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DESERT STORM AFTER 25 YEARS: CONFRONTING THE EXPOSURE OF MODERN WARFARE

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Panelists:

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P R O C E E D I N G S

MR. O'HANLON: Good afternoon, everyone. Is this all working and sound okay? Great. Thank you for coming to Brookings and at the SEIU offices of Brookings. We're delighted to be here, and thank our friends at SEIU for hosting us, and all of you for coming.

I'm Michael O'Hanlon, with the Foreign Policy Program in Brookings. I codirect the Center on 21st Century Security and Intelligence with Retired General John Allen, who, himself, had been in the Marine Corps long enough to date back to Desert Storm like some of you like the congressman.

We are going to talk today about Operation Desert Storm and so-called Gulf War illness 25 years after that militarily impressive and, yet, medically complex operation that has to continued to echo in terms of its implications for a lot of veterans a quarter of a century later.

We have some of the best experts in the country to discuss this issue from a medical point of view, and a panel discussion. And we have, perhaps, the most vocal and most credentialed member of Congress to kick us off, Congressman Mike Coffman from the State of Colorado.

Congressman Coffman is a veteran of both Iraq wars, as some of you may know. The only member of Congress with that distinction. And when you read his bio, it's even more impressive than that because, well, I guess, Army soldiers might consider it slightly blemished because he began in the Army and then switched to the Reserves, but, you know, from my point of view, it was impressive that he did both of these things.

And, moreover, as a Reservist, he was activated for both of these wars, and actually served his nation voluntarily and willingly, especially in that second operation when he had already been building a business in Colorado and been out of the military for quite a while, and yet volunteered to go back in and work in Iraq sort of a couple of years into the operation.

But as you probably know, he represents one of the most dynamic and important parts of the country in the Sixth District of Colorado, and he's been very vocal in his concern for veterans and the way in which we've tried to take care of them on the set of conditions that is known, again, as Gulf War illness.

So today's event will have that as much of its specific motivation. But, of course, we'll be able to range more widely and more broadly as well.

After Congressman Coffman speaks and handles some questions first from me and then from you good folk, we will make a transition in place. You can always help yourselves to coffee and water, but there's not going to be a break, and we'll go straight into a panel discussion led by my good friend, professor, doctor, and many other titles that go along with the distinguished career of Joel Kupersmith, who is now at Georgetown University.

He was the director of research and development in the Veterans Health Affairs area for eight years in the Department of Veterans' Affairs. So both through the Bush and the Obama administrations held that very important position. Prior to that, a long career in medicine where in addition to various other accolades and accomplishments, he was the director of cardiology in one medical department. He was the dean of another medical school at a whole host of medical accomplishment to go along with his great service to the nation and to veterans.

So after we hear from the congressman, have some discussion, we'll go to Joel, and he will then convene a panel that he'll tell you more about once we get to that stage of the program.

So without further ado, please join me in welcoming Congressman Mike Coffman to the podium.

(Applause)

CONGRESSMAN COFFMAN: Well, thank you so much for having me today. And when we think about this is obviously the 25th year of the anniversary of the Gulf War, and I think what we want to do, what I want to do as a Gulf War veteran is bring this issue to closure.

And so let me just talk about some things. So we, I think a lot of people when they think about the first Gulf War, they think about the short duration of the tactical phase of the ground war being several days. But I think we have to remember that we had soldiers on the ground in Saudi Arabia right after the invasion of Iraq, I mean, invasion of Kuwait by the Iraqi army.

President George H. Bush had put them into Saudi Arabia as a buffer in case the Iraqis tried to move further south and seize those oil wells as well.

I was in light armored infantry, which is now called light armored reconnaissance in the United States Marine Corps, and it is a wheeled instead of a track vehicle. It has a 25 mm main gun, two machine guns. It was for a raid reconnaissance and security operations in the open desert. Now, it has

been reconfigured into what's called light armored reconnaissance dropping the scout infantry component of it.

And so we, I didn't arrive in theater until late December of 1990. Obviously, it's often mentioned about, and I think research has been disproportionate as to sort of the psychosomatic component of this multi symptom chronic illness known as Gulf War Syndrome.

But I will say that the stress was more significant than people realized because of the fact that it was, military analysts were saying that there would be 30,000 casualties in the ground war. Iraq was listed as the fourth largest army in the world. And so we were anticipating really the worst in this, and the light armored infantry was slated to as to be the first in, so that didn't help in terms of stress of my unit. I was the executive officer for a line company of light armored infantry.

And so one of the things that when you look at what were the health variables, I think one was we were given, I think, I'm trying to remember, non FDA approved, and I get that simply because of the desperation of a concern of biological or chemical agents, nerve agents, that we were aware that Saddam Hussein and the Iraqi army had a stockpile of chemical, chemical and biological weapons. And so that was probably the first variable of what were the potential effects of that.

I think that the second thing that I remember from the war of significance is the smoke from the oil well fires, and how dramatic that was, and how, I mean, how significant that was that I think, obviously, Saddam Hussein, or the Iraqi military had done their best, I think, to exploit the oil well fires to blow a lot of the well heads in place in order to, that that they saw that there was tactical significance in having that smoke be able to obscure some of their positions.

And then we, certainly, in our own use of indirect fire and artillery, mortars, in bombing operations of their positions which were in and around these well heads obviously exacerbated that particular problem. But that it had gotten so bad that it was literally based on wind conditions. You would see literally a wall of smoke coming at you, and you would be in that literally for days at a time, potentially, and everything would be black. And then you would be forced to be in that environment.

And, well, obviously, in our debriefings and leading the theater of operations, we were informed not to worry. It was a heavy particulate, you know, sort of smoke, and that as long as you didn't smoke cigarettes (laughing), and your lungs were in good shape that you would be able to get it out of

your system over time. And so that was the second concern.

A third concern, which is probably the most significant to me, and has really sort of motivated me to be involved in this issue, and it really angered me and created a lot of distrust, was that what my unit did, what we did as a battalion is that we did, we went in in advance of the main ground attack.

We had two missions. One was deception in that we wanted to deceive the Iraqi military as to the time and place of the main ground attack, and we wanted to trip their defensive plan prematurely by sending this battalion forward into essentially an area where two Iraqi divisions were joined together, to go right into their, right inside of Kuwait.

And then the second was what's called a reconnaissance by fire mission and that is simply we wanted to be able to identify Iraqi artillery and knock it out before the main ground attack, and so, so only the Marine Corps could come up with this I think, and that is sending the ground force forward for the sole purpose of getting shot at as a means of identifying Iraqi artillery, getting it to come up against us, and to be able to then identify it and knock it out mostly through air support missions.

But what I remember most disturbing was in the aftermath of the fighting, I remember to my north seeing a large plume of white smoke that was not moving. And I reported it out. And I said, well, what, hey, you know, there is, through my front there is a, this large plume of white smoke. It's almost a cloud just above the ground, and it is very large and it's not moving. And I got no response back from that.

Wind conditions were not coming our way. There just seemed to be no wind at the time because we were just stationary. We're just there.

And it was later on that I learned that in Khamisiyah, that in a, that the coalition forces had captured a fairly substantial munitions depots which contained chemical weapons which were blown in place.

And here's what amazes me. Here is what, where I think the deception started. And that is that wind, the Department of Defense was asked were U.S. military forces ever exposed to chemical weapons. They said no. Well, that wasn't true.

