

The *Obvious Question*: Why do the DOD/VA/Army deny HBOT to the injured?

The DOD/VA/Army continue to deny the effectiveness of hyperbaric oxygen therapy (HBOT) in treating and helping to heal traumatic brain injury (TBI), Post Traumatic Stress Disorder (PTSD), and chronic Post Concussive Syndrome (PCS). Some contractors being paid millions of dollars to research "new" drugs and therapies are also on record as saying that anyone using HBOT to treat and help heal brain injuries is practicing bad medicine and harming patients by offering them "false hope." Insurance companies say the science is uncertain and, hence, they will not reimburse for the use of HBOT for TBI/PTSD/Concussion. We disagree. Here are factual responses to the major arguments put forward by those who resist the science and evidence. [NOTE: The VA has started a Pilot study to once again see whether HBOT works. In four facilities they are treating PTSD-only patients who are "problems." Thus far, every patient who has gone through the Pilot has experienced significant medical improvement: twelve successes out of twelve patients. The facilities are Oklahoma State University, Travis AFB, Joint Base San Antonio, and Tampa Wound Healing. The Pilot is designed to observe how success is achieved. The answer is straight forward: TreatNOW. Their end point is undetermined.

1. **Dueling DATA.** Army medicine has run five major and two other trials investigating the use of Hyperbaric Oxygen for Traumatic Brain Injury and PTSD. The lead administrator commented that the DOD "has spent an obscene [emphasis in original] amount of money -- over \$126M -- on HBOT research and the evidence is inconclusive." Yet their discussion and **DATA** -- as opposed to their editorial conclusions -- demonstrate that HBOT is both safe and effective: "**Randomization to the chamber . . . offered statistical and in some measures clinically significant improvement over local routine TBI care.**" Also: "**.... total scores for [both] groups revealed significant improvement over the course of the study for both the sham-control group and the HBO2 group....**" Expert outside consultants to DOD declared that "**[HBOT] is a healing environment.**" The Army's top researcher in a pivotal study states on the VA website: "**People did get better and we can't ignore those results.**" The Principle Investigator in the first study, Dr. George Wolf, and a USAF team, reanalyzed the data in the cornerstone DOD/VA/Army study and concluded: "This pilot study demonstrated no obvious harm [and] both groups showed improvement in scores and thus a benefit. Subgroup analysis of cognitive changes and PCL-M results regarding PTSD demonstrated a relative risk of improvement There is a potential gain and no potential loss. The VA/Clinical Practice Guidelines define a "B evidence rating" as "a recommendation that clinicians provide (the service) to eligible patients. **At least fair evidence was found that the intervention improves health outcomes and concludes that benefits outweigh harm.** A team of non-government researchers evaluating HBOT science and DATA conclude: "**There is sufficient evidence for the safety and preliminary efficacy data from clinical studies to support the use of HBOT in mild traumatic brain injury/ persistent post concussive syndrome (mTBI/PPCS).** The reported positive outcomes and the durability of those outcomes has been demonstrated at 6 months post HBOT treatment. Given the current policy by Tricare and the VA to allow physicians to prescribe drugs or therapies in an off-label manner for mTBI/PPCS management and reimburse for the treatment, it is past time that HBOT be given the same opportunity. This is now an issue

of policy modification and reimbursement, not an issue of scientific proof or preliminary clinical efficacy." And a soon-to-be-released study by a DOD contractor also concludes that an analysis of their DATA shows that HBOT is safe and effective for PTSD. **[NOTE: PTSD has recently been shown by Army researchers to be, in a majority of cases, probably the *result of blast injury* and, thus, a physical wound to the brain with psychological sequelae.]**

2. Fundamentally, military medicine does not focus on the *wound to the brain*, focusing instead on palliating symptoms. Army medicine – medicine in general – does not appreciate that a brain wound is a “soft tissue” wound. Doctors and wound care clinics have non-controversial protocols for wound healing, but fail to apply them to brain wounds. You can see it with just the Concussion Protocol. Nothing in any protocol for a Concussion is active intervention to do wound healing. The protocol is “watchful waiting” and hoping the patient recovers with “the tincture of time.” A concussion is a brain wound and can be treated as such. Increased oxygen is always called for in wound healing, particularly in a closed space like the head where inflammation reduces blood flow and oxygen delivery. Additional good news about HBOT for brain wound healing is that almost all patients get off almost all their prescribed drugs.

