled them to take responsibility for their behaviour (*222*).

- Relationship approaches aim to influence the types of relationships that victims and perpetrators have with the people with whom they most regularly interact, and focus on problems within families and negative influences from peers.

## Community-based efforts

The principal aims of community-based violence prevention activities are to raise public awareness of and debate about the issues, stimulate community action, address the social and material causes of violence in the local environment, and make provision for the care and support of victims.

Types of approaches that focus on community factors include:

- Public education campaigns using the media to target entire communities or educational campaigns for specific settings such as schools, workplaces, and health care and other institutions.
- Modifications to the physical environment, such as improving street lighting, creating safe routes for children and youths on their way to and from school, and monitoring and removing environmental pollutants that may affect child development.
- Extracurricular activities for young people, such as sports, drama, art and music.
- Training for police, health and education professionals, and employers to make them better able to identify and respond to the different types of violence.
- Community policing to create partnerships between police and a variety of groups at community level.
- Programmes for specific settings such as schools, workplaces, refugee camps and care institutions – including hospitals, health care clinics and long-term care institutions for the elderly. These types of programmes focus on changing the institutional environment by means of appropriate policies, guidelines and protocols.
- Coordinated community interventions – involving many sectors and geared toward improving services and programmes.

Educational campaigns have been shown to be beneficial in some circumstances, such as the *Soul City* multimedia campaign in South Africa. This campaign has addressed many types of interpersonal violence including bullying, gang violence, violence by intimate partners, rape and sexual harassment. Evaluations of the adult *Soul City* television series have found increased knowledge and awareness, and shifts in attitudes and social norms concerning domestic violence and gender relations. There has been a significant increase in the willingness to change behaviour and take action against violence, both in urban and rural areas, and among both men and women.

Community policing initiatives have been implemented with some success in Rio de Janeiro, Brazil, and San José, Costa Rica (*223, 224*), but require more rigorous evaluation to determine their effectiveness. Improved training for police and health care providers is a key response for preventing many types of violence. Evidence of effectiveness, however, indicates that training alone is insufficient to combat violence. It must also be accompanied by and reinforced with efforts to change attitudes and organizational culture (*225–227*).

Networking and multisectoral cooperation at the community level are increasingly used to deal with violence. Coordinating councils, interagency forums and similar activities are established involving a wide range of people, including magistrates, community health and social workers, members of women's groups, staff of schools, and the local religious and political authorities. Typically, their functions include sharing information and expertise, identifying problems in the provision of services, and promoting community awareness and action on one or several types of violence.

- Community-based efforts are geared toward raising public awareness about violence, stimulating community action, and providing for the care and support of victims.

## Societal approaches

Societal approaches to reduce violence focus on cultural, social and economic factors, and how these factors shape different settings and entire communities.

Types of approaches that focus on these broader societal factors include:

- Legislative and judicial remedies such as the creation or improvement of laws against sexual violence and violence by intimate partners, or against the physical punishment of children at home, in school or in other settings; mandatory reporting laws for child abuse as well as abuse of the elderly; and procedures for handling cases of family and sexual violence.
- International treaties – many international treaties and conventions are relevant to the prevention of violence. Besides setting standards for national legislation, these instruments are invaluable for advocacy purposes.
- Policy changes to reduce poverty and inequality, and improve support for families – such as social assistance and economic development schemes, employment creation, improved education, parental leave, maternal employment and child care arrangements.
- Efforts to change social and cultural norms. These are especially important in tackling gender issues, racial or ethnic discrimination, and harmful traditional practices, all of which may have deep roots in the social fabric.
- Implementing disarmament and demobilization programmes in countries emerging from a conflict, including providing alternative employment for former combatants.

It is believed that rates of child abuse and neglect can be significantly reduced by successfully tackling poverty, improving educational levels and employment opportunities, and increasing the availability and quality of child care. Research from several countries indicates that high-quality early-childhood programmes may offset social and economic inequalities and improve child outcomes such as child development and success at school (*228*) – outcomes that can also reduce rates of youth violence.

Measures to reduce gun violence have been instituted in a variety of countries, including stricter policing of illegal possession of guns, or tightening the rules for storing guns to prevent theft and trade in stolen weapons. Such measures have proved successful in reducing homicide and suicide rates in some settings (*229–232*). Other successful measures against suicide have included stringent restrictions on the sale of toxic farm chemicals and medicines, and removing harmful elements such as carbon monoxide from domestic gas and car exhaust fumes. For example, restrictions on the sale of the weedkiller paraquat, which played a central role in suicide in Samoa, led to a sharp drop in the rates of suicide within 3 years (*233*).

- Societal approaches focus on the cultural, social and economic factors related to violence, and emphasize changes in legislation, policies and the larger social and cultural environment to reduce rates of violence in different settings and entire communities.