I mean, but here's what really bothered me about this. To what extent, I don't know, my

troops were not.

However, what you had was from General Schwarzkopf's log, page was missing from that day. You had the electronic files accidently, quote/unquote, destroyed. And so you had something like five years elapsed where the Department of Defense never acknowledged the incident in Khamisiyah and the potential exposure for U.S. military forces to chemical munitions.

And so what concerns me, besides the fact that there was deception, besides the fact that it was stunning to me as a Marine Corps officer that at that, that superiors at the highest levels would not be honest about what occurred is that the research that the Gulf War, this multi symptom, chronic illness begin to surface, and that the DOD was so specific as to what that was not a variable was that I think that there was time wasted in terms of research that should have been immediately done considering that as a variable.

So I've just, I've developed distrust since that time. And so my goal certainly as a member, as a Gulf War veteran and an Iraq veteran as well, is that, to bring closure to this issue in a couple of ways.

So first of all, let me just say it's almost that we've forgotten about because of the fact that Iraq (inaudible) that we've really forgotten about the first Gulf War, and I think it's necessary to continue to press and to bring this issue forward so that we don't forget about the men and women who served in that conflict, and that we bring closure to the issue in terms of research in terms of finding out what these issues really are.

Concerned about, I think that the research has been disproportionately directed at psychosomatic causes. I think that some of the research has been questionable in terms of it’s, of the peer review, the lack of peer review, at some of the congressionally directed research. I think there's been questions in terms of what it's been spent on, and some unrelated issues as has been the subject of a GAO report.

And so, and I think that there's a formation of the RAC, the Research Advisory Committee, and the lack, and the question about the level of independence of the RAC.

In 2014, I passed legislation in the house that was not taken up in the Senate. And what that legislation did was essentially two things. Number one, it created, it sought to restructure the RAC in

a much more independent manner, whereas the majority then of the membership would be selected from House and Senate, the House and Senate Veterans Affairs Committees, respective veterans Affairs Committees.

Then I think that the other issue was certainly to look at animal studies which had not been done and there was some criticism of that, some live animal studies.

But, unfortunately, the Senate did not take that up. And so where it doesn't seem that we've made a lot of progress on this issue to date, so that's my concern.

Again, bringing this issue to closure in terms of research. I think there is some questionable things from the VA standpoint in terms of the disability claims process as far as what I consider a clear reading of the statute in terms of presumptive decisions or various presumptions where, that are supposed to automatically be associated with Gulf War service that are not current, that those decisions don't seem to be done in that respect.

And so I think we have a long ways to go on this particular issue, but it's, I think, the fact that 25 years have elapsed and we're having discussion here today is not, is not good.

And I think for the marines, sailors, airmen, and soldiers who served in that conflict, I think I owe them an obligation, I think we owe them an obligation as a nation to get down to the bottom of this, again, multi symptom chronic illness and to find a causality for it, and to treat those, certainly as best we can.

And so with that, I'll be happy to open up to questions, or however you want to proceed. Thank you so much for having me.

(Applause)

MR. O'HANLON: Congressman, thank you very much. So, again, I'll just follow up with a couple of quick questions, and then I'll call on some of you for additional Q&A. We'll do this for about 20, 25 more minutes with the congressman with the time he's got.

Of course, we're going to have a scientific and medical panel, and you framed the issue very well from the vantage point of the soldier/marine/airman/sailor, and I just wanted to, as a lay person, get a little bit more on the table in terms of understanding how you see this.

Let me put the first question to you this way, if I could, sir. Roughly, of the six hundred

some thousand Americans who served in the Gulf in this period of time, roughly how many do you have the sense are afflicted in one way or another, one degree or another by this? You don't have to give me a number. Maybe the panel will later. But is this something that affects only that small fraction that might have come across the chemical weapons depot, or got hit by a cloud that lingered for three days, or is this a large fraction of the overall six hundred thousand that at least had some impact from this set of ailments?

CONGRESSMAN COFFMAN: You know, I think it's the latter. I think it's a larger number, and I think that's the complexity of looking at this issue. You know, I raised, there's something like eight, I think, factors, and I have only raised three that I had direct contact with. And so I think the problem is that we just don't know.

I will say this. Out of the marines that I served directly with, they were not impacted. And so, you know, certainly what are the variables involved in that I don't know, but the number, the number certainly suggests a larger number that could have been in contact simply with chemical munitions at that time.

MR. O'HANLON: And one more question. In terms of what we can realistically hope for, and, again, you and I both know we're going to hear a medical panel in a few minutes, but I'm getting, I'm just trying to get a sense of what most people who served feel is realistic to aspire to at this point.

Twenty-five years later, I would assume that most people may still hope for a cure, but they're not necessarily expecting a cure if that's even an appropriate word to use. I've got a daughter with autism, so I know there are ailments where you just don't use the word, "cure," and what you hope for is treatment, mitigation, what have you.

But is that what people are hoping for, or do they just sort of want answers? They just feel like they've been let down because people haven't, their country hasn't even told them what they're suffering from, and even if the treatments don't advance that far, the causality will just bring some degree of, you know, of, allow them to move on, allow them to at least know what the heck's happened to their bodies?

CONGRESSMAN COFFMAN: Sure. I think as long as you have questions that are out there, questions about, that are raised about not having peer reviewed research, questions about should

there be animal studies, questions about the independence of the Research Advisory Committee.

I think what we want to do; I think we know these criticisms that are out there. Let's just address these criticisms. Let's just bring closure to this issue.

I hope we find a cure, but I think if the veterans of the first Gulf War felt that this country, that this government did everything it could, and right now they don't believe that, then I think we can bring to this issue even if we don't find a cure.

MR. O'HANLON: Thank you. Well, let's go to you. Yeah, please wait for a microphone and then identify yourself, and we'll start with the gentleman here in the fifth row.

MR. TURKELTOW: Yeah, Paul Turkeltow. So you're raising the possibility of a conspiracy. What's the motivation for this conspiracy? How could it be covered up for 25 years with all the people in the field? And is this, you're saying it's Agent Orange Part II with this particular --

CONGRESSMAN COFFMAN: Well, so it happened. I mean, there were five years elapsed before there was an admission of, that U.S. troops could have been exposed to chemical weapons because of the fact that combat engineers were used to blow these chemical munitions in place. So I think as a veteran, I was very disappointed with that fact.

Beyond that, I don't think there's any, there's no great conspiracies. I think what we wanted --

SPEAKER: (Off mic.)

CONGRESSMAN COFFMAN: Oh, what was the motivation embarrassment? The motivation was, in my view the motivation was embarrassment that there was such psychological elation that the shadows of Vietnam had ended. That this was a great victory for American. The aftermath had not yet surfaced about Saddam Hussein would remain in power. Iraq would kind of remain a thorn in the United States' side in terms of sanctions and thing like that.

But at that time, I think that they didn't want a blemish on what would be this extraordinary celebration. And so I think that, you know, that they didn't want this, the narrative, they wanted to remain the narrative of this extraordinary victory, and it was seen as an extraordinary victory at the time, you know, the fact that we have taken on the fourth largest army in the world and literally just rolled right over them with very minimum casualties. And the battalion that I served that did essentially

force reconnaissance, mechanized force reconnaissance work for three days inside of Kuwait, (inaudible). We had one marine lost, and that was really through munitions left on the, you know, unexploded munitions on the battlefield, in fact, right after the fighting, and 14 wounded.

