

A National Program to Promote Children's Cognitive and Mental Well-Being in Conflict-Afflicted Iraq

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Chronic and recurring violence has been the hallmark of post-2003 Iraq, and the lives of ordinary Iraqis are dominated by violent events. Not a week has gone by without some terror attack, explosion, kidnapping or unrest somewhere. Death and crippling injuries, not to mention psychological trauma, have devastated people's lives. It is shocking and mind-boggling just to look at list after list of the deaths and injuries in Iraq over the past fifteen years recorded by organizations such as the [United Nations](#) and [Iraq Body Count](#). Regrettably, recent years have not seen much improvement. For example, at the most recent count, Iraq topped all countries in the number of terror attacks as well as the number of deaths and injuries (U.S. Department of State, 2015, 2016, 2017).

In addition, shockingly violent incidents of grave magnitude and impact that caused as

many deaths and injuries as the World Trade Center attacks of 9/11, such as the Camp Speicher massacre by ISIS in 2014 and the Karada district explosion in Baghdad in 2016, have hardly been properly investigated as the government stands unable or unwilling to do so. Such events are severely traumatic to the people who are affected by them. Although the focus is always on the number of victims, the physically injured and the mentally traumatized, especially children, must live through this terror for months and years, and sometimes their whole lives.

Many who have lived through these events and have not been injured are internally displaced inside Iraq, either because their homes were destroyed during fighting or because they have fled their homes to seek safety; and of the nearly 5 million people who have been displaced, about half are children. They are in a refugee status or living in some

unstable condition, vulnerable to attack, abuse and malnutrition. They have feelings of fear, horror and despair (Save the Children, 2017).

Today in Iraq a whole generation of children and youth have grown up in the aftermath of war and/or terrorism or have had their caregivers lost or incapacitated. Anyone who has visited Iraq in recent years would have been shocked to see children running among cars on the roads barefoot or with worn-out clothes and shoes. Some of those children earn a living on the streets, others are beggars or search for food in rubbish dumps. They do not go to school. Many are homeless and have become prey for crime and drug abuse. These scenes and facts are common to many areas in the so-called new democratic Iraq.

Even children in relatively “safe” areas are not off the hook. They suffer from other hazards such as severely crowded classrooms (60–90 children), crumbling school buildings, lack of schools (due to a shortage of some 15,000 new school buildings), malnutrition and stunted growth, which affects around 25% of Iraqi children (UNICEF, 2012). While it is not possible to include all the details in this short article, here I refer to the *End of Childhood* index (Save the Children, 2017), where Iraq is ranked 123 out of 172, near the bottom of the scale. All these factors are detrimental to health and well-being, and especially detrimental to mental health and cognitive potential. A mental health/educational catastrophe is growing with each passing week, and the ramifications will last for decades to come. Urgent action is needed.

Now that months have passed since the

Iraqi parliamentary elections, which were held in May this year and have been surrounded by controversy, and 15 years have passed since the 2003 war, it is past time to look at the alarming impact the war and its aftermath (ceaseless violence, poverty, displacement) have had on Iraqi children and do something about it. In post-2003 “democratic” Iraq, the living conditions of children are far removed from the fancy dreamy words like *freedom*, *elections* and *human rights* often used by politicians. It would be truer to say that the lives of these children have been plagued by violence, displacement and hunger, and in many cases also the loss of their caregivers. The 2003 war and what followed—chaos, chronic violence, weak governance, severe decline in public services (health care, sanitation, education, road safety, electricity)—is now being manifest in alarming trends in youth behavior and an unprecedented decay in social structure. Many social problems have emerged, including drug use, suicide, and juvenile violence.

BRAIN DEVELOPMENT CANNOT WAIT FOR POLITICIANS TO WAKE UP AND ACT RESPONSIBLY

A childhood experience that is plagued by hunger and trauma mars brain architecture and physiology, cognition, emotional stability, and ultimately, behavior and life outcomes. Research has shown the grave consequences of early life trauma and adversity on the developing brain, and recent data from human and animal studies have shown the deleterious impact of adverse living conditions in childhood on brain structure and function.

Such conditions negatively impact children's cognitive abilities and psychological well-being for life. It is not within the scope of this article to review the research on this subject, but a few references are listed—see Ivy et al. (2010); the National Scientific Council on the Developing Child (2010); and Nelson (2017).

The scientific literature also shows that intervention can promote readjustment of brain circuits because developing brains are malleable and respond to a positive healing environment. This is great. It means that steps can be taken to provide healing programs for children affected by adversity so that they can recover.

Government and society must work together to protect children and provide them with a secure, nurturing environment. A massive country-wide effort is needed to address this problem and must be a top priority of the incoming government. This is important not only with regard to the rights of children to decent living conditions where they can thrive but also for the security of society and to prevent future breeding grounds for violence and crime. But when government priorities are shifted elsewhere, as has been the case, and politicians are still squabbling in the midst of markedly deteriorating living standards and services, this problem cannot wait. With goodwill, creativity and science, things can be turned around—such as with the new initiative I am advancing that integrates government departments, Iraqi expatriates, private organizations and international agencies to take on this issue and act.

H M S A

Hmsa, an acronym *ه م س ا* for the Arabic title “the societal endeavor for cognitive well-being and education” (Figure 1), is a grand nationwide program that will tackle the developing catastrophe of war children. It utilizes what scientists have concluded on the benefits of intervention on brain healing after trauma and turns this knowledge into practical measures to help children and families heal, taking into consideration both the constraints of the local environment and its attributes.

