ratings could be explained by teacher's perceptions that children are more distractible as a result of trauma or other preoccupations they may have about their families. Alternatively, parents who are traumatized themselves may under report their own children's difficulties.

This study has yielded some important indicators about the presence of ADHD among children in Iraq. However, the UN embargo imposed on Iraq from 1990 to 2003 has impeded educational and scientific work including research and publication. In addition, factors such as low community awareness and the lack of will by the state government to provide funding for research and treatment has negatively impacted the mental health of Iraqi children, in turn impacting on Iraqi society.

Sincerely,

Dr. Abdul Kareem Salman AlObaidi

Dr. Numan S. Ali

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## Commentary to Attention Deficit/Hyperactivity Disorder among Schoolchildren in Baghdad

Javad Alaghband-rad MD<sup>1,2</sup>

Dear Editor:

I read with interest the letter sent by our colleague in Iraq, Dr. Abdul Kareem Salman AlObaidi, who reported on the prevalence of ADHD in that country. I am writing to you as a child psychiatrist who has lived, researched and practiced in a neighbouring country, Iran, for the most of his professional life and served, for a few years as the president of the national academy of child and adolescent psychiatry there, among other responsibilities. It is hard to overlook the enormity of courage and challenges endured by Dr. AlObaidi and his colleagues to conduct research in a country devastated by a number of wars, occupation and decade-long UN sanctions leading to documented high infant mortality rates and malnutrition among other things. Lack of resources

including lack of research infrastructure, I assume, would make research involvement as heroic as fighting in a battlefield. Keeping in line with Dr. AlObaidi's report, I am reporting here the preliminary data from a very large national survey in Iran (N=12164) on the epidemiology of child and adolescent psychiatric disorders including ADHD. In the survey, we used households as the sampling frame and drew proportional samples, from each province, in a probabilistic fashion nationally. The point prevalence for ADHD in the general population of those Iranians aged 18 or under was 8.5% with a 1.7:1 male preponderance (Alaghband-rad et al., unpublished data).

I agree with Dr. Abdul Kareem's assertion regarding variations in terms of reported prevalence of ADHD across different studies. In fact,

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epidemiological studies have shown even a wider range of prevalence estimates, ranging from a very low estimate of 0.2% (Essau et al., 1999) to a much higher estimate of 27% (Vasconcelos et al., 2003). Excluding those studies that report extreme rates or use flawed methodologies, the rate still remains between 5 and 12 per cent (Rowland et al., 2002). In one of the most recent comprehensive systematic literature reviews (Polanczyk et al., 2007), based on a statistical computation, the pooled prevalence rate of ADHD was estimated to be 5.23%, although with significant heterogeneity among various estimates. As expected, studies using DSM-IV criteria generated higher prevalence rates than those using ICD-10. Likewise, the studies which did not require functional impairment for diagnosis reported higher prevalence estimates than those that did. This seems to be one of the limitations of this Iraqi study as well in which measurement of impairment remains unreported. The other methodological limitations, not uncommon among other studies as well, include issues around sampling, generalizability of the sample, sample size, reliability and validity of the interview instrument and process. The varied range of prevalence rates, however, would not be attributed to any meaningful differences among countries unless cross-national studies are conducted using parallel diagnostic interview methods, identical or comparable sampling frames and similarly defined population.

Yet, speculations about various potential risk factors and psychosocial correlates of ADHD, unique to Iraqi' society, would be tremendously interesting. As mentioned, Iraqis have suffered for decades from different wars and their various consequences. Psychosocial stressors during pregnancy and low birth weight, perhaps common in today's Iraq, are among the well-studied risk factors for ADHD. Putting DSM classification aside, many of the mental health problems could plausibly arise

from an adaptive response to pathogenic environments such as trauma and neglect. As suggested elsewhere (Jensen et al., 1997), increased motor behaviour (hyperactivity) especially during juvenile years may serve to "wire the brain" to the external environments in a way to fit the environment.

I am delighted to get a chance to comment on Dr. Dr. AlObaidi's letter and wish him success for his courageous efforts and career.

Sincerely, Dr. Javad Alaghband-rad

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6

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