And so, which was extraordinary, I mean, when you think about what we did relative to our casualties. That we had tremendous superiority fighting conventional battles in the open desert.

And so that was the narrative, and I think that this compromised the narrative.

MR. O'HANLON: Go up here to the front row, and then we'll work our way around. Right up here.

DR. CHAUDRY: Thank you very much. I am Dr. (inaudible) Chaudry with the (inaudible). Certainly, as you mentioned that was a great success, and extraordinary retreat. The popularity of President Bush started going through the rough (inaudible).

But many people at that time had been saying, some of his critics, that if the Army, U.S. Army and their allies had chased them out of (inaudible) and U.S. might not have to go back again, but such a huge, costly war in terms of finances and as well as human toll.

What is your take on that?

CONGRESSMAN COFFMAN: So the question is, you know, there was a lot, there was, after, in the aftermath, then there was growing criticism that Saddam Hussein was left in power.

You know, when I look back, so here's where I think, you know, history is, what do they day, hindsight's 20-20, or whatever in terms of history, but I think the fact that there was cross purposes. We were sitting on the sidelines while the, first of all General Schwartzkopf negotiated a cease fire agreement. They should have had Saddam Hussein at the table opposite of him. Instead allowed Saddam Hussein to send a general. The general asked him a question, what about our helicopters? Can we use them because of the fact that our bridges are blown, our roads are in disrepair, and for our own governance we need to get around?

Well, they never fought their helicopter gunships during the war, and hid them knowing that they would need them in the aftermath, and yet, we have the Central Intelligence Agency encouraging the Shia, in particular, to rise up against them in the south, and they were put down, you know, by those helicopter gunships.

And so maybe the Iraqis could have worked out regime change among themselves during that critical period of time. So I think that was a tactical mistake that was made.

But I can remember hearing Dick Cheney after I asked him, after I was able to meet with him after the war in Colorado, asked him the question about why didn't the U.S. go forward to Baghdad at that time, and he gave a brilliant answer about, well, you know, the sectarian divide within the country. It would be very hard to govern the country. We would be seen as occupiers. I think a great answer that would have applied, you know, in 2003 to mend his mistake, you know, going in. I know we played a cat-and-mouse game with him in terms of the sanctions and, you know, it was so many mistakes made.

And I went back to Iraq in 2005-2006, and civil affairs governance (inaudible). We were just so in over our heads at that time. And we really made the situation much worse in that region by virtue of the intervention I think in 2003 with the end of the day.

MR. O'HANLON: Stay in the front row here, and then we'll work back.

SPEAKER: Yes. I am a Gulf War vet Marine, disabled, and so I've really done a lot of reading to try to understand what was going on with myself and what not. So I read a lot that really some of the things like "Gas in the Gulf" by Eddie Toon, and the Newsweek article that came out last year, the congressional hearings I think around '96. Anyway, some of the talk, you talked about the explosions of the chemical factories, one of the theories that I've heard, and it makes sense to me, because nerve agent if it's a cause and effect, will kill you. I mean, you're probably not going to live with a whole lot of it.

So the theory that I've read is that it would shoot plums out over miles and miles and miles. Well, this stuff gets into the sand, and by the way, when you're over there you're eating food that has sand, you get sand in your mouth, you get said in your M-16, you know, and so that was the thing. It's a lot of exposure over time. It's a cumulative thing not a cause and effect.

When I think we struggle as a society dealing with, its easy cause and effect, but it's a cumulative thing we struggle, I think, medically and politically, and stuff like that so I think trying to get our arms around this is tough.

So I wish we would do a little more investigations about the cumulative effects over time on a light amount of nerve agent not just this cause and effect because I think that's where the missing link is, and a lot of them are saying, hey, that's what's ignored. So I hope we, I hope you think about that

more. Thanks.

MR. O'HANLON: Thank you. We stay on the front row, and then we'll go back.

MS. NICHOLS: I want to thank our congressman from Colorado. I'm Denise Nichols. I'm also a Gulf War veteran.

CONGRESSMAN COFFMAN: Colorado, yes.

MS. NICHOLS: Air Force (inaudible), and I want to second his comment on the cumulative effect. When we had Shays' hearing they were talking about nerve agents and the immediate effect not, you know, a low level over consistent days.

And when you had the Air Force bombing, and you had a weather front that was stalled where the troops were massing, all of us were massing up in that area, so Senator Riegel's report way back in '94 is kind of the landmark along with (inaudible)'s report at that time, and then Riegel-Shays hearing and the government reform and your efforts.

But one of the things that that is concerning to Air Force vets is your lack of acknowledgment in the fact that in the letters that went out for the ones that were in the Khamisiyah area which we had problems with all the location of the troops in the area, they didn't, you know, have a good location system.

But they said may have been exposed when they sent out letters from Khamisiyah versus our current OIS (inaudible) that were exposed from old IEDs. And their letter was that you were exposed.

So I think the frustration with the whole situation as far as (inaudible) and being sick and I'm disabled, is that there hasn't been an acknowledgment so that we can move forward, that we can concentrate on the research and the efforts being made by very good researchers, and you'll hear one today.

But the wording of you may have been --

CONGRESSMAN COFFMAN: Sure.

MS. NICHOLS: -- does not help the VA to cover us versus the IEDs and OIF where they got definitely applied, Purple Heart applies. You know, that's a very frustrating thing is the DOD or higher headquarters from the DOD that's, you know, not accepting and not acknowledging that and giving us credit, and VA doctors need to be more educated on all their cost effectors. But the VA needs that I think

from the DOD or from somebody that these exposures occurred. These vets are not lying. They're not malingers, and that's what is very, very upsetting.

I mean, we can deal with our rashes and neurocognitive, but acknowledge us. Respect us that we're not lying. We're not malingering.

MR. O'HANLON: Thank you.

CONGRESSMAN COFFMAN: Thank you.

MR. O'HANLON: Shall we take the last couple together, and then, well, actually, there are four more hands. Why don't I do two groups of two? So we'll take the, you can do two together. We'll take the gentleman here, and then the gentleman right behind together.

SPEAKER: Hello. My name is (inaudible). My uncle actually served in the first Gulf War. My question for you, Congressman, is as global chemical weapons stockpiles have really declined precipitously since the first Gulf War, and the likelihood that U.S. forces will again be exposed in such a similar manner has declined, is the clock ticking on research and sort of the motivation for finding a solution to this problem, is that going away?

MR. O'HANLON: Can I take one more together with that.

MR. WILSON: Yes, sir. My name is Ronald Wilson. I'm in the Social Security Administration, and I was a infantryman in the Marine Corp during the Vietnam War, and I had a lot of my high school classmates who did get killed in Vietnam, and quite a few did come back maimed, and some came back with PSTD, but they only had a one-year tour of duty, and I, you know, I'm, myself okay, and my question is do you think that the incidents of PSTD is something that's genetic to particular soldiers' genetic makeup, or is it something has to more due to multiple deployments which put them under severe stress no matter what their genetic makeup is? And is there a method that can be devised to be proactive to prevent soldiers or prepare them so that they won't be susceptible to PSTD?

CONGRESSMAN COFFMAN: So let me, I'm going to do your question first, and then I'll do the question on the chemical weapons second.