3. The suicide epidemic and the tens of thousands of bad paper discharges are not recognized as potentially caused by brain wounds. Discussions of the suicide epidemic, particularly during stand-downs and in strategy papers, emphasize alertness about behavior, but medicine does not do a root-cause analysis. Brain injury, and the drugs prescribed to deal with the symptoms of brain wounds, contribute to ideation of suicide. Undiagnosed brain wounds – frequently masked as “PTSD-only” diagnoses – have been identified as a secondary result of BLAST injury in DOD-studies, yet over 300,000 “PTSD-only” diagnosed service members have never been reevaluated for TBI. Thus, some assume that brain wounded patients really are just psychologically weak. As the controversy continues, DOD/VA/Military Services continue interventions with predictable results even in the face of facts:

- The services and VA are experiencing self-admitted epidemics of suicide; drug abuse, over-prescription and overdose deaths; traumatic brain injuries; and incidents of post-traumatic stress disorder:
- U.S. Special Operations suicides tripled in 2018.
- Marine suicides reached the highest level in a decade despite the end of Large-Scale Combat Operations.
- More than 50,000 Iraq and Afghanistan Army veterans who developed mental health conditions during their military service received other-than-honorable discharges, making them ineligible for health benefits.
- The Veterans Administration is reported to have spent less than 10% of the monies allocated for Suicide Prevention marketing campaigns.
- Mental health professionals qualified to diagnose brain wounds are in short supply. Over 25,000 misdiagnoses had to be redone because unqualified people were allowed to diagnose. And some VA physicians are well-known for their belligerence and unwillingness to even inform patients that a safe and effective treatment, HBOT, is available to them.

4. Some people do not believe that HBOT works, nor that it is safe and effective, nor that it is economical. Hyperbaric medicine is barely taught in medical school, certainly not its use for brain injuries. The researchers put in charge of studies are not HBOT specialists. The DOD/VA/Army have been repeating their suspect findings for so many years that the PubMed and WIKI and other "go-to" entries for quick-grab information on HBOT are all out-of-date and uncomprehending of the continuing research that exists, but which is ignored in write-ups. In the case of HBOT research by DOD/VA/Army medicine, the fact that the "sham" used in the studies is demonstrably NOT a sham and has been debunked in the literature, and that all the studies are, in fact, dosing studies, is seldom read or reported. Thus, as many of us have learned, doctors who bother to take the time to investigate current research get, at best, conclusions that HBOT is controversial and unproved. At worst, it is still pooh-poohed by the Army as just one more risky waste of time and money; VA contractor researchers want to believe that their studies have "put the final nail in the coffin of HBOT." And yet, increasing numbers of brain injured worldwide are being treated and helped to heal -- over 6,100 and counting in over 90 Coalition clinics. Luckily for some, a few doctors in the VA are prescribing HBOT for TBI, and invoices for the services are being paid.

5. The Army/DOD/VA really believe there's nothing to be gained by salvaging brain-injured, active duty/former service members. It's an economic argument, coupled with a disregard for individual lives. According to some in Command, the brain injured are busted, a percentage of them are probably liars and malingerers, soft, damaged-before-they-got-here, not man enough. "Get 'em out, particularly since we have to downsize." There is also a documented pattern of Command using "Other Than Honorable" discharges for all manner of conduct unbecoming, particularly brain-injured caught self-medicating for nausea and headaches. Those OTH discharges are unconscionably high, irrespective that huge numbers are combat veterans, and that they lose all rights to medical benefits.

