

100 000 excess civilian deaths in Iraq since March 2003

Owen Dyer *London*

The first scientific study of civilian casualties in Iraq has found that the rise in mortality from pre-invasion levels equates to 100 000 extra civilian deaths since March 2003. The research, published early online in the *Lancet*, concluded that violence has overtaken chronic disease as the leading cause of mortality since last year's invasion, and the leading cause of violent death has been airstrikes by coalition forces (www.thelancet.com/journal).

The findings are based on a survey funded by the Johns Hopkins Bloomberg School of Public Health, and by Iraqi doctors, who questioned 30 households in each of 33 randomly

selected population clusters. Assuming an average seven residents in each household, the authors estimated their sample size was 6300 people. Residents were asked to report all deaths between January 2002 and September 2004.

Chronic disease accounted for 48% of the 46 deaths reported in the prewar period. Violence accounted for 51% of 142 deaths reported by the same households since the invasion. Of 73 violent deaths, seven were criminal murders, two were of unknown origin, one was from the Saddam regime during the invasion, two were due to insurgents' attacks, and 61 were killings by coalition forces, 28 of which were children aged younger than 15.

One of the 33 surveyed clusters was in Falluja, a town known to have had high civilian casualties during the occupation. The Falluja cluster alone accounted for 52 of the 73 recorded violent deaths. Describing Falluja as an "extreme statistical outlier," the authors eliminated it from their final analysis.

Discarding the data for Falluja, they found a prewar crude mortality rate of 5.0 (95% confidence interval 3.7 to 6.3) per 1000 people per year. After the invasion, mortality was 7.9 (5.6 to 10.2) per 1000 people per year. This translates to a relative risk of death of 1.5 (1.1 to 2.3), compared with the prewar period.

"We estimate that 98 000 more deaths than expected (8000-194 000) happened after the invasion outside of Falluja and far more if the outlier Falluja cluster is included," the article says.

Even without the Falluja data, violence remained the leading cause of death, accounting for 24% of mortality. "Violent deaths were widespread, reported in 15 of 33 clusters, and were mainly attributed to coalition forces... The risk of death from violence in the period after the invasion was 58 times higher (95% CI 8.1-419) than in the period following the war."

The most commonly quoted figure for civilian deaths in the conflict is about 16 000, based on individual deaths reported in

the media and compiled by the group Iraq Body Count. John Sloboda of Iraq Body Count said that the *Lancet* research was based on a small sample which might not be representative. "Our figures certainly don't show the whole picture either. The true figure lies somewhere between 16 000 and 100 000."

The Ministry of Defence refused to comment on the research, saying, "We believe there are no accurate estimates of civilian casualties in Iraq." Pentagon spokesman Barry Venable said, "There is no accurate way to assess civilian casualties." Coalition forces say they have not attempted to keep track of civilian casualties.

Marc Garlasco, senior military analyst for Human Rights Watch, who researched civilian deaths from cluster munitions during the invasion, said, "I have no argument with the study's findings on infant mortality or general health, but the estimates of bombing deaths seem too high, when you consider the numbers of bombs dropped." □

Teenager held in Guantanamo denied medical evaluation

Jeanne Lenzer *New York*

A US judge has ruled that a Canadian teenager held by US forces at Guantanamo Bay naval station does not have the right to a medical or psychiatric evaluation to determine if he is fit to help with his defence.

Omar Khadr was captured in Afghanistan in July 2002 in a battle that left a US soldier dead. Mr Khadr, 15 years old at the time, was seriously injured. No charges have been filed against Khadr in the two and a half years that he has been held at Guantanamo Bay.

John Bates, a US district court judge, denied a petition for an independent medical evaluation, writing that claims that Khadr was in "deteriorating health" and had been tortured were mere "speculation," because a US doctor who provided testimony on behalf of Khadr based his evaluation on materials from other sources and did not personally examine the teenager. Judge Bates also ruled that Khadr did not have the right to a competency evaluation since

no charges had ever been filed against him (www.dcd.uscourts.gov/04-1136.pdf).

Khadr's Canadian lawyer, Dennis Edney, called the ruling "Kafka-esque." US authorities have refused to recognise Mr Edney as Khadr's attorney, instead assigning two US lawyers.

The ruling has been denounced by medical and legal experts who say that it violates numerous international agreements and ethical norms including the Geneva Conventions.

President George Bush, named as a respondent in Khadr's case, has asserted that "enemy combatants" such as those held in Guantanamo Bay do not come under the protection of the Geneva Conventions.

"This is such circular reasoning," said Ken Hurwitz, senior associate with Lawyers Committee for Human Rights, an international organisation based in New York involved in litigation regarding the detainees. Mr Hurwitz, who is in Guantanamo Bay

this week, told the *BMJ* that detainees there are in a legal "no man's land"—unprotected by the Geneva Conventions or US law.

"The judge's reliance on the military medical records to determine that [Khadr] doesn't need an evaluation is very troubling," said Mr Hurwitz.

"There's strong reason to be suspicious that not all of the medical military officials are acting dispassionately and in accordance with the Hippocratic oath," said Mr Hurwitz, who charges that physicians were "passively if not

actively" complicit with maltreatment of detainees when they handed over prisoners' medical records to interrogators. "Military rules even provide that wounded or medically injured detainees should be medically cleared for [harsh interrogation]."

Steven Miles, professor of bioethics at the University of Minnesota, who reported doctors' complicity in torture at Abu Ghraib in the *Lancet* (2004;364:725-9) agreed that there was evidence of torture at Guantanamo Bay. □



The US Supreme Court has ruled that Guantanamo detainees should have access to US courts, but the ruling has had little effect to date