

18.7 Million Annihilated Says Leading Expert in Peer-reviewed Journal;

An approved, authoritative, scientific
presentation made by an expert

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An earlier version of this talk was given at Goldsmiths College in December
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OP-ED COLUMNIST

The Pain of the G-8's Big Shrug

By NICHOLAS D. KRISTOF

Published: July 10, 2008

Genocide is regrettable, but don't lose perspective. It is simply one of many tragedies in the world today — and **a fairly modest one in terms of lives lost.**

All the genocides of the last 100 years have cost only 10 million to 12 million lives. In contrast, every year we lose almost 10 million children under the age of 5 from diseases and malnutrition attributable to poverty. Make that the priority, not Darfur.

Civil conflict in Congo has claimed more than 5.4 million lives over the last decade, according to careful mortality surveys by the International Rescue Committee. That's **at least 10 times the toll in Darfur**, but because Congo doesn't count as genocide — just as murderous chaos — no one has paid much attention to it.

OP-ED COLUMNIST

Orphaned, Raped and Ignored

By NICHOLAS D. KRISTOF

Published: January 30, 2010

Sometimes I wish eastern Congo could suffer an earthquake or a tsunami, so that it might finally get the attention it needs. The barbaric civil war being waged here is the **most lethal conflict since World War II** and has claimed at least 30 times as many lives as the Haiti earthquake.

A **peer-reviewed study** found that **5.4 million people had already died** in this war as of April 2007, and **hundreds of thousands more have died** as the situation has deteriorated **since then**.

OP-ED COLUMNIST

From 'Oprah' to Building a Sisterhood in Congo

By NICHOLAS D. KRISTOF

Published: February 3, 2010

That's where Lisa enters the story. After seeing the Oprah show on the Congo war, Lisa began to read more about it, learning that it is **the most lethal conflict since World War II**. More than **five million had already died** as of the last **peer-reviewed** mortality estimate in 2007.

OP-ED COLUMNIST

The **World Capital of Killing**

By NICHOLAS D. KRISTOF
Published: February 6, 2010

But so far the brutal war here in eastern Congo has not only **lasted longer than the Holocaust** but also appears to have claimed more lives. A **peer-reviewed** study put the Congo war's **death toll at 5.4 million** as of April 2007 and rising at 45,000 a month. That would leave the total today, after a dozen years, at **6.9 million**.

OP-ED COLUMNIST

Death by Gadget

By NICHOLAS D. KRISTOF
Published: June 26, 2010

A word of background: Eastern Congo is the site of the **most lethal conflict since World War II**, and is widely described as **the rape capital of the world**. The war had claimed **5.4 million deaths** as of April 2007, with the toll mounting by 45,000 a month, according to a study by the International Rescue Committee.

Number Mongering/Hyperbole

5.4 million, 5.4, million, 5.4 million, **5.4 million.....**



6.9 MILLION

If we just keep extrapolating 45,000 per month we're now

up to around **8.6 million**

Argument from authority



Peer review, peer review, peer review....

“...the International Rescue Committee conducted a series of five mortality surveys...with some of the world’s leading epidemiologists...Partnering with leaders in field epidemiology...top epidemiologists from...The surveys’ methodology, analysis and findings were subjected to intense peer review, presented at numerous scientific conferences and universities and confirmed by numerous public health experts. Three of the studies were published in respected scientific journals, including the prestigious Lancet.” (Statement put out by the IRC)

Problem Number One

The claims (5.4 million...**6.9 million**, etc....) are almost surely false

1. Even if we accept the validity of mortality data collected by the IRC any reasonable estimate of excess deaths from these data will be so imprecise as to be virtually meaningless. The [Human Security Report 2009/2010](#) accepted the IRC's data and estimated excess deaths of 900,000.....