## Some important gaps

The preceding sections have given a brief glimpse of the variety of programmes around the world aimed at curbing and responding to violence. They also show that very few programmes have been rigorously evaluated for their effectiveness. In order to find out what does and does not work in preventing violence, and to direct resources where they are likely to be most effective, evaluation must be given a higher priority in all activities. It is important to note, though, that rigorous research takes time to produce results. The impulse only to invest in proven approaches should not be an obstacle to supporting promising ones.

A number of other shortcomings are also apparent. As discussed earlier, there are insufficient programmes aimed at primary prevention – measures to stop violence before it happens – compared with secondary or tertiary prevention. There is also an imbalance in the focus of programmes – community and societal strategies are under-emphasized compared with programmes addressing individual and relationship factors.

Finally, it is the case that most violence prevention programmes have been developed and tested in industrialized countries. There is a pressing need to develop or adapt, test and evaluate many more prevention programmes in developing countries, and to discover what does and does not work in a much wider range of settings.

- Relatively few approaches have been rigorously evaluated for their effectiveness; evaluation must be given a higher priority in all activities.
- Not enough programmes are aimed at primary prevention, compared with secondary or tertiary prevention.
- Programmes operating at the community or societal levels are under-emphasized compared with those aimed at individual or relationship factors.
- There is a pressing need to develop or adapt, test and evaluate many more prevention programmes in developing countries.

# Recommendations for action

The multifaceted nature of violence requires the engagement of governments and stakeholders at all levels of decision-making – local, national and international. The following recommendations reflect this need for multisectoral and collaborative approaches.

## Recommendation 1. Create, implement and monitor a national action plan for violence prevention

A national plan of action is important for preventing violence and for promoting effective responses that can be sustained over time. Such a plan should be based on a consensus developed by a wide range of governmental and nongovernmental actors, including appropriate stakeholder organizations. It should take into account the human and financial resources that are and will be made available for its implementation, and should include elements such as the review and reform of existing legislation and policy, building data collection and research capacity, strengthening services for victims, and developing and evaluating prevention responses. The plan should also include a timetable and evaluation mechanism, with a specific organization mandated to monitor and report periodically on progress. It should feature coordinating mechanisms at the local, national and international levels to enable collaboration between sectors that might contribute to preventing violence, such as the criminal justice, education, labour, health and social welfare sectors.

## Recommendation 2. Enhance capacity for collecting data on violence

National capacity to collect and analyse data on violence is necessary in order to set priorities, guide programme design and monitor progress. In some countries, it may be most efficient for the national government to designate an institution, agency or government unit to be responsible for collating and comparing information from health, law enforcement and other authorities that maintain regular contact with the victims and perpetrators of violence. In countries with limited resources, that agency might also assume the monitoring function described under Recommendation 1.

Data collection is important at all levels, but it is at the local level that the quality and completeness of data will be determined. Systems must be designed that are simple and cost-effective to implement, appropriate to the level of skills of the staff using them, and conforming to both national and international standards. In addition, there should be procedures to share data between the relevant authorities (such as those responsible for health, criminal justice and social policy) and interested parties, and the capability to carry out comparative analysis.

At the international level, the world currently lacks accepted standards for data collection on violence to enhance the comparison of data across nations and cultures. This should be remedied by the development of internationally accepted standards such as the *International classification of external causes of injuries* (*234*) and the *Injury surveillance guidelines* developed by the World Health Organization and the United States Centers for Disease Control and Prevention (*235*).

## Recommendation 3. Define priorities for, and support research on, the causes, consequences, costs and prevention of violence

There are many reasons to undertake research on violence, but a main priority is to gain a better

understanding of the problem in different cultural contexts so that appropriate responses can be developed and evaluated. At the national level, research can be advanced by government policy, by direct involvement of government institutions (many social service or interior ministries, as well as criminal justice agencies, have in-house research programmes) and by funding to academic institutions and independent researchers.

Research can and should also be undertaken at the local level. For maximum benefit, local authorities should involve all partners possessing relevant expertise, including university faculties (such as medicine, social sciences, criminology and epidemiology), research facilities and nongovernmental organizations.

Some high-priority global issues call for cross-national research at the international level. These issues include: the relationship between violence and various aspects of globalization, including economic, environmental and cultural impacts; risk and protective factors common to different cultures and societies; and promising prevention approaches applicable in a variety of contexts.

## Recommendation 4. Promote primary prevention responses

The importance of primary prevention is a theme echoed throughout the *World report on violence and health*. Some of the important primary prevention interventions for reducing violence include:

- prenatal and perinatal health care for mothers, as well as preschool enrichment and social development programmes for children and adolescents;
- training for good parenting practices and improved family functioning;
- improvements to urban infrastructure, both physical and socioeconomic;
- measures to reduce firearm injuries and improve firearm-related safety;
- media campaigns to change attitudes, behaviour and social norms.