The program has two aims: (1) to facilitate healing and recovery in traumatized children so that they can overcome their war-adversity experiences, and (2) to prevent exposure of more children to such adverse and traumatizing experiences by building resilient communities. To realize these aims, *hmsa* works with the child and his or her caregivers, providing mentoring, guidance, and psychological support for the child, and training and education for immediate caregivers (family, community, healthcare providers, and teachers). Activities are centered on the children, to help them heal, and on caregivers to teach them how to facilitate the healing, how to recognize symptoms, and where to get help. Other activities focus on the community at large and work with law enforcement and community leaders to establish safe environments that protect children from exposure to violence. These activities include extensive awareness programs, training for law enforcement personnel, and partnerships with local businesses and community leaders to combat

hunger and establish safe zones for children during crises (Figure 2).

In dealing with any daunting task, one must have a can-do attitude and exploit the positive opportunities that are available. Despite the adverse living conditions of many children in Iraq, as described earlier, one must also look at the bright spots. First is a strong family tradition. Children and youth in Iraq are typically surrounded by or are close to extended family. This is good. It is protective to their brains because the presence of a trustworthy person calms the feelings of fear. This factor has been taken into account in the design of this program. Another bright spot is the willingness to do good and help others, which is an intrinsic characteristic of Iraqi society. Ordinary people do care and they want to help others. This is a deeply rooted value in the society and it too has been

taken into consideration. These are worthy characteristics that gave me a lot of insight for the program. Ordinary, everyday people far outperform politicians and officials. On so many occasions, I hear and see how much they care. One school principal describes with passion how she collected books from her own home and those of her relatives and donated them to another school to help them get by until they received their own books that were delayed for months during the school year. She was so keen that the children did not miss out on their education. There are thousands such people. The *hmsa* project counts on them.

I envision *hmsa* activities being implemented over several years as components of one grand design. The activities can be customized to serve the specific needs of each region. Funding and implementation can be

Figure 1. Announcement image of the brain health project (“the societal effort for cognitive and educational well-being”, pronounced *hmsa* in Arabic).



Figure 2. Activities and services provided by the *hmsa* project to children, their caregivers and the community (right) in order to realize the aims of the programs (left).

Healing and recovery	Working with child directly
	Working to help the child through awareness and education of immediate family caregivers
Prevention and Building Resilience	Professional caregivers training (doctors, teachers, counselors)
	Create secure environment, law enforcement training and fighting hunger in communities

achieved in a way that combines government, private entities, international aid and expatriate Iraqis.

There are strong reasons to believe that this initiative can succeed. Importantly, Iraq has in the past undertaken such grand initiatives where government and the community worked together to achieve great outcomes. The well-known eradication of illiteracy campaign in the 1970s and the mass vaccinations and health screenings between the 1970s and 1990s are just a few examples. Many people who were involved with these efforts are still around, and one can learn from their experience in delivering programs throughout the country. I have met many such people who have told me amazing stories about how they worked in the most remote areas of Iraq and were successful. Of course, the *hmsa* program described here is designed for the 21st century and is based on the advanced knowledge of neuroscience. It uses the arts, sport and literature in innovative ways to create positive outcomes from children’s suffering; it brings in

long sought-after expatriate expertise, and it works with communities for the betterment of their children. With the use of technology, implementation can be even more effective, and the program will benefit from the knowledge, skills and experience of highly qualified Iraqi expatriates who are willing to help at all levels. Finally, all deliverable programs are science based and will be evaluated through psychometrics and behavioral indicators. *Hmsa* can transform Iraqi society to a healthy state conducive to progress and happiness.

What is also important about this initiative is that it fits with the [Sustainable Development Goals of the United Nations](#). Implementing *hmsa* will help Iraq reach five of these goals:

- Goal 2 Zero Hunger
- Goal 3 Good Health and Well-Being
- Goal 11 Sustainable Cities and Communities
- Goal 16 Peace, Justice, and Strong Institutions

• Goal 17 Partnerships for the Goals

Indeed, there are many other wars and conflicts in the Middle East region and throughout the world, and one could say that many other areas have the same problem as Iraq. This is true. Yet I believe that *hmsa* can and eventually will be applied elsewhere in the region. In fact, it is my goal, dream and passion to make *hmsa* available and working throughout the region wherever there are traumatized children. Nevertheless, the chronic and repeated exposure of Iraqis to violence and war is unprecedented and unparalleled anywhere. From 1980 until today, Iraq and its society has been constantly involved in war or the consequences of war. In many cases, therefore, the parents of the children are themselves in need of help. War trauma has affected them too. Even more importantly, many of today's adults, victims of previous wars, have never received any help or even recognition of their suffering. This of course has an impact on their own health and well-being and affects how they behave as parents and how much they are able to help their children who are experiencing trauma today; the situation is further aggravated by the decline of living standards and services, described previously, in addition to the poor condition of the schools and the problems associated with that. All these factors are converging threats to the brain health of the children, many of whom have already passed teenage years and are already having behavioral and social problems. But even in the period prior to the Iran-Iraq war (1980-1988), it was not peaceful in Iraq. Many

segments of society suffered persecution, killings and injustice, and there are many traumatized families from that time. For details on the persecution and dictatorship era in Iraq during the 1970s, the reader is referred to my book, *The First Evidence: A Memoir of Life in Iraq under Saddam Hussein* (Kubba, 2003). In consequence, the severity, duration, and impact of prolonged war trauma has created a critical situation in Iraq today.

Regrettably, our world functions in a way where political decisions made by a few people affect millions of people, and their echo is heard decades later in the brains of future generations. Politicians all over the world must think about the immediate and future calamities of war before they launch them. Such politics is the perfect environment for creating endless terrorism. If we want a safer world in the future, traumatized children must heal from their war trauma experience and find the way to normalize their lives. Governments, policy makers and society at large must take the necessary measures to create conditions that are conducive for healing traumatized individuals and societies through innovative methods and programs such as project *hmsa* and others.

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