A tide of health risks engulfs the largest generation of adolescents in the world's history

April 24 2012

There is wide variation between and within regions in the profile of adolescent health. The highest death rates remain in low-income and middle-income countries (LMIC). Alarmingly, adolescents in these countries are rapidly acquiring western health risks including high rates of tobacco and alcohol use, obesity and physical inactivity. The authors of the fourth and final paper in The *Lancet* Series on Adolescent Health call better coordination across UN agencies and their surveys to fill data gaps, as well as calling on each country around the world to produce a regular report on the health of its adolescents. The paper is by Professor George C Patton, Murdoch Children's Research Institute, Melbourne, and University of Melbourne, Australia and Dr Claudia Cappa, UNICEF, New York, USA, and colleagues.

South Africa had the highest rates of adolescent mortality recorded in the world, with rates 8 times that of high-income countries for males, and 30-times that of HIC females. The USA had the highest adolescent mortality rates (10-24 years) in a league of 27 high-income countries, due to its high rate of violent deaths (also highest out of 23 HIC with data) and deaths due to road trauma. New Zealand had the second highest overall mortality in those aged 10-24 years, and Portugal the third highest. The lowest rates were in Singapore, a third those of the US, followed by the Netherlands and Japan. Australia was 13th lowest, and the UK 15th lowest.

Mortality due to road traffic injury, the leading single cause of death in young people worldwide, was around four times higher in males than females. It also rose four-fold between younger adolescents (10-14 years) and young adults (20-24 years). There was enormous variation between countries. Even in low-traffic mortality regions such as Western Europe, death rates in young adult males were five times higher in Croatia, Greece and Portugal than in low-fatality countries such as Norway and Iceland. The Russian Federation had the highest recorded road traffic fatality rates in young males.

Globally, suicide rates among 10-24 year olds were highest in eastern Europe, especially Kazakhstan, Lithuania, and the Russian Federation, while the lowest rates were in Greece, Italy, and Spain. Finland, Ireland, Norway, Japan, Switzerland and New Zealand had the highest rates among high-income countries.

Violent deaths were highest globally in eastern Europe and Latin America. El Salvador has the highest recorded worldwide murder rates for both males and females. Among most high income countries deaths due to violence have largely disappeared. The US stands out as an exception with deaths due to violence 10 to 20 times higher than in the great majority of high income countries.

Maternal mortality in adolescents has reached record lows in HIC. However, over 700-fold variations exist between most HIC and LMIC with the highest maternal mortality. Even within sub-Saharan Africa, where rates were highest, there was a 70-fold variation between the highest rate country (Chad) and the lowest (South Africa). Bangladesh and Haiti also had very high rates.

Data on health related behaviours presented in this final paper comes from a range of sources: the health behaviour in school-age children (HSBC), the Global School Health Survey (GSHS) and the Global Youth

Tobacco Survey as an estimate for children aged 13-15 years. The highest rates of tobacco use are now in LMIC with females using at similar levels to males in most places. Rates on early tobacco use aged 13-15 years were high in Chile, Malta, Austria, and Namibia in both boys and girls. HIC cannabis use was highest among boys in the USA, followed by Canada, Spain, and France, and also highest in the same four countries among HIC girls. The UK was mid-ranking among HIC for both boys and girls in cannabis use.

For at least weekly binge-drinking of alcohol, rates were generally higher for adolescents in HIC compared to LMIC, with the exception of Latin American countries including Colombia, Venezuela, and Uruguay. Up to one in five adolescents in the HIC with available data were binge drinking at least weekly. Austria and Ireland had the highest rates of at least weekly binge drinking of countries with the latest available data in Western Europe. Surprisingly rates from the USA were similar to these suggesting that the drinking patterns of USA adolescents were catching up with those in other HIC, despite the high legal age for drinking in the USA (21 years old, with most countries worldwide where drinking is legal having a minimum drinking age of 16 or 18).

The last year with internationally comparable data was 2006, and among a league of 40 (mostly high-income) countries on the indicator of having ever been drunk by the age of 13 years, England was 4th worst, Wales 5th and Scotland 8th (with Estonia the worst and Italy the best performing nations) On the indicator of drinking weekly at the age of 15 years – Wales was 3rd worst of the 40 countries, England 4th and Scotland again 8th. (with Ukraine the worst performing and Norway the best). New estimates for many countries are due in the coming months, which will provide an opportunity for the UK other countries providing new data to assess whether their policies to reduce harmful drinking among teenagers have had any impact over the past five years.

LMIC now have some of the most overweight adolescent populations with countries in Latin America (Costa Rica, Guatemala, Ecuador, Chile, Argentina and Uruguay) and the Middle East (United Arab Emirates, Syria, Libya, Egypt) standing out for girls. In HIC, the rates of overweight were generally higher in boys than girls. Canada, Greece, Italy, Malta, and the USA stood out for their high rates, with at least a third or more of boys overweight. Globally, China, plus several Latin American and eastern Mediterranean countries, Mauritania, Oceania, and Thailand were notable for having between a fifth and a third of boys overweight. A staggering 60% of children aged 13-15 years were overweight in Tonga: the highest worldwide.

Surprisingly, despite its obesity epidemic, boys aged 13-15 in the USA exercised more than boys in any other HIC in the 16 countries reporting data, and American girls had the second highest levels of exercise behind Ireland, which was in second place for boys. The UK finished 8th best for girls and 5th best for boys. Norwegian boys and French girls did the least exercise among HIC.

Sexual activity among adolescents aged 13-15 was highest among 19 HIC for girls in Denmark, followed by Iceland, the UK, and Sweden. Greece and Denmark had the highest rates among boys. The lowest rates in boys were in Belgium, and for girls Israel.

Employment opportunities, identified in other papers in this Series as vital to promoting adolescent health, also varied widely. Within HIC regions such as Europe, there were seven-fold differences between countries with low youth unemployment (Netherlands) versus high levels (Spain, Macedonia). Globally, high unemployment rates were identified in North Africa, the Middle East, Central Asia, and central Europe.

Rates of early marriage were high in southern Asia, with Bangladesh reporting the highest regional rate with two-thirds of women marrying

before age 18 years. Very high rates of early marriage were reported from most of sub-Saharan Africa, with Niger, at 75%, having the highest rate worldwide. High rates of early childbirth were also identified in sub-Saharan Africa, southern Asia, and some countries of the Caribbean and Latin America.

The authors say that "For the largest generation in the world's history, the available global profile of youth health is worrying. The high income world has been grappling with a rising tide of risks for non-communicable diseases, including the problems of obesity, physical inactivity, alcohol, tobacco and illicit drug use. That tide is now overwhelming many LMIC who have yet to bring in measures to control the problems of injury, infectious disease and maternal mortality in this young age group."

The UN and its agencies have an urgent central role in aligning systems of data collection to provide a good understanding of a rapidly changing picture of global youth health. They should draw in expertise from academia and globally oriented research institutes to develop strategies to fill the data gaps. The authors say: "With this coordination, every country should aspire to produce a report on the health and well-being of its young people to guide government and non-government agencies working towards their healthy development…Within future global health initiatives tackling non-communicable diseases, mental health, sexual and reproductive health, and injury, there is a need for explicit data strategies for young people including age and sex disaggregation of data and capture of health risk processes."

Provided by Lancet

Citation: A tide of health risks engulfs the largest generation of adolescents in the world's history (2012, April 24) retrieved 10 May 2024 from https://medicalxpress.com/news/2012-04-tide-

health-engulfs-largest-adolescents.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.