New WHO Violence Prevention Information System, an interactive knowledge platform of scientific findings on violence

Authors: Burrows \overline{S} ,¹ Butchart A,¹ Butler N,² Quigg Z,² Bellis MA,^{3,4} Christopher Mikton

- ¹ Department for Management of Noncommunicable Diseases, Disability, Violence and Injury Prevention, World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland
- ² Public Health Institute, Faculty of Education, Health and Community, Liverpool John Moores University, 15-21 Webster Street, Liverpool, L3 2ET, United Kingdom
- ³ Directorate of Policy, Research and International Development, Public Health Wales, Number 2 Capital Quarter, Tyndall Street, Cardiff, CF10 4BZ, United Kingdom
- ⁴College of Health and Behavioural Sciences, Normal Site, Bangor University, Bangor, LL57 2PZ, United Kingdom

Article type: Special feature

Keywords: violence, prevention, prevalence, consequences, risk factors **Number of words**: 782

Scientific information on violence can be difficult to compile and understand. It is scattered across websites, databases, technical reports and academic journals, and rarely addresses all types of violence. In response, in October 2017 WHO released the *Violence Prevention Information System* or *Violence Info*, an online interactive collection of scientific information about the prevalence, consequences, risk factors and preventability of all forms of interpersonal violence. It covers homicide, child maltreatment, youth violence, intimate partner violence, elder abuse, and sexual violence.

Violence Info has three primary sources of data:

- 1. Published scientific studies provide data on the prevalence, consequences, risk factors and effectiveness of prevention and response strategies. The data were extracted from systematic reviews and, in areas poorly covered by them, from single studies.
- 2. WHO Global Health Estimates provide global, regional and national homicide rates.
- 3. The WHO *Global status report on violence prevention 2014* provides information on what countries reported about the existence of national actions plans, social and educational policies, specific laws, prevention programmes, and services for victims.

Violence Info is ambitious - a literature review and data synthesis on this scale is rare. The data repository currently contains almost 13 000 individual data points, from over 3 500 single studies. Data are presented on more than 120 different risk factors and for 45 different consequences across the different violence types. It includes study data on prevalence of the various types (e.g. child maltreatment) and sub-types (e.g. sexual abuse) of violence for 95 countries, including 59 low- and middle-income countries. Summary estimates are provided for the effectiveness of more than 38 different intervention strategies for preventing and responding to violence.

Additionally, *Violence Info* presents homicide estimates for 183 countries/areas, by sex, age group and year (2000, 2005, 2010, 2015). Regional and global homicide estimates are also available. Information on national efforts to address interpersonal violence is presented for 133 countries.

Violence Info is structured as follows:

- 1. Dedicated pages for each violence type
 - These pages summarize data from published scientific studies on prevalence, consequences, risk factors, prevention and response strategies. A world map indicates which countries have studies on prevalence for a particular subtype of violence (e.g. physical, sexual), the number of studies, the total sample size of those

studies, and the median prevalence value for those studies. Users can shift between the different subtypes of violence, and between country and WHO region.

Different visualizations show the relative importance of particular consequences of and risk factors for each violence type. Consequences are grouped as problems relating to health, social and behavioural issues, cognitive and academic performance, and economic issues. Risk factors are organized according to the social ecological model of violence with its four levels: individual, relationship, community and societal.¹

Within each type of violence and for both prevention and response strategies, *Violence Info* provides the number of studies, sample size and the range of effectiveness across different interventions. A section also summarises key elements of those interventions with evidence of effectiveness. Details of the survey instruments most widely used to measure the prevalence of the each violence type are also summarized.

2. Studies pages

Data from published scientific studies can be explored in more depth in the *Studies* section through a series of interactive visualizations. The studies are organized first by violence type and then by prevalence, consequences, risk factors, prevention and response strategies. The data can be filtered by several variables such as author, sex, age or country income group.

3. Country pages

The *Countries* section includes data for WHO Member States and areas. Each country page displays the types of violence for which study data are available; national homicide rates (from WHO Global Health Estimates); and national efforts to address interpersonal violence (from WHO *Global status report on violence prevention* 2014).

Violence Info has several interactive features. By hovering and/or clicking on the world maps and visualizations, users are provided with more fine-grained information for the particular violence type being examined. Help tools are provided throughout the website and a methodology document is available for download. Images from the site can be downloaded, shared and embedded in other documents and websites. The study data and homicide estimates can also be downloaded as Excel files.

The development of *Violence Info* is a collaborative undertaking between WHO, Liverpool John Moores University and Public Health Wales. *Violence Info* is designed to support local, national and international violence prevention policy developments, interventions or other activities. We would welcome the views of those who might contribute to or use such a tool both on its current utility and on how this might be enhanced. The website will be periodically updated as new scientific studies become available. Access *Violence Info* at http://apps.who.int/violence-info/

References

Krug E, Dahlberg L, Mercy J, Zwi, A, Lozano R. World report on violence and health. Geneva: World Health Organization; 2002

RELATED LINKS

Violence Info http://apps.who.int/violence-info/ WHO Prevention of Violence Unit http://www.who.int/violence_injury_prevention/violence/en/

WHO Global Health Estimates http://www.who.int/healthinfo/global_burden_disease/en/

Global status report on violence prevention 2014 http://www.who.int/violence_injury_prevention/violence/status_report/2014/en/

Disclaimer: Stephanie Burrows and Alex Butchart are staff members of the World Health Organization. They alone are responsible for the views expressed in this update and they do not necessarily represent the decisions or policies of the World Health Organization.

Competing interests: None declared.

The Corresponding Author has the right to grant on behalf of all authors and does grant on behalf of all authors, an exclusive license (or non-exclusive for government employees) on a worldwide basis to the BMJ Publishing Group Ltd and its Licensees to permit this article (if accepted) to be published in IP and any other BMJPGL products to exploit all subsidiary rights, as set out in our license (<u>http://ip.bmjjournals.com/ifora/licence.pdf</u>).