COMMENTARY

Opportunities Lost: Political Interference in the Systematic Collection of Population Health Data During and After the 2003 War in Iraq

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ABSTRACT

The review of the article, "Developing a Public Health Monitoring System in a War-torn Region: A Field Report from Iraqi Kurdistan," prompted the writing of this commentary. Decisions to implement health data systems within Iraq require exploration of many otherwise undisclosed or unknown historical facts that led to the politicization of and ultimate demise of the pre-2003 Iraq war systematic health data monitoring system designed to mitigate both direct and indirect mortality and morbidity. Absent from the field report's otherwise accurate history leading up to and following the war is the politically led process by which the original surveillance system planned for the war and its aftermath was destroyed. The successful politicization of the otherwise extensively planned for public health monitoring in 2003 and its legacy harmed any future attempts to implement similar monitoring systems in succeeding wars and conflicts. Warring factions only collect military casualty data. The field report outlines current attempts to begin again in building a systematic health monitoring system emphasizing it is the "only way to manage the complex post-war events that continue to lead to disproportionate preventable mortality and morbidity."

Key Words: health care surveillance, Iraqi Kurdistan, mortality and morbidity, war and conflict

As I reviewed the article, "Developing a Public Health Monitoring System in a War-torn Region: A Field Report from Iraqi Kurdistan," I could not help but flash back to the 2003 Iraq war and the fateful historical decisions made that resulted, for the foreseeable decades, into a major preventable tragedy. Too often, in humanitarian work, our well-designed plans and work are confounded by sudden disappointments and challenges that are unexpected. The field report from Iraqi Kurdistan provides an excellent account of their applauded efforts to bring back a "functioning health monitoring system" for Iraqi Kurdistan. The authors have historically described a chronic state of public health chaos that reigned from before the 2003 war, was further exacerbated by it, and remains so today. This commentary serves to readdress just how and why the shameful political decisions had occurred in the days leading to the 2003 war in Iraq and remind us of what might occur when similar decisions are made by warring governments. When it comes to protecting the public health of populations during and after wars, there is, too often, a decision of "non-response." Mitigating both the direct and indirect and, therefore, preventable morbidity and mortality is a human right, the loss of which still haunts the post-Persian Gulf war and the 2003 war Iraqi population who deserve to understand why.

History will someday divulge that the political opportunity to intercede to access health data and measure both direct and indirect mortality and morbidity from before the onset of the 2003 war was summarily lost on the Iraqi population and shamefully resisted by those who had the power to change it. Worse, it led to a current political decision model, which I must say is "actively passive" in its resistance on supporting any data collection analysis of anybody but military casualties during war or its aftermath. This willful stance remains today among warring nations that blatantly ignore the critical importance of public health data collection and response, and violate the Geneva Convention (GC). I argue in this commentary that the history, while politically uncomfortable to some readers, must be part of the argument that moves the parties to war or conflict, and the humanitarian community of responders, to ensure that a systematic health data collection is "absolute from the start." Santayana's historical philosophy, "Those who do not learn history are doomed to repeat it," illustrate that no matter how "ugly" and vile human nature can be, it must

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not dictate or guide our public and private policies, especially when it comes to health.[1]