6. The Code of Medical Ethics is built around ensuring that both doctors and patients participate meaningfully in decisions about health care. Physicians have a responsibility to provide information and helps patients understand their medical condition and options for treatment. This is the doctrine of ***informed consent***. In fact, doctors must ensure that patients are told of their diagnosis; that patients understand the nature and purpose of recommended interventions; and, most importantly, that patients are made aware of the burdens, risks and expected benefits of ***all options***. [Code of Medical Ethics Opinion 2.1.1] Separating brain wounded service members without using a treatment that works, particularly given the inability of military medicine to treat and help heal the wound to the brain, necessitates that informed consent is violated. Brain wounded patients are simply not told about HBOT, nor are care-givers even conversant with basic science about wounds to the brain, nor where treatment is available.

7. Finances: Why admit there's a treatment when the brain-injured are on active duty? The Army would have to pay for it. We heard: "Get them over to the VA and let the VA deal with it. Save money and meet down-sizing requirements." Ignore the obvious: costs deferred increase the long-term costs. But that's not DOD's problem

when service members are told there is no treatment or, worse, are given palliatives that mask symptoms with drugs. Ethics are not a concern; apparently the Warrior Ethos “I will never leave a fallen comrade” stops at the hospital door. As long as Congress keeps funding, the military can continue to toss the brain injured aside. Further, the Army and VA continue to quote alarmist numbers about the cost of HBOT. They insist that each treatment will cost hundreds of thousands of dollars. The real truth is that a typical protocol of forty dives will cost less than ten thousand dollars. Economies of scale and multiplace chambers will drive those prices down to more than half that amount. And the current analysis of neglected brain injured veterans is that each patient costs tax payers \$60,000 each year, every year. States are paying billions of dollars every year for failing to treat wounds to the brain, and those patients are sustained on drugs which in many cases come with warnings about the risk of suicide.

8. Pharma. They make it so easy to just palliate the problem rather than heal it.

Easier to write a Rx for drugs -- many of them warning of the risks of suicide -- than to admit they're stymied. And without accountability about results, why stop now? [This practice is not unique to military medicine, but at a minimum, the Army should follow best practices with respect to tracking what medicines the brain-injured are prescribed, and the contra-indications for each. They don't.] Prescription drug overdoses have increased. Today's fighting men and women are more at risk from the drugs given to them legally. A 2010 Army study found that one-third of its soldiers were on prescription meds. Nearly half of those — 76,500 soldiers — were taking powerful and addictive opiate painkillers. The number of patients treated by VA is up 29 percent, but narcotics prescriptions are up 259 percent. And while the actual numbers are proving difficult to obtain, among all veterans receiving VA services nationally in a single year, 2005, a VA researcher calculated 1,013 had died of accidental drug overdoses — double the rate of the civilian population, when accounting for age and gender. More current data from the CDC reports that the accidental drug overdose in the Army is 33% higher than in the civilian sector. [NOTE: We keep looking for an *avant-garde* Pharma that will sponsor a trial using HBOT and their drug to discover how HBOT in combination with that drug would accelerate healing. Alternatively, how to extend the patent life of a drug that helps in the healing of TBI in combination with HBOT. Sadly, no takers. You can't patent oxygen.]