The first two interventions are important for reducing child abuse and neglect as well as violence perpetrated during adolescence and adulthood. Improvements to infrastructure can have significant impacts on several types of violence. Specifically, this means addressing environmental factors within communities – identifying locations where violence frequently occurs, analysing the factors that make a given place dangerous, and modifying or removing these factors. It also calls for an improvement to the socioeconomic infrastructure of local communities through greater investment and improved educational and economic opportunities.

Another challenge to both national and local interventions is the prevention of firearm injuries and improvement of firearm-related safety measures. Moreover, while no conclusive research results are yet available on how exposure to violence through the media affects many types of violence, the media can be used to change violence-related attitudes and behaviour as well as social norms. Depending on conditions in specific locations, most of these primary prevention interventions can have important mutual reinforcing effects.

## Recommendation 5. Strengthen responses for victims of violence

National health systems as a whole should aim to provide high-quality care to victims of all types of violence, as well as the rehabilitation and support services needed to prevent further complications. Priorities include:

- improvements to emergency response systems and the ability of the health care sector to treat and rehabilitate victims;
- recognition of signs of violent incidents or ongoing violent situations, and referral of victims to appropriate agencies for follow-up and support;
- ensuring that health, judicial, policing and social services avoid a renewed victimization of earlier victims, and that these services effectively deter perpetrators from re-offending;
- social support, prevention programmes and other services to protect families at risk of violence and reduce stress on caregivers;

— incorporation of modules on violence prevention into the curricula for medical and nursing students.

Each of these responses can help minimize the impact of violence on individuals and the cost to health and social systems. However, their design and implementation must include safeguards against ''revictimization'' – the placing of victims at risk of further violence by perpetrators, censure from their families or communities, or other negative consequences.

## Recommendation 6. Integrate violence prevention into social and educational policies, and thereby promote gender and social equality

Much of violence has links with gender and social inequalities that place large sections of the population at increased risk. The experience of countries that have improved the status of women and reduced social discrimination suggests that an array of interventions will be required, including legislative and judicial reforms, campaigns aimed at raising public awareness of the problem, training and monitoring of the police and public officials, and educational or economic incentives for disadvantaged groups.

In many parts of the world, social protection policies and programmes are under considerable strain. Many countries have seen real wages fall, basic infrastructure deteriorate, and steady reductions in the quality and quantity of health, education and social services. Since such conditions are linked with violence, governments should do their utmost to maintain social protection services, if necessary reordering the priorities in their national budgets.

## Recommendation 7. Increase collaboration and exchange of information on violence prevention

Better working relations between international agencies, governments, researchers, networks and nongovernmental organizations engaged in violence prevention are needed to achieve better sharing of knowledge, agreement on prevention goals and coordination of action. This should be remedied through the creation of coordinating mechanisms in order to avoid needless duplication and to benefit from the economies of pooling expertise, networks, funding and in-country facilities.

The contributions of advocacy groups – such as those concerned with violence against women, human rights abuses, abuse of the elderly and suicide – should be recognized and encouraged through practical measures such as offering these groups official status at key international conferences and including them in official working groups. The contribution of experts working on the different types of violence should be aided by developing platforms that will facilitate the exchange of information, as well as joint research and advocacy work.

## Recommendation 8. Promote and monitor adherence to international treaties, laws and other mechanisms to protect human rights

Over the past half-century, national governments have signed a variety of international legal agreements that have direct relevance to violence and its prevention. Such agreements set standards for national legislation and establish norms and limits of behaviour.

While many countries have made progress in harmonizing legislation with their international obligations and commitments, others have not. Where the obstacle is the scarcity of resources or information, the international community should do more to assist. In other cases, strong campaigning will be necessary to bring about changes in legislation and practice.

## Recommendation 9. Seek practical, internationally agreed responses to the global drugs trade and the global arms trade

The global drugs trade and the global arms trade are integral to violence in both developing and industrialized countries. Even modest progress on either front will contribute to reducing the amount and degree of violence suffered by millions of

people. To date, however – and despite their high profile in the world arena – no solutions seem to be in sight for these problems. Public health strategies could help reduce their health impacts at both the local and national levels, and should therefore be accorded a much higher priority in global-level responses.

# Conclusion

Although there are major gaps in knowledge and a pressing need for more research, experience to date has taught some important lessons about preventing violence and mitigating the consequences. These include the following.