HISTORY OF MORTALITY AND MORBIDITY STUDIES DURING WAR

During the last quarter of the 20th century, the work of Guha-Sapir and Lechat led to a general acceptance that epidemiology could provide a rigorous analysis of who was most at risk of dying in a crisis. They argued that by targeting the most vulnerable individuals health providers could more effectively put their scarce resources to work. This culminated with a 1987 *World Health Organization Report* that established close links between conflict, massive starvation and displaced populations in the Horn of Africa.[2,3] In 2003, Murray and colleagues had summarized the preliminary work of Ghobarah, Huth, and Russett, which documented that the impact of war on populations arises from both the direct effects of combat deaths, as well as the indirect consequences of war, the impact of which may continue to occur for several years after a conflict ends.[4,5] Also, data were being released on battle deaths in armed conflicts between 1946 and 2002. While they demonstrated a decrease in global battle deaths, the study identified the need for "increased attention to non-battle causes of mortality." In nine Sub-Sahara African countries, the battle deaths in prolonged wars amounted, as a percentage of total war deaths, to anywhere less than 2% (in the war between Ethiopia and Eritrea from 1976–1991), to up to 27% in the 1981–1996 war in Somalia. Evidence was compelling that indirect, preventable deaths dominated all conflicts.[6] In most instances, outside humanitarian assistance ceased when funding ended at the end of the warring, leaving aside any recovery of essential public health infrastructure and protections resulting in exorbitant numbers of preventable mortality and morbidity. While the humanitarian community was greatly influenced by the *World Health Survey*, which provided a reliable and valid basis for assessing conflict magnitude of mortality and morbidity, these models would necessitate an "improved collaboration between political scientists and experts in public health" for proper "measurement, prediction, and prevention of conflict-related death."[4] These requirements, in most cases, would prove to be a major challenge.

THE 2003 WAR WITH IRAQ

A bit of historical context is necessary regarding the 2003 war with Iraq that culminated into a preventable tragedy. I have taken liberally from my co-authored article "Civilian Mortality After the 2003 Invasion of Iraq," which appeared in *The Lancet* 10th Anniversary Issue on the war in Iraq.[7] The politically initiated decision to go to war did not take into account the public health data and the use of that data to minimize mortality and morbidity that resulted from the disruption of the public health and health delivery infrastructure. It is tragic when one understands that the totality of the decisions made at the time was because no one among decision-makers was listening to the dire consequences that would result when the best of public health data and recommendations were undercut.

In 1991, as part of a delegation under the American Red Cross that negotiated on behalf of the over 1 million Kurdish refugees displaced across the border with Turkey and Iran, I became acutely aware of the deteriorating public health outcomes and imposed loss of health security that are characteristic of autocratic regimes.[8] In 2001, I held the position of Deputy Assistant Administrator for the Bureau of Global Health at the US Agency for International Development (USAID), in the US Department of State (DoS), and later designated as the future Interim Minister of Health for Iraq, a position that would take place after the planned invasion on March 19, 2003. While preparations for war escalated, I focused on lobbying for an initiative in the planning that would ensure attention to mitigating indirect or preventable mortality and morbidity. In late 2002, the DoS organized a meeting with numerous academic leaders, many in public health and all of Iraqi descent, who held notable leadership positions in academia outside of Iraq. I was encouraged by their sincere interest, understanding the problem and potential solutions, especially in public health data collection. Many raised concern that the crucial health indicators had precipitously worsened over the decade after the 1991 Persian Gulf War and served as just 1 more dire example of a vulnerable baseline of health indicators that could only get worse with the onset of another war.[2,9] An innovative sibling-reported mortality study estimated direct war-related Iraqi mortality from 1980 through 1993. The Iran-Iraq war from 1980 to 1988 led to 200 000 adult deaths and the 1990–1991 First Gulf War accounted for 40 000, with an additional 3000 Kuwaiti deaths. For the 2 years between the wars, an additional estimated 19 800 additional Iraqi deaths occurred; nearly half of all adult deaths were attributed to direct war-related causes.[10]

Iraq faced the prospect of the 2003 war with an exhausted and inadequate public health infrastructure, a fact not lost on the Iraqi population and planners from USAID. Those responsible for humanitarian assistance and recovery also emphasized that, in prolonged warfare and conflict, preventable mortality and morbidity can exceed direct deaths from violence as public health infrastructure and social protections rapidly deteriorate. All were unified in the decision to lobby for immediately organizing a systematic health data system with international partners.

These discussions were enough to draw the attention of decisions makers in both the DoS and USAID of the potential opportunities to mitigate preventable health and public health consequences of an invasion. A *Future of Iraq Task Force* from the DoS and USAID was organized and eventually led to the signing of multimillion US dollar contracts with the World Health Organization (WHO) and UNICEF

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designed to immediately implement and enhance post-invasion countrywide surveillance, training, and decentralized monitoring directed at the most vulnerable populations.[9] Surveillance teams in multiple areas would identify and monitor those areas of health, shelter, food, water, and energy and monitor for illnesses that result from the deterioration and loss of public health protection and prevention programs. Among DoS, USAID, and the humanitarian community, this was universally agreed to be our best opportunity to avert the anticipated war-related preventable mortality and morbidity that we all knew would arise after the war.