So it's a real concern because we have, you know, obviously, rising claims, disability claims for post-traumatic stress disorder. I think on the active duty side I think we're getting a lot better. I think, for instance, Marine Corps, Infantry, after in Afghanistan, after there's a fire fight, they will just like

you would do police or fire after sort of a traumatic incident that they are taken aside. And then they kind of talk through the incident. I think that's very important.

And then the United States Army has sort of they'll take a senior NCO and they'll make that person give them a collateral duty, and they'll train that person in post- traumatic stress, and sort of tell them to watch over soldiers at the battalion level. So I think there's a lot of great things still going on in active duty, and as well on TBI, and I think there's a relationship between traumatic brain injury, that there's protocols now. They weren't in place before where soldiers are more, you know, ground troops that are impacted are placed in a situation with very limited stimulation for a period of time to allow them to recover. So we know a lot more.

I just think there is a question about, you know, do, should we do any kind of screening up front to determine who is more resilient versus somebody else. We have not had that discussion yet. Perhaps we need to.

And I think there is also a question about treatment. One of my concerns is in the VA is more of drug centric therapies, and I think that that's problematic as opposed to the kind of interactive modalities of treatment, psychological treatment that otherwise exists.

And so, but I think we're getting better. I think we're working through these things, but I think we've got a long ways to go.

And then on the chemical weapons issues, always threats rise and fall. But we have to be prepared that if we were in a conventional conflict that we're going to be confronted with chemical weapons, and so we have to be, we have to train up for that.

And so oftentimes what happens is the military loses that skill set. Just as we have right now, we've done counterinsurgency for so long, we've lost capability, it's declined in terms of combined nonconventional operations. That's going to take us a while to get back.

But I don't think the clock is ticking on this issue. I think we just need to bring, you know, bring it to closure simply out of respect for the men and women who served in the conflict.

MR. O'HANLON: So we'll take our last two questions for the congressman here in the back.

MR. PAGADO: Jack Pagado. I served as Army captain in the Gulf War, and I worked for

General Allen in Afghanistan on his CAT team.

MR. O'HANLON: Oh, wow. Okay.

MR. PAGADO: Yeah, it was fantastic. He did wonderful. The question I'm asking is it's about numbers. When the VA is seeing 1.2 million OIF veterans, and now you go back to the Gulf War with another 660,000 veterans, you get two million plus and counting, and, therefore, how are you going to get the money?

You know, at the end of the day, it's the money. And when you only serve two or three percent of the population is serving our veterans, the other 98 percent of the people they don't care.

So how do you go about getting the money to help the veterans?

CONGRESSMAN COFFMAN: Well, the money has been there. Whether or not we're allocating it properly I think is a question. But the fact is since, I think, 2009, I think, the budget has gone up something like 86 percent, and the unfunded liability is pretty incredible.

And so that, you know, to, so that if we can find cures as opposed to paying out disability claims, that's always going to be a plus whether we're talking about Gulf War Syndrome, or we're talking about post-traumatic stress disorder.

MR. O'HANLON: By the way, as we go to the last question from John, let me clarify or add to your point. You mentioned two veterans' populations, but we still have more than 20 million Americans alive today who are veterans, many of them, of course, from Vietnam, Korea, even World War II.

So it is actually a substantial fraction. Doesn't mean we always think about them enough, so that part of your point is certainly well taken. John.

MR. ANGERVINE: Thank you, sir, for you time. I'm John Angervine. In your remarks, you had indicated that we lost time, five years of research. What policy lessons or policy observations would you apply from that lost five years going into OIF and OEF in terms of their exposure, or our exposure, to burn pits or other particulate matters and contaminants that we were exposed to ad nauseam, even with longer deployments than we incurred in Desert Storm? It was just deployment, but it was still, the subsequent ones have been even three, four times longer?

CONGRESSMAN COFFMAN: Sure. The burn pits absolutely concern me, and, I mean,

the fact is that given the conditions of Iraq, I mean, it wasn't that you could go, you know, it was too hazardous to go out, offsite, and there were questions there, and so the solution was to burn in place, you know, right where the troops were. And so I think there's concerns about that.

One thing that there's been some discussion on in the House Veterans Affairs Committee is on toxic exposure. Should we somehow put these issues together and have one entity responsible for researching these things whether it's Agent Orange, whether it's Gulf War Syndrome, or whether it's the burn pits of Iraq and Afghanistan.

And so I think that's something to say if we consolidate, would we be, in fact, more efficient in driving this research forward to find, to be able to understand the causes, and to be, and to hopefully develop cures.

MR. O'HANLON: Before we all thank the congressman very much for his service and his remarks today, I just want to now remind you of our next step in the program. I'm going to hand the baton off to Dr. Joel Kupersmith, whose my coconspirator in this event, and the Georgetown University Medical Center is co-hosting this with Brookings, and, again, we're thrilled for what Joel and his panel are about to do.

But I thought as we thank the congressman, I think probably everyone here would also want to thank that group of veteran that he represents which is the 600,000 plus Desert Storm group, which we don't thank often enough, and, you know, people used to say the Korean War was the forgotten war, but maybe in a certain way while Desert Storm is seen as a big military success, the veterans population from that war is sometimes a little bit the forgotten veterans population, and I know none of us want that to be the case, so let's all join in a round of applause not only for the congressman (inaudible).

(Applause)

MR. KUPERSMITH: Thank you very much, Congressman Coffman for your time and your most interesting comments.

I want to say first that Gulf War illness, and all the maladies that have occurred in Gulf War veterans are kind of a perfect storm that started with, as Representative Coffman said, records changes possibly, that had dealt with wounds of war that were not directly related to battle, that dealt with symptoms that physicians had a difficult time with, that dealt with also with physicians not learning the first

lesson you learned in medical school, and that is to listen to your patients, and many administrative problems, and no one working together, all of which added up to mistrust is where we are not. And mistrust is the one factor that makes it so difficult to move ahead.

And so we will now start with our panel, and I want to introduce the three very distinguished individuals. Carolyn Clancy, Dr. Carolyn Clancy, who is the deputy undersecretary for health, for Organizational Excellence in the Department of Veterans' Affairs, formerly director of the Agency for Healtcare Quality and Research. Very distinguished career.

James Baraniuk, one of Georgetown's stars. A professor of medicine at the Medical Center, and an expert in Gulf War illness who has contributed much to our understanding of the condition.

Adrian Atizado, a Gulf War I veteran. Also deputy national legislative director of the Disabled American Veterans.

Each panelist will begin with a roughly five-minute introduction, and then we will start with questions and answers first, within the panel, and then we'll open it up to the audience.

So let's start with Dr. Clancy.

DR. CLANCY: Good afternoon everyone. And Dr. Kupersmith, thank you for that nice introduction, and, frankly, for inviting me to join today's panel.

And I really want to thank Representative Coffman, who has left, for his continued advocacy on behalf of our veterans, and to congratulate him even though he's not here for having been awarded the Distinguished Service Award from the Military Order of the Purple Heart, a very much deserved recognition.

Of the close to 700,000 men and women who served in the Persian Gulf in the first Gulf War during Operations Desert Shield and Desert Storm, at least a quarter of them continue to report troubling health symptoms that are not easily diagnosed.

And I know having a close colleague I'm working with now who was deployed then, that's probably an underestimate. When I've asked her questions, she keeps saying, yeah, yeah, I'm gonna go get my exam, but, yes, she has symptoms, but if you were to survey her, she'd probably tell you everything was just fine because in her case she has figured out to mitigate some ongoing challenges and so forth.

