

CFSAC Written Testimony October, 2010
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I am a former neonatologist who had to retire from practice in 2000 due to illness. I have had ME/CFS since 1999. Before retiring I worked at the Neonatal Intensive Care Units of Children's Hospital of Philadelphia and the Hospital of the University of Pennsylvania.

At this Committee's meeting a year ago, I spoke about science and Myalgic Encephalomyelitis/Chronic Fatigue Syndrome, or ME/CFS. Specifically, I addressed the negative impact of the CDC's "empirical" definition of CFS on scientific research into the causes of and potential treatments for ME/CFS. A resolution was passed at that meeting stating that the "CFSAC rejects the empirical definition" of CFS. Despite this recommendation, the CDC has published 3 papers in the past year using the "empirical" definition, including a paper which was unable to find any evidence of XMRV in blood from a cohort of patients with "empirically" defined CFS or in healthy controls, and another paper which discussed personality features and personality disorders in the same group of patients. At the last CFSAC meeting six months ago, Dr. Unger stated that she stood by the CDC's estimate of the number of people affected by CFS in the United States, a number based on the "empirical" definition. There is no evidence that the CDC has paid any attention to the expressed views of this Committee about the "empirical" definition. Communication with the leadership of the CFS program at the CDC about the definition and other issues has been next to impossible for other professionals involved with ME/CFS as well.

At the same CFSAC meeting six months ago, I confined my comments to the Committee's charter, at the Committee's request. At that meeting, an amendment was made to the Function section of the charter to include the statement "the current state of knowledge about the epidemiology, etiology(s), biomarkers, and risk factors relating to Chronic Fatigue Syndrome and identifying potential opportunities in these areas". The words etiology(s) and biomarkers are not in the current version of the charter on the Committee's website.

It must be frustrating to members of the Committee to have their recommendations ignored so blatantly. Taxpayers are spending a reported \$130,000 each year on this Committee. We do expect effectiveness. I'm sure the dedicated experts who take the time to serve on the Committee also expect that their recommendations will be implemented, especially the ones that are revenue-neutral.

These are big issues: (1) that the Center for Disease Control of the United States of America is continuing to use a discredited definition in publications about CFS, and (2) that the charter of this Committee ignores the importance of a search for the cause of a disease that affects one million Americans and their family members. But today I want to move on from discussions of science and bureaucracy and talk about medicine.

Medicine is an applied science. Doctors take scientific facts and apply them in real world situations in order to improve the lives of real people. Part of the reality of medical practice is that sometimes doctors don't yet have all the information we need to make a fully informed decision. And yet we must act. For example, a patient arrives in the emergency room in shock

and we may not initially know why. But we have to act. We draw tests to clarify the cause of the patient's low blood pressure at the same time that we start IV infusions to treat the low blood pressure. We may give antibiotics for the most likely infections before we know what the infection is, or even if infection is the cause of the patient's condition. We act.

At the present time, there is no action for patients with ME/CFS. We know, for example, that many patients have low blood pressure and orthostatic intolerance, yet there is no recommendation to treat the low blood pressure, or even to do tests to establish its cause, in the CDC's CFS "toolkit" for professionals. We know many patients have chronic viral infections, yet there is no recommendation to treat those infections. The CDC "tool kit" for CFS does not recommend testing for any infections. We know that many patients have abnormalities of immune function yet there is no recommendation to treat those abnormalities. We know a lot about Canadian Consensus Criteria-defined ME/CFS, but we don't apply that knowledge to treat the disease.

In the past year we have learned a lot about MLVs, including XMRV, which present an attractive, although as yet unproven, hypothesis about the underlying cause of ME/CFS: a newly identified family of retroviruses may affect the immune system causing patients to be susceptible to various new or re-activated viral infections, as well as other possible infections, and perhaps themselves are causing much of the diverse symptomatology of the disease. It is time to act. Despite the incompleteness of our knowledge, we can treat. We must treat.

We know from past clinical trials that some patients improve, if not recover completely, when treated with antivirals appropriate for the viral infections that they have as demonstrated by appropriate lab tests. These clinical trials include, but are not limited to: enteroviruses, as shown by Dr. Chia, various herpesviruses, as shown by Dr. Lerner, and HHV-6, as shown by Dr. Montoya. Other infectious agents that have been shown to be common in ME/CFS patients include chlamydia, mycoplasma, and parvovirus, among others. I propose a randomized controlled trial of XMRV positive patients in which patients are randomly assigned to two groups: half the patients receive treatments for the infections that they are shown to have, and the other half receive treatments for the infections that they are shown to have and, in addition, are given the three antiretrovirals that have been shown by Dr. Singh to be active against XMRV: raltegravir, zidovudine and tenofovir. The primary outcome measure should be Karnofsky score, i.e., patient functionality. This is what patients care about: what they are able to do in their daily lives. Appropriate measures of the other, non-retroviral, infections should also be followed as secondary outcome measures. There is no currently accepted measure of XMRV activity, but it is not necessary to follow viral counts or to have an accepted immunological marker to establish efficacy of anti-retroviral treatment. Improved patient functionality or a more rapid eradication of other infectious agents will establish efficacy. Raltegravir, zidovudine and tenofovir have been used in thousands of AIDS patients, and their safety profiles are well understood.

I'm sure some will argue that there should be a third group in this trial, a group that receives no treatment for the infections that they have. I personally think that it would be unethical to include a group that receives no treatment. The word Tuskegee comes to mind. Although, ME/CFS patients were not deliberately infected, unlike the men in the Tuskegee experiment, it

is, in my opinion, unethical not to offer treatment to patients with known infections. However, I do realize that the current standard protocol for ME/CFS at this time is not to test for other infections, and, even if found, not to treat them. As a physician, this is unacceptable to me.

One could also argue that a third group should receive antiretrovirals alone. I am not opposed to this. I suspect all infections will need to be treated, but, since this is not documented, it is a reasonable question to research.

People with ME/CFS have been extremely patient with the medical and scientific community. However, our patience is not inexhaustible. Despite the cautionary mumbling of some physicians and scientists, people want to be treated for this serious, debilitating illness. We read the scientific papers on the internet. Despite our intermittent brain fog, we are not stupid. We will seek treatment. We will not wait for scientists to satisfy their intellects and establish who is “right”. If clinical trials are delayed too long it may be impossible to find untreated patients to enroll. At a certain point, it will also be impossible to claim therapeutic equipoise, because the mass of anecdotal evidence will be impossible to ignore.

Research cannot be done without funding, and funding for ME/CFS research at the NIH has been abysmally low. The NIH website gives an estimate of 5 million dollars, or about 5 dollars per patient, for 2010. ME/CFS received no ARRA funding for 2010. It is time to establish designated funding levels for ME/CFS.

I have spent my life working primarily as a clinician, not a researcher. I am therefore not particularly familiar with different types of grants or the mechanism of organizing randomized controlled trials with NIH funding. I have neither the time or the energy to get that information now, and it is not my job to do so. A request for proposals should come from the NIH for the necessary projects. More research dollars are urgently needed for this significantly underfunded, serious illness. It is time to act.

Many thanks to all the people who serve on this Committee and support this Committee. It is my hope that the future will soon be much brighter for people with ME/CFS.

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