THE DEATH KNELL

On January 20, 2003, during an early morning USAID Iraq planning meeting, we learned of an unprecedented *Presidential Decision Directive 24* that had just been handed down. Under President Bush's signature, the Directive moved all of the plans and responsibilities of the DoS and USAID to the US Department of Defense (DoD). Even the Secretary of State Colin Powell was not yet aware of this decision nor was he consulted on its content. The Secretary of Defense Donald Rumsfeld made this decision "based on the assumption that the Iraqi regime would be rapidly removed, a humanitarian crisis would be unlikely, and public health infrastructure loss would be kept to a minimum."[7] These expectations seriously conflicted with those of the 6-month-long *Future of Iraq Task Force* that predicted the opposite outcome.[9,11] This decision essentially "locked out the State Department" and supported the claim that the "DoD was conducting its own foreign policy" and "undercutting the DoS."[10] Furthermore, Rumsfeld, using "ideological commitment and loyalty" as selection criteria, demanded that "all the staff for post-war appointments for the various Iraqi ministries be named by the DoD."[9-12]

With the war underway in March, the diplomatic corps from its temporary positions in Kuwait was awaiting orders to enter Baghdad to put into place the mandated 3-month timeline to make a transition to a new Iraqi government. When the war was considered won on April 10, they were informed by the Secretary of Defense that they should expect to conclude their duties and leave Iraq within 3 weeks – a major change from the original 3-month strategy. Rumsfeld argued that with an early turnover of political power, the United States would be "welcomed as liberators rather than as an occupying force." This decision summarily canceled the contracts with WHO and UNICEF and, by claiming the US military forces were "liberators," rather than "occupiers," ignored obligations for public health recovery under Articles 55 and 56 of the 4th GC.[7,11,12]

Also, the total budget for humanitarian assistance was cut in half. The previously concluded contracts for disease surveillance with WHO and UNICEF were among those deemed unnecessary and sidelined. However, when word reached the temporary US headquarters in Kuwait that the hospitals in Baghdad had been looted and the health system collapsed, I was immediately sent as the first diplomat to enter Baghdad. My first meeting was to inform the major hospital administrators that met together at the 1000 bed Al Yamuk public hospital that the original plans for recovery were compromised. They did not understand the delays as the hospitals were looted, the national pharmaceutical system was destroyed and Ba'ath Party loyalists had entered the Al Yamuk Hospital, among others, killing and looting at will. I was informed that the pharmaceutical warehouses were all looted, including all of the medications and supplies to keep the hospitals both running and to prevent an inevitable and rapid rise in indirect deaths. The next day, I met with the International Committee of the Red Cross in Baghdad to inform them of the changes and related that DoD health relief convoys were at the end of the pipeline and were inadequate for the state of collapse of the hospital system that I observed. Returning to the safety of the US Marines located at the Baghdad airport 8 km west of Baghdad, my convoy received 3 assassination attempts, the result of a fatwa initiated by Shi'a cleric Muqtada al-Sadr who professed to be the next Minister of Health.[13] I was immediately flown back to Kuwait where I lobbied the Bush appointed new USAID Mission Director in Iraq for a pharmaceutical resupply contract with a firm in the Netherlands, which the humanitarian community often used in times of emergency. A fiery exchange occurred between us when he summarily denied the request in favor of a future free-market pharmaceutical system, which had no prospect of being completed for many months, if not years. There was no discussion of any potential surveillance system.

