**Letter about the use and mis-use of science in fields that are “politically sensitive” and about the scientist responsibility to use what they know for improving the health of the people.**

October 14, 2012

I am one of the many people that has enough information to believe that there may be a long term damage on reproductive health, among other diseases, due to wars in the recent times.

This is why, on behalf of the little power that well done science might have towards the solution of the health problems and for the pursue of truth for a wide region, I am here stigmatizing its misuse, in a case of which I know precisely the circumstances.

I was prompted to write this letter after reading a paper published by M. Al-Sabbak et al, in Bull Environ Contam Toxicol (2012) 89:937–944 16 September 2012 and the article on the Independent by Sarah Morrison on Sunday, 14 October 2012, which alerted me about the paper.

Let me start by saying that the information about cases on Fallujah in that paper was collected together with Dr. Savabieasfahani, last author of this paper, with a protocol prepared by myself, and partly used for a previous joined publication of which I was the writer and the corresponding Author.

Her personal facts intervening, suggested to dr. Savabieasfahani not to contribute further with her work. Her misbehavior around the first experience of work together made me take the position that I could not add her as author to any further work to which she would not contribute and where we could not trust her behavior before publication.

The hair samples from the people of Fallujah were obtained, transferred and analyzed by an Italian team with the consent of the Iraqi part, and none of the authors of the paper above had anyhting to do, in any form or contribution, with this part of the work.

Given the above controversy and other unpleasant details, with dr. Savabieasfahani and others, at that time, in early 2011, I found myself compelled, as way of preserving the responsibility of work, to put rapidly on line the data and the analysis of the pattern of changes of malformations and late miscarriages in families with a birth defect child, as explained in an introductory note to it. This can be found as I said then, “for future memory”. and can be accessed at <http://www.newweapons.org/?q=node/120>.

The authors of the M. Al-Sabbak et al paper took data already published as if they were their work; this is an ethical issue, not irrelevant, but would not have elicited me to write, if there was not a more important issue, namely that they did not know how to read these data and misrepresented the results. This in turn made the journalist of the Independent, UK to be mislead and so the wider public.

First of all in the first figure of their paper (fig 1) is a bad editing of data in fig 3 of the paper on line, but is not clearly indicated that these are NOT prevalences (ie frequency in a random population) but the frequency of events within a cohort of 56 couples which had a birth defect child (newborn or returning for check up). That is why they “had come into the hospital” as they said only in the fig legend, better, this is why they were enlisted in the study. This makes a great deal of difference and does not correspond to what is then reported in the paper and in the journalistic report, 50% birth defects.

Second point. We put the crude data form metal analysis and some rapid considerations in the text of the manuscript on line, pressed by a campaign of defamation, and before having the time to elaborate the data, meanwhile we kept working to the statistic and the interpretation of data, and did further analytical testing. The conclusion we reached after this additional study is that there is not statistically significant differences between adults parent of children with birth defects and of normal children in Iraq, all being contaminated more than Italian adults, and we do not know if is because of differences in other “civil life conditions” contaminants. Also in the paper published there is not significant difference shown, but in the text is promoted the idea that there is. Again this leads to misleading conclusions, as any scientist should know, for the only use of propaganda, which is not the aim of scientific certification of a situation. The only contaminant that cannot be accounted for by “civil life conditions” is U.

Third: The information about Basra reported in the paper is absent of any coherence: one time is a 17 fold increase of birth defects, few paragraphs below is more than 2 fold increase and from the Table I is less than two fold increase. In addition, it is really peculiar for a geneticist to learn that in Basra there is no cardiac birth defect, the most frequent malformation at birth, also in Fallujah, and this is a fact that casts doubts on the whole set of data from that hospital.

Scientifically the pitfalls are many, and is the reviewers responsibility, and that of the Bull Environ Contam Toxicol Journal which is not using adequate reviewers.

But the misuse of the data, making its way into the press, if is not stigmatized, becomes responsibility of the wider scientific community, or of those among them that recognize it.

This needs to be done on behalf of the better health of the victims, which may profit from serious studies and will not improve their health by journal titles reporting “bubbles”.

We may all easily share the prejudice that the damage was not caused by a natural catastrophe, but brought by men who will not admit easily their responsibilities. Even more because of this, one should protect the meaningfulness of using scientific tools to assess the damages in a not controversial manner.

Moreover and most important it is my concern and opinion that science should be used to know better first and foremost in order to protect the health of the population, and this cannot be achieved by patchwork reports, uncritical or wrong evaluation of data and data stealing.

Actually, badly done science can play against finding out facts that serve the purposes of improving health, and also offers reasons to disregard scientific findings in general, even when they are pursued with intellectual and moral honesty.

One wonders what is the reason to want to use “science”, if one does not a good job at it, rather than, say, use good journalism, witness reports, advocacy, political struggle?

Finally, I here disclose a conflict of interest: We just sent a manuscript about the study done in 2010 in Falluhjah, which is presently under reviewing.

In summary I here denounce:

**ethical breaches by stealing data (using somebody’s else data as one’s own without referring to the source)**

**misinterpretation of rough data and poor science (a responsibility also of reviewers of the Journal)**

**disinformation towards the mass media**

**diminution of the meaning of scientific pursue towards people’s health and international law enforcements for reparation**

Everybody can reach its own conclusions about this operation by the Authors of the publication.

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n.b. I am not willing to be interviewed or go into mass media.