9. The Research Trough. Eisenhower warned about the military-industrial complex. Today, he would call it the *military, industrial, academic, research, contractor, pharma, insurance/health care complex*. This thing has just gotten so BIG, with billions of research dollars sloshing around to feed the cycle. There is no patent on oxygen and no profit in fixing the problem. Just keep nursing it. Sound familiar? Alternative medicine practitioners have to get outside it to really treat patients and get them healthy, but they can't do it with the controls and formularies mandated by the DOD/VA/Army and the Insurance regulations to which they are beholden. One telling example: One of the authors of Army research that perpetuates a fundamental flaw in research design and execution, is a researcher leading a \$62.2 million federally funded effort involving multiple universities, military installations and veterans hospitals to better understand how to prevent, diagnose and treat concussions. Millions of dollars will pass through the contract to other institutions, but most of it will remain at home. Comically, the researcher crows: “This isn't just about throwing money at a problem This is the

military and the (Department of Veterans Affairs) and President Obama realizing that this is a huge problem, concussions, and we need to get to the bottom of this. **It's probably not as bad a long-term problem as people are yelling and screaming**, [emphasis added] but if there is something there, we need to understand it" His compatriot, a fellow researcher also compromised by a perpetual conflict of interest, spelled out the formula: **"There's nothing that compares to the federal government in terms of sustainability The federal government is how you sustain your research, year in and year out, even when times are bad."** Notice not a word about a suicide epidemic or the need for urgency, let alone compassion or the hair-on-fire need to stanch the damage across hundreds of thousands of lives, families and communities. Together with too many members of Congress, they would rather talk about the problem and get paid for long-term studies/research than go to work solving the problem -- treating now, using the private sector and an installed capability that can go to work immediately, for fractions of the current costs.

10. Lobbying. Closely aligned is the close ties of the government with lobbyists and the merry-go-round from military [and law enforcement and the Intel community and Congress] into the sector that cajoles elected representatives. There's no stopping it: let a 1000 lobbyists bloom. So you have the most eclectic bunch of technologies and processes and gee-whiz new-and-shiny toys to parade in front of Congress, people who are beholden to your contributions to get reelected. You have this long list of contracts and contractors to vet and test anything that will pump \$\$\$ back into the districts. TreatNOW is sympathetic to new technologies that could/do work but it is H-A-R-D to get through the contractor-led opposition: Big and small contractors on long-term contracts could tell the USG that they could do it better/faster/smarter if they just got some \$\$\$ added to their contracts. Happens all the time. The process has gotten so out of hand that Congress and the Army can continue to study the problem. The NFL's doing it in front of our eyes: see ESPN's *"League of Denial"* [[here](#)] for glaring parallels [you have to embrace the irony in the military Recruitment Command surreptitiously **paying the teams** to put on tear-jerker celebrations at ball games to bolster enlistments. And the public thanks the NFL for their generosity. Spectators shed a tear and the wounded go back to diminished lives on welfare, despite alternative treatments like HBOT hiding in plain sight.

11. Closely allied to the above is the explosion of Veteran help organizations. It is reported that over 50,000 VSOs have been started since 9-11. Fraud, greed and lack of accountability are often the result. Certain organizations have been exposed for skimming unconscionable amounts out of every dollar for salaries and pensions, marketing, advertising, travel, merchandise, offices space. The public is lulled into thinking that they're helping vets recover when what they're doing is giving them a temporary high, handing them t-shirts and meals, but sustaining them as permanently disabled, on welfare, told that there is no treatment for their brain injury other than coping with their "new normal." A large number of charities do good work, but they do not treat the underlying wounds to the brain. They treat symptoms at best. They help save lives, but with a severely diminished quality of life

12. Recruiting care givers. DOD and the VA recruit more and more from foreign ranks and younger and younger psychiatrists and psychologists. The VA reports they are

short hundreds of qualified mental health workers. Most have never seen combat, and all are constrained by current protocols, and none have even been told that HBOT is an option. Virtually none have studied alternative therapies. Nutrition is seldom discussed; the common protocol is: "there's not much we can do for you, this is complex, we need to see where your new normal is going to be. Be resilient. We'll deal with individual symptoms. Group talk and neurocognitive therapy will help you. Let's monitor your drugs. Set an appointment and we'll see how you're doing then." [More info [here](#)].