I want to say that VA is working diligently to provide the highest quality care to these veterans while at the same time supporting research that will help them more effectively diagnose treatment, and even prevent many of the health issues they face. But there are still many unanswered questions, and that is frustrating on all sides.

So have we made progress? Yes. Do we have a long way to go? Without question. When it comes to healthcare, no treatment therapy, or preventative measure can come too soon. And in this respect, we're especially appreciative to the many individual veterans and stakeholder groups who've worked diligently to keep these critically important health issues before us. Denise Nichols and many, many others. Ron Brown in the National Gulf War Resource Institute.

Because of their efforts, we understand how these issues impact their daily lives and better understand how to impact, focus our clinical care and research. The firsthand stories that I've had the privilege of hearing from those who served on the ground near the denotation of the munitions at Khamisiyah are heartbreaking and horrifying.

We know that many Gulf War veterans are affected by a debilitating cluster of medically unexplained chronic symptoms that include the fatigue, joint pain, indigestion, insomnia, dizziness, respiratory disorders, and sometimes memory problems.

The chronic multi-symptom illness we see so often in Gulf War veterans is clearly not a psychological condition, which doesn't mean that it doesn't have psychological impacts. I hope I said that clearly. It is very hard to say that clearly and in a way that comes across as respectful, which is how I intended.

And we are committed to insuring that our clinical and research efforts take into account physical, psychological, and social health factors because it affects all of your life.

I want to just give you a very brief overview of some of the progress we've made in clinical care in research in these 25 years, and importantly tell you how we're focusing our research in the years ahead.

So between 2000 and 2015, the percentage of these veterans who are enrolled in VA healthcare increased from 13 percent of that cohort to about a third. We have established through the support of the Congress, the war-related illness and injury study centers which provide specialized care

for Gulf War veterans with complex, chronic, unexplained, or difficult to diagnose conditions, and we are continuing to see increased patient demand.

That is reflected in the number of veteran who are seen at these centers. There are three of them. One here in D.C., but also, frankly, in much larger number of veterans who are served by e-consults, and consultations, and I have a couple of the leaders of these centers on speed dial when I get contacted by veterans and so forth.

More than 160,000 Gulf War veterans have undergone a Gulf War registry exam, which is a very comprehensive medical exam and exposure history. This is the one that my colleague keeps saying, yes, I'm going to make my appointment to one of these days. It's free, and you don't have to be enrolled in our healthcare system.

And we've established a post-deployment integrated care initiative through which we've attempted to enhance the delivery of integrated team-based, post-deployment, health-related services by primary care teams and community providers. Is that consistent and flawless throughout our system? Not yet, but it will be because that is nothing less than our aspiration.

Just to say a few words about research, our research spans a wide scope of studies, and we're standing on the shoulders of Dr. Kupersmith here, ended better understanding and effectively diagnosing and treating Gulf War illnesses from the long-term effects of potentially hazardous agents about which we have incomplete information as Representative Coffman was very clear, to hypothesis-driven studies aimed at improving diagnosis and treatment.

And I will say that's where one of our greatest controversies is, right? How much should we invest in finding out more about causation versus saying, you know, there's a lot of missing information about exposures. Let's just get on with it and figure out what works now.

There is no right or wrong answer here, but we've been very appreciative of people who have given us lots of feedback about that.

We've aggressively pursued and fast tracked studies we think will be helpful, and we've increased our funding for Gulf War research to more than $14 million in 2016 which is an underestimate, and by the way, many of our employees are involved in studies funded by the Defense Center for Medical Research.

We have just by way of a couple of example, a longitudinal health study of Gulf War era veterans which began in '95, and this is to compare the health status and functioning of Gulf War veterans with those not deployed to the Gulf so we can begin to discern some of the direct effects of deployment, and we have been able to demonstrate that those who were deployed are more likely to report new health problems, and that their exiting illnesses are more likely to linger.

A more recent analysis based on the original cohort showed that those same veterans continued to report poorer health. That is a long price tag, another sort of meaning of the word, "cumulative."

And these findings further strengthen our resolve to continue to learn more. At the same time, we have found that 96 percent of Gulf War veterans with chronic multi-symptom illness have breathing problems when they slept. And we're finding that some of the treatments for what we think of as typical sleep apnea actually can help ease those sleeping and breathing problems, and that for some veterans that means less pain, improved thinking, and improved general health overall.

And in what looks to be promising news for many Gulf War veterans with gastrointestinal disorders such as irritable bowel syndrome, VA researchers have identified a small R&A segment that blocks a gene that makes glutamine, an essential amino acid for colon health, and this may lead to ways of boosting the production of glutamine in the body.

In addition, researchers nationwide continue to build upon this. Several longstanding VA research portfolios in pain management, autoimmune disease, neurodegenerative disease, respiratory problems, and so forth, all of which are highly relevant to those who served during this time period.

Moving forward, some exciting developments in process. One is a large genetic study of Gulf War veterans that may begin to give us some hints about what the Congressman referred to as resilience.

This is not something that was your fault, but if we know that, then we will be able to stop the ticking clock. I thought that was a great question.

Study participants must agree to donate their brain and other body tissues at the time of their death, but are followed throughout their life, and the medical, lifestyle, and exposure data they collect will provide us, we think, with valuable clues to the health challenges faced by these veterans.

We're also using personalized medicine to study the specific health issues of women veterans who served in Desert Storm. At Miami, VA researchers are running detailed biomedical studies on Gulf War veterans of both genders using blood samples and so forth to understand key differences that may lead to (inaudible) diagnoses, and we're looking at biomarkers.

Actually, I'm just going to stop her because I could go on and on. But what I want to say is I cannot overemphasize the key role that Gulf War veterans themselves have played in all these efforts by reminding us, by keeping up their vigilance, by, frankly, helping us sort through from their perspective what's the right position on some of the controversies we faced, and how do we invest our research dollars and so forth. So I look forward to the discussion, and thank you again for inviting me to join today.

MR. KUPERSMITH: Thank you, Dr. Clancy. Jim.

MR. BARANIUK: Thank you. So what do we learn from the entire Gulf War episodes, the 1991, 1990-1991 cohort, how do we learn lessons from the neurotoxic exposures of that period, and how do we move forward for diagnostics?

It's always in the lessons of the past so that we don't repeat them, that should apparent to everyone, but as Representative Coffman mentioned, we may forget.

So one of the things that's important to remember here in culpability here is the Iran-Iraq War of the 1980s, and who provided Saddam Hussein with nerve agents.

They were delivered by the western governments to help fight against Iran. Going into the 1990-91 war, we had every expectation that they would be used against us. As Representative Coffman mentioned, Prodostignian bromide was introduced as an unapproved agent to try to protect against nerve agent toxicity.

The decision, obviously, was if there was going to be overwhelming exposure, then this drug may save some lives. The question is was that drug, in fact, part of the problem since it does have its own toxicities that at that point weren't clear.

When questions like that have been reviewed by the Institute of Medicine and others, you need animal studies, and those have been largely not admissible. I think that's a blunder again to not look at all of the evidence.

The denial of the Khamisiyah event is as pointed out very deep. I'm always impressed by

the 1997 CIA analysis where on the day that Khamisiyah was destroyed, nobody knows which direction the wind was blowing.

The CIA's analysis is it was going straight south away from the troops, and the Ransac photograph show it southeast directly over the bulk of the troops. But there's no military record of which way the wind was blowing.