Vice President Cheney immediately dismissed all of the seasoned DoS personnel: former Ambassador Barbara Bodine, the Coordinator for Central Iraq in charge of Baghdad, Retired General Jay Garner who was the Coalition Provisional Authority for Iraq, whom I had previously worked with during the post-Persian Gulf War Kurdish crisis, and me as the Interim Minister of Health in Iraq.[13] As I prepared to leave Baghdad, and undeniably angry at the total denial of the political leadership in Washington of the severity of the Iraqi health system and what was a clear violation of the GC, I declared to the press that Iraq was a "public health emergency" in hopes that this would rally international pressure to reverse the misguided decisions and force a surveillance system, but it only further angered the resolve among the US political leadership.[7,12,14]

THE POLITICIZATION OF IRAQ HEALTH DATA

Secretary Rumsfeld's perception that the war was short-lived and coming to an end eventually perpetuated grave dissatisfaction among Iraqis.[15] In April 2004, Rumsfeld admitted in a news conference that coalition forces had become an occupying power committed to an extended military presence. The United States was now spending the US $2–5 billion each week, interestingly the same amount originally quoted for the launching and maintenance of the entire pre-war planned

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systematic surveillance system. The sidelined USAID surveillance contracts, however, were never implemented. These lost opportunities, plus the burgeoning insurgency and the scarcity of security services, directly contributed to the chaotic conditions that helped plunge Iraq into a lasting acute-on-chronic public health emergency.

I wrote in *The Lancet* 10th Anniversary Issue on Iraq that, "as the conflict worsened, and without a strategic health recovery or surveillance plan in place, these decisions caused irreparable damage to the capacity to define populations at risk. A shortage of baseline data led to an ad-hoc response to a health-system recovery that was directed more at structural repair than system failures. Coalition forces, that still expected a hasty redeployment, did not measure mortality and morbidity outcomes."[7]

To quell the worsening health issues, more data were needed but an "epidemiological blind spot" emerged for the remainder of 2003. In the spring of 2004, the now newly named Iraqi Minister of Health, Ala Alwan, finally installed a surveillance project that showed that, during the previous 15 years, more citizens had died from preventable public health causes than from violence, a factor that the original DoS and USAID planning had aimed to mitigate.[7] A few years later, I spoke to Ala Alwan in his new position as the WHO Regional Director for the Eastern Mediterranean. He confirmed that we did not know at the time, and never will know, how many people in Iraq died and for what reason during that fateful first year, but could confidently assume all those with chronic diseases suffered greatly and probably succumbed as the pharmaceutical system that included supplies for dialysis, chemotherapy, vaccines, and medications for chronic diseases such as diabetes, cancer, and heart disease never recovered. Indeed, by 2005, Iraq was "suffering from a complete breakdown in the pharmaceutical distribution system, with limited access to essential drugs, counterfeit medicines flooding the market and an escalation in the number of unlicensed street vendors." Pharmacists and academic staff were subject to terrorist attacks. Some were murdered and others kidnapped. Community pharmacies were destroyed, and looting of drugs and equipment was rife.[16]

Between 2003 and 2007, the Coalition Provisional Authority led by the United States under Paul Bremmer required a US Advisor for each Ministry. While this transition "included building new parties, recruiting and training new military forces, creating a nascent civil society, and drafting new laws," no health data surveillance systems were organized. Bremmer's pro-counsel channeled what could have been serious efforts to restructure the post-war health system, into "stop-smoking" campaigns and the goal of recreating a US type economic approach to health that uncovered failures and no basic understanding of the merits of counting the dead, missing again an important window of opportunity where change could have been implemented. Estimates of those who died during the 8 years of intervention range from a low of 100 000 to a high of half a million.[7,17] We just don't know.

THE BATTLE OF THE SURVEILLANCE SYSTEMS

Through the subsequent decade, the attempts to fill the knowledge gaps for Iraqi deaths all suffered political ire. First was the Iraq Body Count (IBC), a non-peer-reviewed online and media-centered approach that passively counted non-combatant civilian deaths as they were recorded in the media and available morgue reports.[18] Concerns were that it "did not attempt to find those deaths that go unreported, that there was bias among volunteer staff, absence of independent verification, variation in the original sources of information, and underestimation of mortality from violence."[7,19-23]