.....with a 95% confidence interval of

-600,000 to 2,400,000

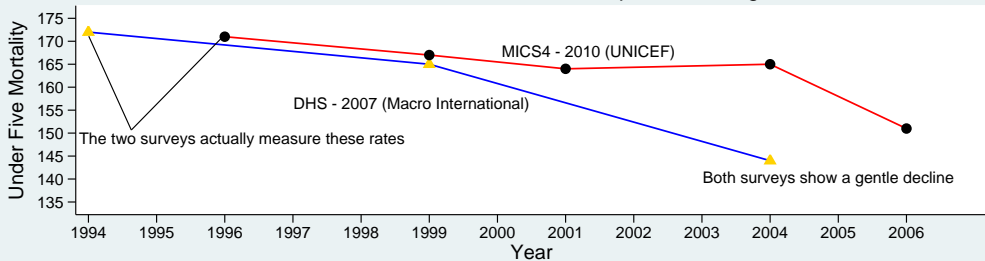
2. The IRC's claimed big spike in the mortality rate probably did not even happen. Two subsequent surveys found no evidence of such a spike. (See the next slide)

This IRC spike is really more of an assumption than a result because the IRC does not actually measure the data point at the bottom of the spike. Rather, the IRC just assumes its baseline and then backs this assumption up with vigorous hand waving.



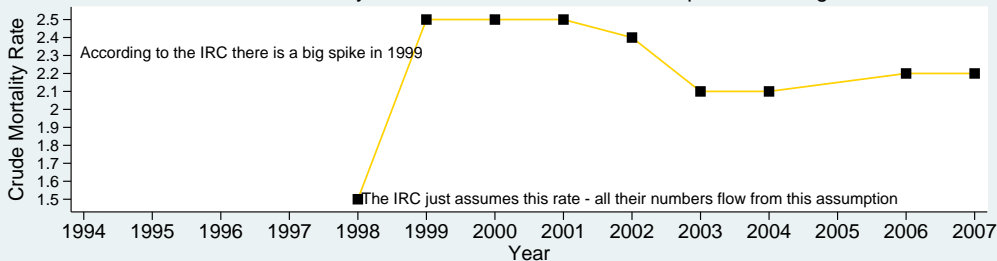
Under-Five Mortality Rates

DHS and MICS4 - Democratic Republic of Congo



International Rescue Committee

Crude Mortality Rate Estimates - Democratic Republic of Congo



Problem Number Two

There is some evidence that number mongering doesn't work and, in fact, may be counterproductive.

Slovic, P. (2007). "If I look at the mass I will never act": Psychic numbing and genocide. *Judgment and Decision Making*, 2, 79-95. Available at www.decisionresearch.org

In laboratory experiments Slovic finds, for example, that people donate money to help particular people whom they see suffering but do not respond well to statistics on the number of people suffering and, in fact, it seems that the bigger the numbers the weaker the response.

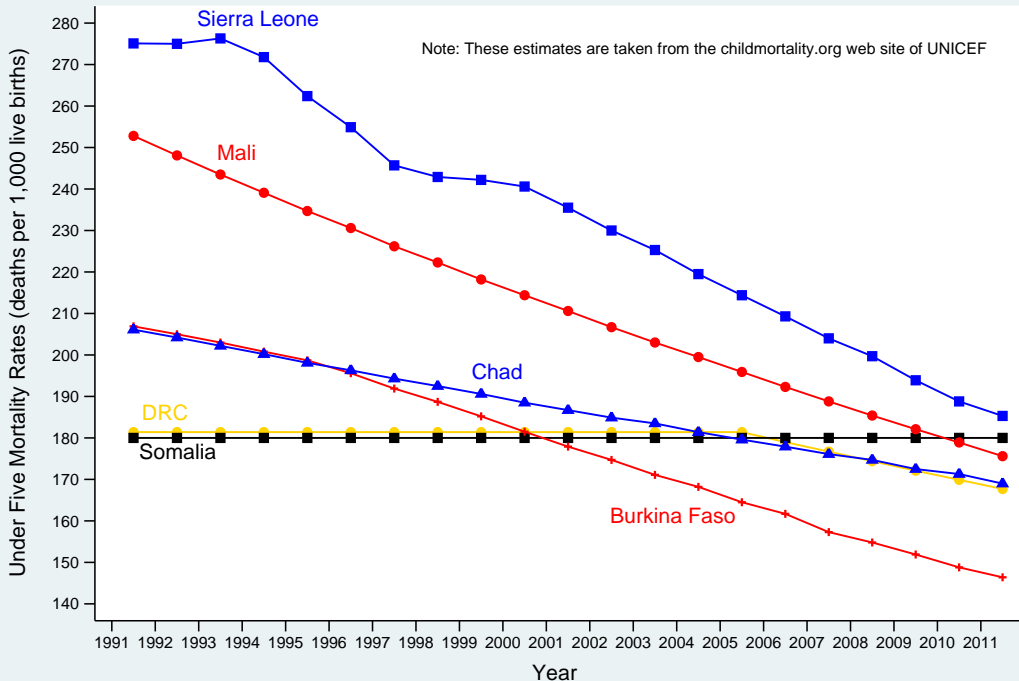
Let me be clear - the child mortality rate in the DRC is very high and it makes perfect sense to help the people of the DRC.