That coupled with the entire psychosomatic bias that evolved after 1991, the discrediting of the symptoms because they didn't fit into a medical textbook definition.

I think that's had a terrible long-lasting stigmatic burden on all of the veterans. And again, it's 25 to 32 percent of the veterans. If 25 or 32 percent of congressmen got sick with this, or Wall Street got sick with this, I think we'd hear about it. Something would be done.

As Dr. Clancy has mentioned, things have been done. Since 2006, the Congressionally Directed Medical Research Program, CDMRP, has started with a small bundle of money and grants that is now expanding, and I believe they are bringing brand new research to the fore. They're using new techniques of magnetic resonance imaging of the genotyping and other studies in order to identify what is wrong in the brains of our Gulf War veterans, of our neurotoxically exposed veteran.

Our own contribution here has been to identify that there are problems with the white matter in the brain. Those are the telephone lines that connect one region of the brain with another so it can communicate, and you can think clearly.

We have shown that exercise in a standard way causes a relatively normal cognitive function in a veteran to deteriorate so that they have to use exceptional compensatory mechanisms in their brains.

We've also shown that exercise will induce brain stem heart interactions so a third of the people will develop a fast heart rate when they stand up. This has not been previously demonstrated, but appears to be a very consistent biomarker that agrees with atrophy of the brain stem with, and with some of the cognitive changes.

And now we're moving forward to publishing our work on disease biomarkers which must be really, really important because it's already been rejected twice. Welcome to scientific research.

The results of these studies have the possibility to bring closure for the Gulf War, for the

Gulf War veterans. An important though will be to establish that this is real. They're not making this up. There are reports in the 1990s that claim that the Gulf War veterans were malingers. They're a bunch of 18 and 19 years old who excitedly went into the military to improve their lives? And then they came out claiming PTSD so they could get disability for the rest of their lives? I've seen this published. And I'm sorry, if you can allow that to be published, you are casting severe dispersion on our volunteer armed forces and all of the military.

Another issue is I've followed a paper trail that identified 26 cases of people who had acute toxicity at Khamisiyah on the day after the munitions dump was blown up. Then have a syndrome called SLUDGE, which is for Salivation Lacrimation. It's the signs of pesticide or organophosphate nerve agent toxicity.

These people have clear nerve agent toxicity. The thing is they lived. When we look at nerve agents and all the research going up to the 1980s, it's how do you kill people? What's the lethal dose for killing 50 percent? LD-50? These people had a lower dose exposure. So that that was never studied.

This was an opportunity to say these people have a low dose exposure. What happens? What evolved is that within two, three months of their return to Ft. Bragg and their other locations, there were military who could not climb the steps to get into their barracks or their offices. They were too weak. They couldn't do their 12-minute run. They were followed up at Walter Reed. No such illness was diagnosed.

This was an opportunity lost of seeing an acute illness related clearly to asetylcholine intoxication followed by the subacute damage to the nervous system. And the follow-up afterwards is totally absent from the record.

I believe now that we're seeing this persistent syndrome, I think that the work that many of us are doing is going to lead to answers as to what is wrong now. I don't think I'll be able to answer the entire story of what happened in 1990-1991, but we can anticipate with further investigation. With good scientific research we will come up with medical answers that help the Gulf War veterans.

I'll also add that we are studying important issues for society. We're studying cognitive problems. We're studying disability, and these are societal problems so that the research that's done will

have a great applicability too people with chronic fatigue syndrome, with fibromyalgia, with Alzheimer's Disease, and with other illnesses. There's going to be a very large benefit with time.

There's also a huge stigma that this is psychosomatic. That depression is the answer here. That these are all depressed people. I now in my intake interviews for our research projects go over the established anxiety definitions, depression definitions, and our veterans don't fit the bill.

MR. KUPERSMITH: Jim, can I ask you to just finish up quickly?

MR. BARANIUK: Sure. Yeah. The other outcome from the MRI studies is that we're going to redefine psychiatry. I'm not alone in this. Many psychiatrist agree that it's high time we moved away from what Rene Descartes split up as the mind and the body, and now brought those back together so that we can understand how our whole person works, how we can fix that. Thank you.

MR. KUPERSMITH: Thank you very much, Dr. Baraniuk. Adrian.

MR. ATIZADO: Good afternoon. So I want to thank Joel for inviting me to be part of this panel. I want to say thank you, Dr. Clancy, for being here as well. And for Mr. Coffman for his remarks.

I, like Mr. Coffman, was in the Gulf War. I was a corpsman for the 1st Marine Division. Funny enough, I was actually in charge of the chemical/biological/radiological response team for Aids Station, Mass Casualty Unit. I was not an officer so I do not have a global sense of the operation. I was very much involved with, and quite focused on making sure that if we did get any casualties that I would be able to respond because the golden hour tends to be quite short when you're out on a battlefield.

And the physical description (inaudible) descriptions that Mr. Coffman described was quite true. I'm sure many of you may recall the pictures of the area of operations, the oil well fires. I almost forgot about how thick it was.

So if many of you can remember the desert camouflage uniforms that service members wear now, the brown and tan, we came out with it looking like this. That was how, how thick it was. And like him, we, that was the least of our worries. We had a mission accomplished. I think a lot of us felt that we did that, but we're not really here to talk about the operation, I think, but really what happened after.

And in my line of work, I actually had the opportunity to listen and learn from the people who had dealt with other exposures before me. And it's impressive to me the parallels of that which radioactive or atomic veterans had gone through. Herbicide exposed Vietnam veterans, what they went

through, and (inaudible) Gulf War veterans, and now the emerging burn pit exposed veterans.

But I will tell you, even though there seems to be a cycle of, the only way I can explain this is cycle of insanity, because we seem to be doing, trying to the same thing, expecting a different result. We don't track actual the exposure of service members when we know that there was an exposure issue or a chemical concern out there.

But the response seems to be much faster. So I'll give you an example in nerve side exposed veterans. So they sprayed 11 million gallons. Out of 19 was Agent Orange sprayed between I want to say '61 to '76, something to that effect, '65 to '76.

It wasn't until 1980 GAO report that really opened the can of worms as to what that was all about. So that's, you know, roughly, 18 years before, or 15 years before the first spraying.

The reaction from Gulf War veterans was much sooner. I remember Secretary Principi, some of you may remember him. He was a, I remember a news article of him watching this on TV, and he was the number two lead person at the VA at the time back in '93 I think is what, is what it was, and he said we've got to do something.

So with the pen as an administrator of the second largest federal agency, he said we're going to start a registry to which he was told not really. Can't do that. So he alone who had seen what his cohort had gone through, and had the wisdom to try and act and be proactive, was told by the system that was created to take care of veterans and their specific illnesses, you can't do that.

This is part and parcel of what my generation had experienced. Why they feel so maligned, so disenfranchised, so disrespected. You know, you have VA officials who publicly state that they, malingering was not the word. They were looking for benefits. They wanted money. That was from a VA provider who was supposed to be caring for them. So this was a system that this government, this nation, created to take care of them. This is the response that they got. And that has stigmatized their view etched in their brains for even today.

You know, I've lost quite a few friends. A lot are still, you know, they are sick and they're tired, and they're sick and tired of being sick and tired. And now they're getting to the age where they are literally physically gonna get sicker by virtue of age. So that will complicate them, and that's what they're looking at today.