Violence is often predictable and preventable. As the *World report on violence and health* has shown, certain factors appear to be strongly predictive of violence, even if direct causality is sometimes difficult to establish. Identifying and measuring these factors can provide timely warning to decision-makers that action is required. Moreover, the array of tools with which to take action is growing all the time as public health-oriented research advances.

Upstream investment brings downstream results. There is a tendency worldwide for authorities to act only after violence has occurred. But investing in prevention – especially primary prevention activities that operate ''upstream'' of problems – may be more cost-effective and have large and long-lasting benefits.

Understanding the context of violence is vital in designing interventions. All societies experience violence, but its context – the circumstances in which it occurs, its nature and society's attitude towards it – varies greatly from one setting to another. Wherever prevention programmes are planned, the context of violence must be understood in order to tailor the intervention to the targeted population.

Different types of violence are linked in many important ways and often share common risk factors. Unfortunately, research and prevention activities for the various types of violence have often been developed in isolation from one another. If this fragmentation can be overcome, the scope and effectiveness of interventions is likely to be enhanced.

Resources should be focused on the most vulnerable groups. Violence, like many health problems, is not neutral. While all social classes experience violence, research consistently shows that people with the lowest socioeconomic status are at greatest risk. The neglect of poor people's needs – in most societies the poor are generally those least served by the state's various protection and care services – has to be challenged if violence is to be prevented.

Complacency is a barrier to tackling violence. Complacency greatly encourages violence and is a formidable obstacle in responding to it. This is particularly true of the attitude that regards violence – like the closely related problem of gender inequality – as something immutable in human society. Complacency towards violence is often reinforced by self-interest, as in the socially sanctioned right of men to ''correct'' their wives. Reductions in both interpersonal and collective violence depend upon combating complacency towards violence of any kind.

Political commitment to tackling violence is vital to the public health effort. While much can be achieved by grassroots organizations, individuals and institutions, the success of public health efforts ultimately depends on political commitment. This is as vital at the national level – where policy, legislative and overall funding decisions are made – as it is at the provincial, district and municipal levels, where responsibility for day-to-day administration of policies and programmes rests. Sustained efforts by many sectors of society are often necessary to gain political commitment to tackle violence.

Violence is not inevitable. We can do much to address and prevent it. The world has not yet fully measured the size of this task and does not yet have all the tools to carry it out. But the global knowledge base is growing and much useful experience has already been gained.

The *World report on violence and health* attempts to contribute to that knowledge base. It is hoped that the report will inspire and facilitate increased cooperation, innovation and commitment to preventing violence around the world.

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Violence cuts short the lives of millions of people across the world each year, and damages the lives of millions more. It knows no boundaries of geography, race, age or income. It strikes at children, young people, women and the elderly. It finds its way into homes, schools and the workplace. Men and women everywhere have the right to live their lives and raise their children free from the fear of violence. We must help them enjoy that right by making it clearly understood that violence is preventable, and by working together to identify and address its underlying causes.

Kofi Annan, Secretary-General, United Nations,
Nobel Peace Laureate, 2001

Massacres, forced displacement of populations, discriminatory access to health care – in the contexts in which MSF works, violence, particularly political violence, is often one of the main causes of mortality. The absence of this category in epidemiological registers often reflects the ambiguity of doctors and experts to authorities in power. This report is a welcome break in this wall of silence.

Morten Rostrup, President, Médecins Sans Frontières (MSF) International Council,
Nobel Peace Laureate, 1999

A stronger commitment to increase global violence prevention efforts is desperately needed. Therefore, I welcome this report very much. For the first time all of the available knowledge has been assembled into one publication. Civil society, United Nations agencies and governments need to work hand in hand on the implementation of the recommendations of this report.

Jody Williams, International Campaign to Ban Landmines,
Nobel Peace Laureate, 1997

As long as humanity continues to rely on violence to resolve conflicts, the world will enjoy neither peace nor security, and our health will continue to suffer. This report is an important resource for opening our eyes to the reality of violence as a public health problem, and for providing a source of hope for the future. Perhaps only when we realize that violence is destroying both our bodies and our souls will we begin to collectively address its roots and consequences. This report is an important step in that direction.

Oscar Arias, Former President of Costa Rica,
Nobel Peace Laureate, 1987

WHO has made a substantial contribution by providing a global perspective on all forms of violence. The colossal human and social cost of violence hitherto has been inadequately addressed as a public health issue. This report will raise the struggle against violence to a new level of engagement by health workers and others. Over 20 years we in IPPNW have maintained that nuclear weapons and war are the ultimate expressions of violence that must be eliminated if we are to bequeath a liveable planet to generations yet unborn.

Anton Chazov and Bernard Lown, International Physicians for the Prevention
of Nuclear War (IPPNW), Nobel Peace Laureates, 1985

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