On the other hand, I do not think that shouting and hyperbole are useful.

The next picture gives some perspective on the DRC's situation by comparing its child mortality rates with those of some of the worst-performing countries in the world, all of which happen to be in sub-Saharan Africa.

Indeed, we could follow the IRC's lead and calculate excess death rates for all these countries by comparing with sub-Saharan averages.

DRC - The most Lethal Conflict since World War Two?



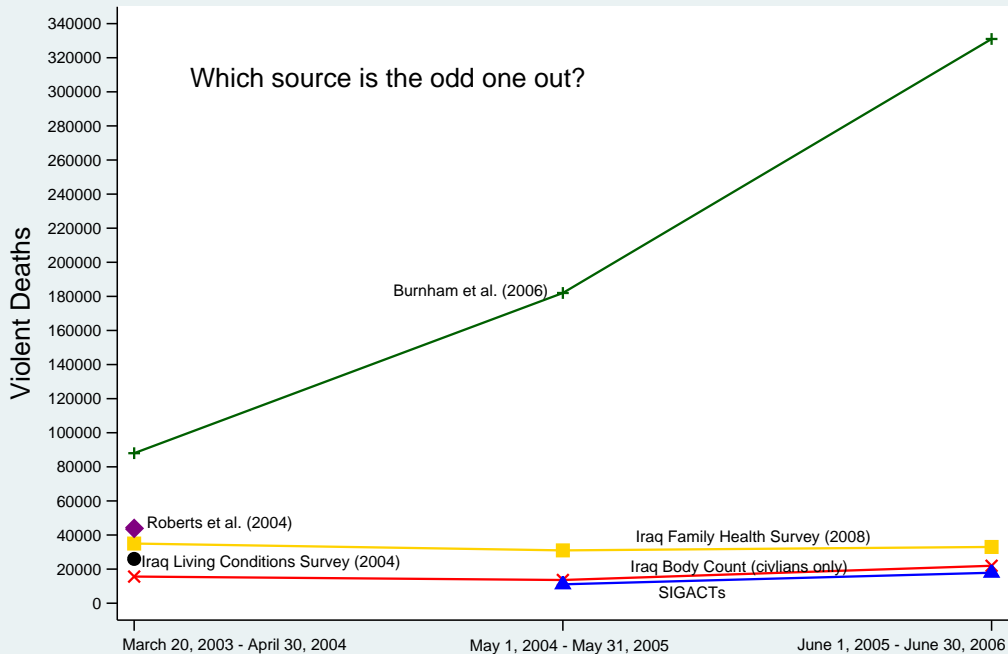
This pattern repeats itself in a strikingly similar way in Iraq.

1. Number mongering/hyperbole
2. Appeals to authority
3. False claims

There isn't time today to go through the Iraq case minutely so I will just give one picture on false claims. However, you will have no trouble finding plenty of number mongering and appeals to authority in this case if you try.