For 25 years, they've been sick, and hurting, and in pain, and trying to get along, get on with their lives, and now if they've survive this long, their twilight years, perhaps, shortened because they are already physically compromised.

And in my position, I'm lucky enough to try and help them with help from Dr. Clancy and Mr. Coffman, and a number of you out here in the audience, Denise, you're part of that group, a number of advocates around the country who still keep the faith and try and fight for them that can't -- so I'll just leave it at that.

MR. KUPERSMITH: Thank you. Okay, let me, I'll start the questions, and then we'll move to the audience. Carolyn, I just, in terms of some of the systems approaches to what you're taking as far as Gulf War veterans and Gulf War illness is concerned, can you describe some of those?

DR. CLANCY: Can you tell me what you mean by systems? I'm just --

MR. KUPERSMITH: Well, centers of excellence, that sort of thing?

DR. CLANCY: Yes. So we have the war-related injury and illness centers that I mentioned. And I think many of you are aware that we started up the burn pits registry a couple of years ago, and I was astonished by how brisk the response was. I should note that I have a very close friend who I believe is in Representative Coffman's district, I'm not a hundred percent sure of the boundaries here, but has, who actually -- I'm sorry.

MR. KUPERSMITH: A little louder, please

DR. CLANCY: I'm sorry. Is that better? Sorry. In addition to the war-related injury and illness centers, we have started up the burn pits registry which I think is very, very important, and the war-related injury and illness centers, or study centers, are quite unique and were designed by the Congress, right, so this was the general direction they gave us, to focus on clinical care and on education, and that is very much what they do.

So in addition to applying for grants and doing studies of selected cohorts of Gulf War veterans and getting some VA funding as well from the Defense Center for, the acronym I can never spell out, CDMRP.

They are also providing consultations across our system seeing some veterans directly themselves, and it is typical of the traditional academic model which generally doesn't seem to, seems to

have kind of sort of disappeared because, you know, your life is so fragmented, particularly around the clinical care and revenue side of that. But I think that has been very, very important.

And I think with the Million Veterans Program, we have a huge opportunity to identify potential genetic clues in combination with the other clinical and medical clues that we're seeing as well.

MR. KUPERSMITH: Thank you. I'm glad you mentioned the Million Veteran Program which I started, so just in line with that, there's still a lot of providers who don't understand this illness both within the VA and outside the VA. How are you approaching that?

DR. CLANCY: So within the VA, within the post-deployment health initiative, we have some astonishingly enthusiastic clinicians. If you manage to get to one of their calls which they do every two weeks, you will never stop going. I tune into a lot of them. They're Fridays for about 90 minutes. This is Drs. Hunt and Bergo, and they are reaching out at all times, and they put such a positive frame on this, on the opportunities to help people that it's almost irresistible. So that is one way that we do it.

Frankly, we also learn a lot by trying to make sure in our work with the benefits administration that we're learning as much as we can and asking lots of questions. And, frankly, this is where some other veterans, Ron Brown and others, are very, very helpful to us.

I sometimes think that we've taught him too much about science because his questions keep getting more and more sophisticated.

Some clinicians, I will say, find this frustrating. And I would be less than honest not to acknowledge that in the same way that many clinicians find chronic fatigue syndrome which shares many of the features of chronic multi symptom illness frustrating.

Others I think step up to the opportunity to try to figure out how do we help each veteran have the best, most functional life possible. Some are more impatient with that. And we're trying to do everything we can to educate.

MR. KUPERSMITH: Thank you. Jim or Adrian, any comments on either of these?

MR. BARANIUK: A point that's been brought up at the VA Research Advisory Committee for the last ten years that I've been going is that there should be a curriculum for the veteran physicians, VA physicians. The patient who come in I have several who have sympathetic providers. I have some who are very aggressive and interested providers, but the vast majority have healthcare providers that

think they're nuts. And that's, I think, very unfortunate.

I think that's a very key thing. At Georgetown with Medstar, they mandate that we take certain courses. And I can't provide service in the hospital without those.

I think you have the opportunity in the VA to do the same. To mandate that the, all of the physicians and other healthcare providers learn what Gulf War illness is, and identify what are the treatments that are available to them that will help these people.

One of the things, simple things is we've identified migraines as an important component of Gulf War illness, and treating them relieves a great deal of suffering. Yet, I've had patients who've gone to VA neurologists who are told they don't have migraines. And Dr. Jessie said in his reviews that they don't have migraines either. It's not an increased risk. It doesn't jive with my evaluation and treatment of patients.

I think if we go back to the science, it'll be very important to show to the healthcare providers that there has been progress, and that there are things they can do to help their patients.

So I don't know how easy it would be to get to mandatory training, although I do have one note of optimism. Recently reviewed what we are requiring of providers across our system by way of mandatory training. And it turns out it is probably less than our colleagues in the field think. So if we can actually clarify all that, that may create some actual time.

I'm not sure that any educational curriculum will necessarily directly address the impatience with a chronic poorly defined symptom complex. Some people have more patience with that than others, and I'm not actually sure that we've got the right educational tools to address that. Certainly, not being respectful is completely antithetical to our core values. And I know many of my colleagues try to reinforce that, and it's not as good as it could be. That's all I'll say about it.

By way of you had asked a question earlier of, Dr. Kupersmith, about what about we are referring more and more veterans to partners in the community. The one thing that we have done is to open up a lot of our training, particularly as it relates to mental health issues, but others as well, to people in the private sector so it's free. You can get your continuing education credits which all clinicians need in order to keep up licensure and so forth. So that may be an important step.

MR. KUPERSMITH: Okay. Thank you. Adrian?

MR. ATIZADO: Okay. So I guess I'll try and tackle this question from a patient's perspective. When you're a fairly young individual, man or woman, actually, there's about forty some odd thousand women veterans who deployed in country for the, in the Persian Gulf War, when you present, you're a clinically complex and you're a relatively young person, I think impatience comes with it.

So one of the things that I hear often from my friends who have decided to stick around and keep using VA, which is under another subject we need to discuss, is that what they've noticed is that the doctors when they do cycle over because they get new doctors maybe once every year, sometimes (inaudible), sometimes later, that they just like any average person will only absorb information when they good and ready to have it, and so perhaps having some kind of training may be an answer, but perhaps something for the provider that can help them in the immediate.

I do know, I think everybody here knows about geriatricians and how they are really the providers I deal with for elderly but really because they are clinically complex.

When you ask one question, you end up asking for eight other questions because that's just what it leads to when you get older. Perhaps that kind of a specialty is required. That was proposed quite a few years ago. That never really caught traction. Quarter of a million veterans not all of which come to the VA may not make the best, and I hate to even say this, the best business model to have a specialist at each 180 VA medical centers that would be able to take the time to take care of these --

MR. KUPERSMITH: Let me just say that, you know, that's where the Center of Excellence concept comes in. And I totally agree. I think you're right that unless you're receptive to the information, and that's been one of the problems, it's not gonna be absorbed, and so you have to somehow make people receptive to the information.

Let me ask, you know, as we've said now a number of times, one of the flash points of this has been the idea that, you know, its, quote, all in your head. And just to correct a misunderstanding that seems to have come up a few times, it's been a long, long time since the research program funded any research that I can remember that had to do with psychosomatic thoughts about Gulf War illness. Certainly while I was there, I don't remember any.