Researchers, convinced that this had become a prolonged war, spoke openly that data documentation needed active surveillance that purposefully sought out unreported cases. Inevitably, active case finding studies emerged but "remained severely hampered by worsening security, poor access to the study population, both inexperience and inadequate training of interviewers, differing case definitions, and wide confidence intervals that authors insisted showed mortality rates much higher than those reported in the IBC."[7,19-23]

The mortality study from 2004 published in *The Lancet* caused much angst in the United States. Published only a few weeks before the US presidential elections, critics accused the lead author of making a "political maneuver."[7] A 2006 follow-up study affirmed earlier mortality estimates, but President Bush dismissed the results as "not credible," ensuring a derisive attitude toward peer-reviewed mortality estimates, in general, and further asserting that the deaths reported in the lower estimate sources were perhaps more accurate.[7,24]

Nonetheless, *The Lancet* study concluded: "Since the end of the coalition occupation no census-based or population-based surveys have been done. With shifting ethnic, religious, and political pressures, those in power are wary of counts that could affect electoral power and financial distributions of wealth… In truth, because of the politicization and perceived weaknesses of the methods of the Iraq studies, all the studies of civilian death have been discounted or dismissed, yet if half a million civilians have perished, that information should be known. The only accurate death records are of the US and coalition forces. Public health data, once untouchable, are increasingly controlled by political decision-makers. They cannot have it both ways in defining the ground truth: in every war, combatant forces of states and the leaders they serve must be accountable."[7]

TRANSITION

Hamasaeed and Nada see Iraq having gone through 4 "rocky phases," the first of which between 2003 and 2007 was

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highlighted by a US-led Coalition Provisional Authority with each ministry having a US advisor and a "self-declared occupying force." The US military was responsible for national security. Despite the opportunity to do so, no health surveillance systems at the District level were established. The years 2007 to 2011 were highlighted by the shifting of political power from the Sunnis to a Shi'a majority, the recognition of autonomy for the Kurdish North, a marked US military surge, the "awakening" among Sunni tribes, and the eventual US withdrawal from Iraq. Years 2012 to 2017 resulted in increased tensions between Shi'a and Sunnis resulting in a new phase of anti-government conflicts and the rise of ISIS. By 2014, the United States was back in Iraq and regained control with help from Iraqi security forces and Kurdish Peshmerga. The fourth phase, beginning in 2018, saw the rise of the Shi'a cleric Muqtada al-Sadr, who led an unlikely coalition with secular Sunnis and communists who won the largest number of seats while an Iran-backed block came in second. Today, the biggest threat is not conventional warfare but asymmetrical conflict launched by militias and non-state actors. Despite losing its territory in 2017, ISIS remnants continue today to attack civilian and military targets in Iraq. By playing on Sunni grievances still not addressed by governments, the authors contend that "Jihadism remains a threat to several Arab governments," yet claim that, "despite continued tension and increased conflict in the region, specifically Syria and Turkey, Iraq has experienced internal positive changes among Iraqi citizens by limiting the outside influences of Iran and Turkey." Although oil production has improved, unemployment and poverty remain serious problems.[25]

A GUARDED PROGNOSIS

The Iraqi health care system has deteriorated significantly with some of the worst health indicators in the region, almost as bad as those of Yemen, the poorest country in the Arab world.[26] Since 2003, 15 national health surveys, including 3 Multiple Indicator Cluster Surveys (MICS) by UNICEF/MoH-Iraq occurred which collected and analyzed data in order to fill data gaps for monitoring the situation of children and women through its international household survey initiative. However, they are antiquated paper-based health information surveys with many limitations.[27] In 2019, Ala Alwan has again returned to Iraq as the Minister of Health with anticipation of more inclusive and modernized surveillance systems using health diplomacy after 40 years of continuous war to rebuild and reconstruct the health infrastructure from the bottom up.[26] Alwan's population profile estimated 5.5 million in-need persons, 1.6 million internally displaced population, 4 million returnees, in addition to a quarter of a million Syrian refugees. Facing the chronic challenges of a diminished economy, within a short time, he tenured his resignation but later recanted. He claimed "unfair pressures and blatant interference in his work," contending "many obstacles have continued to prevent him from implementing good governance."[28]