13. Passing the buck to the Army, the lead for TBIs. The fact that the Marines are letting this go on is baffling [For example: [here](#)] The Army SG has the lead. The USAF and USN don't have quite the same sized problem, but they ALL have SpecOps problems. There's the very real possibility that they're ALL willfully negligent, whether from conspiracy, stupidity, confusion, block-headedness, inertia, or real belief that NOTHING is going to work. [remember the old adage: "when given a choice between conspiracy and stupidity, choose stupidity."] That's one of the reasons that we need to keep treating and healing, getting Joe Namath and BG Patt Maney and other luminaries sounding the alarm for us that both the NFL and DOD/VA/Army are negligent in withholding treatment. They know; they have been told. And the evidence exists [[here](#)]. Consumers -- moms and dads and relatives -- must never shirk from asking this Q: "If your son or daughter got a brain injury, would you deny them access to HBOT for their injury? Who would you rather have treating them: the VA or outside clinics that have brought over 85% of those treated back to a life that military medicine told them they would never have?"

14. Paired with the VA, putting the Army in charge of research is a conflict of interest. It is similar to the cigarette companies sponsoring research into the links between smoking and cancer; or asking the NFL whether concussions lead to brain damage. And "Army medicine" just compounds the confusion, where promotion worries overwhelm independence and scientific rigor. Couple that with a Command structure focused more on the bottom line than the soldier and you incur reluctance, delay and lack of accountability. The services and the VA have an antipathy against HBOT, even for Medicare-approved conditions. There are multiple reasons that the government is slow-rolling proven, safe and effective alternative medical therapies in the face of the suicide epidemic and family catastrophes. There is a willingness to ignore what the rest of the world is discovering, proving and publishing: HBOT for TBI is safe and effective, along with other therapies that can enhance HBOT's effects on healing brain damage. The government's record on admitting mistakes is not good for the service member or public. Think Agent Orange, Gulf War Syndrome, radioactive fallout, secret wait-lists, scandalous cost overruns at every level, demonstrated incompetence, and a perverse set of self-dealing relationships with researchers who ignore the established science, data and laws of physics, chemistry, physiology, biology and biochemistry. But anyone familiar with research and the pace of medicine's acceptance of change should remember the words of Arthur Schopenhauer (1788-1860): "*The truth goes through three stages: first, it is ridiculed, then it is violently opposed, and then, it is accepted as self evident.*" Max Planck put it succinctly: "Science advances one funeral at a time." Though he was talking about nay-saying scientists, he never imaged the irony that he might have been talking about over 20 suicides a day.

SUMMARY: Remember the conditions the wounded endure inside the Warrior Transition Units, Wounded Warrior Battalions, at the DVBIC and the NICOE, and inside the VA, summarized to us by a warrior from the trenches, busted and broken until he received HBOT treatment for his brain wound. He was brought back to near-normal after HBOT. He voiced the opinions of too many veterans in a pattern he saw in DOD and the VA: **deny, delay, deceive, drugs, depression, death**. The VA does some brilliant work, but not with respect to healing brain wounds. Until Congress acts and invokes accountability-with-penalties -- not more repetitive hearings and studies -- and reprograms the \$\$\$ to treat brain wounds with alternative methods, the DOD/VA/Army will continue to avoid wound healing for the brain-wounded. The bureaucracy will neuter Secretaries like Panetta and Shinseki and McDonald and Shulkin and Wilkie and all who follow. They outlast them. HBOT evidence shows that virtually all successfully-treated brain injured quit taking almost all their medications and that ideation of suicide is virtually eliminated. People in authority over military and VA medicine responsible for brain injuries must start thinking like CEOs --market-based solutions -- instead of waiting for the next election and handing the "intractable" problem off to the next appointee: 20 suicides a day. A preponderance of Type II and Type III evidence exists, attesting to the safety, effectiveness and economy of using HBOT to help treat and heal the brain-wounded. www.treatnow.org



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