Iraq War

Six Sources on Violent Deaths

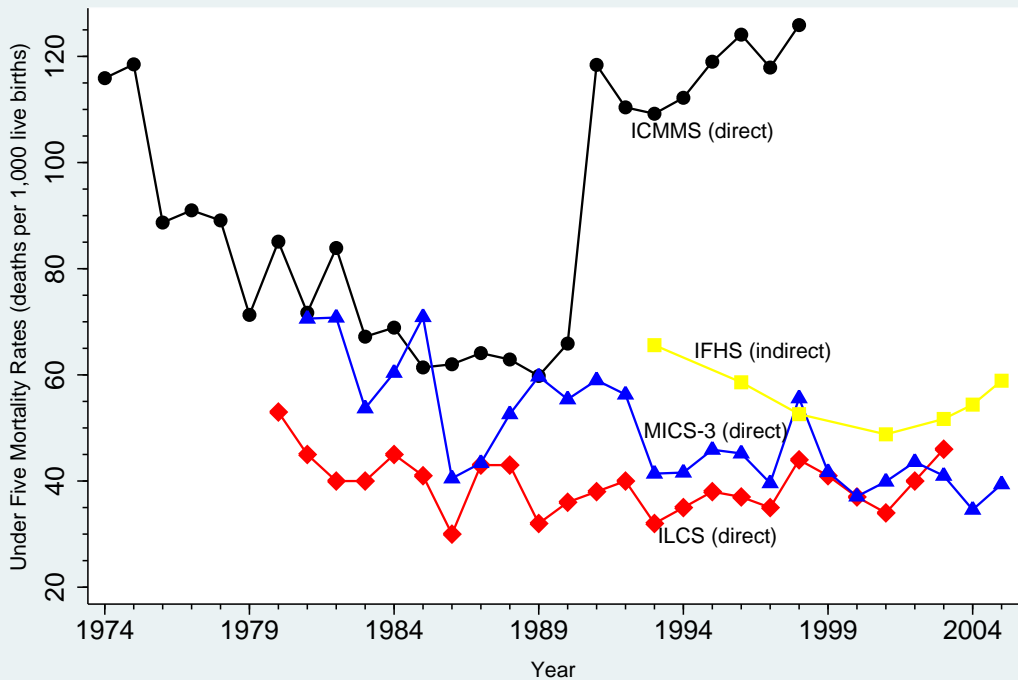


Tony Blair Testifies Before the UK's Iraq Inquiry



“In 2000 and 2001 and 2002 they [Iraq] had a child mortality rate of 130 per 1,000 children under the age of five, worse than the Congo....That figure today is not 130, it is 40. That equates to about 50,000 young people, children [alive today who would have died if Saddam Hussein had remained in power], ...that’s the result that getting rid of Saddam makes.”

Iraq - The ICMMS Versus Three Other Surveys



Three published surveys have now failed to confirm the survey that found a huge jump in child mortality in Iraq under sanctions followed by a sustained high rate. A fourth survey (MICS4 – Iraq) is just out and, I predict, will also fail to confirm.

Actually, if you want to still believe in that sanction-era survey then you have to concede that Blair has a point. Child mortality rates during the war are much lower than the rates that were claimed during the sanctions period.

In fact, Blair has his math wrong. If the child mortality rate really did plummet after the invasion of Iraq to the extent claimed then the number of “lives saved” would be in the hundreds of thousands, not 50,000.

The Reality of Peer Review

Many normally intelligent people seem to be afflicted by a rather bizarre misperception - that peer review of research is a once-and-for-all process that terminates once a paper is published in a peer-reviewed journal.

This view appears to imply that after publication you need not dignify substantive criticism with substantive responses - you can respond to all criticism simply by noting that your paper was peer reviewed.

You are on even more solid ground if you can say that your paper was published in the “prestigious *Lancet*” – the journal that published all of the work critiqued in my talk today.

Yet thousands upon thousands of papers that have been published in peer reviewed journals have turned out to be wrong, wholly or partially.

In fact, if we really treat peer-reviewed publication as ending all scope for debate then we would be better off without it - peer review of this sort would entrench all sorts of false ideas.

But true peer review never stops – journal peer review is only a small piece of this puzzle. We're doing peer review right now in this room.

A Few Tentative Suggestions for Researchers

1. Stop trying to influence policy through shocking numbers.
 - a. These numbers are likely to be wrong. ([The work of John Lonnides](#) is relevant here).
 - b. Moreover, these huge numbers probably jade the public (Paul Slovic), especially when enough of them turn out to be wrong.

2. Look for something else to do that is more useful than estimating the number of people killed in conflicts. There are no actionable policy implications springing from such crude numbers so why work so hard estimating them in the first place? Instead people should:
 - a. Research the impact of specific health interventions on health outcomes.
 - b. Focus on potentially treatable illness and injuries.

3. If you feel you must estimate the number of people killed in armed conflicts then prepare yourself for vigorous debate. In my view, conflict epidemiologists have shot themselves in their own feet by failing to be self critical. The prevailing fear seems to be that open discussion will precipitate a general loss of confidence.



No critiques allowed inside this circle

That is, really do peer review and keep doing it.