USAID suggests that progress has been made in the field of communicable disease surveillance and outbreak response, especially in primary health care reporting on a monthly and weekly basis and injury surveillance. With some stability for the first time, WHO's focus will not be on responding to "urgent health needs of ongoing crises but will move to both emergency and developmental activities that aim to rebuild the country's health system."[29]

In 2004, calls came for major health system reform. However, they faced a history of "relatively poor health outcomes attributed to the inability to address the shortfalls in the public health model, attributing delays to impeding factors categorized within historical, ethical, cultural, political and institutional barriers."[30] In 2010, Iraqi researchers, emphasizing the importance of reinvesting in both public health and community-based primary care, warned that, in Iraqi Kurdistan, there is "need for political action before effective public health policies can be implemented," concluding their study with a quote of Rudolf Virchow: "Politics is nothing but medicine at a larger scale."[31] Historically, health care services have been based on primary health care as a point of referral to specialized services.[32,33] In 2017, an analysis of primary health care development emphasized that Iraqi Kurdistan was "under tremendous pressure to adapt to the continuously changing, complex, and resource-intensive needs of subpopulations exhibiting varying morbidity patterns, within the context of protracted security, humanitarian, economic, and political crises" emphasizing a need for "synergy between all local and international actors involved in the developmental and humanitarian response."[34] The RAND Corporation, working with the Kurdistan Regional Government, improved the health care system by focusing on a primary care management information system, physician dual practice reform, and patient safety training. They found that most main primary health care centers serve too many people and that most subcenters serve too few people. Staffing by health care providers is uneven across the region and centers where laboratory, X-ray, and/or other equipment are concentrated need repair or replacement and training of users.[35]

One potential advantage for Iraqi Kurdistan is the newly acquired semi-autonomous status that allows them to escape some of the chronic ethnic, political rivalries, and less corruption with the absence of oil money. Gilbert Burnham, Professor of International Health at Johns Hopkins and expert in health system analysis in war-torn countries, whom I interviewed for this commentary, emphasizes that the antiquated Health Information System (HIS) "should have been reformed long ago" and the failure of the Health Ministry to implement its pledge for a primary healthcare-focused system." He suggests that an advantage for Iraqi Kurdistan is the "greater concentration of NGOs and bi-and multi-laterals who left Baghdad means more resources are close at hand," a problem that still defines the rest of Iraq. He adds, "After the massive destruction of Mosul, there has been very little provided for

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reconstruction, the limited funding coming from donors, which does not include the United States, must go directly to activities in Mosul via the UN and other international bodies as few see Baghdad willing to help." In the modern-day rush to provide surveillance systems, Burnham cautions that projects such as the field report risks "confusing population-based surveys, routine health information systems, and surveillance systems for outbreaks, and mixes their conclusions. " Each one of these, he emphasizes, is "a separate system with its own indicators and information chain."[36]

In February 2019, the *Humanitarian Response Plan* (HRP) was developed to target populations in critical need throughout Iraq. The judge that 1.2 million people in the Kurdistan Region of Iraq (KRI) require humanitarian assistance as this region is made up of internally displaced populations, vulnerable host communities, returnees, and refugees. The Coordination and Common Services sector of the HRP supports 170 partners with "coordination, information management, and coordinated needs assessments."[37] The *Iraq Humanitarian Country Team* further cautions that "due to damage to infrastructure and the delayed implementation of recovery and resilience activities, affected families will not have sufficient access to public services. Inadequate housing, lack of sustained access to safe water and sanitation and hygiene services, and insufficient access to education will negatively affect vulnerable populations." They further caution that more "comprehensive, reliable, and real-time information exchange and management is required to improve strategic and operational decision-making processes."[38]

Iraqi Kurdistan, in recognizing that it must first have a strong public health base, requires a politically unbiased and sustained public health monitoring system to properly defend the public health protections that are a right of the Iraqi population. The earlier field report is a crucial and welcomed project, one that must first build on solid countrywide HISs. Lessons from the US-led 2003 war must continuously remind us all of the dangers of political interference in any data analysis during and after any war or conflict.

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