But how do we get this mind/body connection over? I mean, mindfulness, for example, is used for very serious conditions like cancer pain. How do we make the point that we can treat some

conditions in that way, while at the same time making the point that we don't think it's all in your head, and it's it's that these physical problems have caused some aberration that we can then approach that way.

MR. ATIZADO: I think that's a really good point. With many of the difficulties people have, the VA has done well with the PTSD. The cognitive behavioral therapy, I look at cognitive behavioral therapy as being a six-week training session of brain, intensive brain retraining for one specific issue not a complicated fix for the entire patient.

The patients I think are at least resilient to, or accepting that there is a place for some of these. It's very often though that the physician doesn't know what to do so they have to do something so they'll give an antidepressant which is just as likely to lead to adverse events and no benefit whatsoever.

Holding their hands back so that they don't prescribe unnecessarily can be equally important. Studies that were done in Tai Chi from the VA have some important implications because they show reorganization and brain retraining. I think that's a novel way of introducing the re-facilitation of parts of the brain that otherwise are not compensating properly. We still need other treatments though and they will come.

MR. KUPERSMITH: Thank you. Anybody else want to take that or -- okay.

MR. BARANIUK: If I could just make one quick point. You know, I think the concerns about the opioid epidemic and unsafe and inappropriate use of opioids for pain may in a curious way actually open up some other avenues for exploration, so we having a state of the art conference in the fall to look at nonpharmacologic alternatives, and so we were excited about putting this together, and, you know, the next thing I know I'm reading in the trade press every single day that docs who are struggling to come to a new approach to treating pain still wanting to help patients with pain, but not wanting, but wanting to back off from what had become an easy habit in terms of too high doses find that there aren't that many resources around to help them figure out, okay, just saying no is not actually a solution here, but now what do I do?

So I think that may actually in a funny way create more demand.

MR. KUPERSMITH: Very good. Very interesting point.

As far as future research, is there any way that we can work collaboratively and comprehensively among departments, and is there any way we can get the private sector because that's been a big gap I think

unlike research on many other diseases that are much more common, the pharmaceutical industry and other aspects of the medical industry are there. They are not for this.

MR. BARANIUK: Looking at chronic fatigue syndrome, I've been talking to Glaxo, Pfizer, other companies for about 15 years about the opportunities, and have zero, have nothing to show for it. Up until last week where the Welcome trust, they started to express some interest because I think they realized that chronic fatigue syndrome has a lot of spinoff opportunities. It's totally untreated right now, and Gulf War illness at the surface in symptoms has many similarities.

At the pathophysiological level, the molecular level, it's going to be, I think, quite different. But this is at least one company or one trust that is beginning to show interest.

MR. KUPERSMITH: That's an interesting point because if I may, it's just a, it's broader. I mean, fibromyalgia is pain. There are some drugs for that now. And I think what you will apply in Gulf War illness, as you said before, Jim, can have much more general application.

MR. BARANIUK: If I just, for fibromyalgia drugs, fibromyalgia is a real disease because it's got a drug and they got advertisements on TV. Right? So it's real. Except if you look at the drug studies, they didn't improve the primary outcome of pain. They improved the other symptoms and the overall scores which include depression, and the drugs that are used, some of the drugs that are used, are old style, old failed antidepressant. Others are used for acute pain with diabetic neuropathy so they would be appropriate for the pain.

MR. KUPERSMITH: Okay.

MR. BARANIUK: But as far as improving fatigue or pain alone, they're not that effective.

MR. KUPERSMITH: Okay. The other is irritable bowel syndrome which is not uncommon, and also is part of Gulf War illness.

I want to ask, you know, every war, every modern war has had issues related to exposures, and one of the things I thought was interesting that Representative Coffman said it that somehow we need to combine the research and, you know, clinical outlook actually on these conditions.

How do you feel about that? How can we kind of improve what we will do in the future so as not to make the same mistakes that we did for Gulf War veterans? Anybody take on that? Adrian, you paused.

MR. ATIZADO: I'm the one that doesn't have any real research background, so I'm actually going to try and answer this question.

MR. KUPERSMITH: That's good.

MR. ATIZADO: So my knowledge of all this is really from the sidelines so you'll have to bear with me if I misspeak, but I think one of the issues, one of the things that always concerned me from the very beginning was so Mr. Coffman talked about this five-year delay, right? That, for better or for worse, one can debate whether that was, one can debate that and say it was both good and bad.

The good and bad is that, you know, sometimes we do have to wait and get the most knowledgeable people to discuss. Even today, there is a balance between what the focus of research in Gulf, for ill Gulf War veterans should be. And that push and pull, that tension, was part of the hearing that Mr. Coffman was in not too long ago.

And there has been a call to focus on treatments. There's been a call to continue looking at underlying causes. I just want to say on this point that we really should not be closing any doors. I think we haven't done enough, we haven't, we don't have enough good answers per, for ill veterans, ill Gulf War veterans to say we should go down this road for the sake of the other.

I mean, everybody, I think, here know that back in October, November the New York Times said that expose about Iraq veterans being exposed, bushwhacked had denoted some, had gotten rid of some chemical munitions pre-'91 actually.

And they were reporting on that exit exams, on their exit exams, I was, I think I was exposed, and I have physical symptoms for it. And they flew under the radar for months.

I bring this point up because what we find out for ill Gulf War veterans, well, I shouldn't make declarative statements in the beltway, but I think I can, I'll make a venture to say that it will, it will pay off because this kind of weapon is accessible, less traceable, and easily deployed.

MR. KUPERSMITH: Okay. Well, any declarative statements that's made three times in Washington becomes a fact, so we'll try to repeat it a couple of times.

Yes, go ahead.

MR. ATIZADO: One very brief point. I mean, what Jim said a few minutes ago about out of this will come a new model of psychiatry which I actually think has a lot to do, or part of it will be

bidirectionality between the impact of the mind on the body and so forth.

I hope that what also comes out of this is an appreciation of the chronic conditions that result from exposures. Right?

MR. KUPERSMITH: Yes.

MR. ATIZADO: We know how to count things, and think about, and we've got epidemiological models for like cancers and other things where sooner or later you've got a start date and a sort of hether physiologic model. I think for this it has challenged our scientific models, but we shouldn't stop trying to figure this out because I think it's going to be hugely important.

I'll say that the one area where I've been disappointed where there hasn't been more investment is patient centered outcomes research because I think this could have been a huge opportunity. I don't think it's too late, but, and frankly, an area where researchers and veterans could work together.

MR. KUPERSMITH: Adrian, and Jim, (inaudible), but you made a point before, and I think it's a broader point that in some ways it's been a long time to study the initial exposures. But in other ways we're not ready yet, or it's not time yet for some of the diseases that may come out with older age either on their own or combined with the conditions of aging.

And, you know, we may see this in the future. It's the same way we are concerned about head injuries, what may happen in the future, and many other things.

Okay, Jim, you want to --

MR. BARANIUK: I think another lost opportunity has been to follow the deaths in the Gulf War veterans. We were talking earlier about the number of cancer death, the impressions of lung cancers and brain cancers of premature death, and yet, there are no statistics, and it would seem that in a group that has a registry like the Gulf War veterans, there should be a way of tracking people.

In patients of the VA, there should be a way of tracking the Gulf War cohort, and yet, although this has been brought up time and time again, nothing has been done. I think it's high time that the epidemiology of this be addressed at a very basic level.

I think that using the non-deployed 1990-1991 veterans is not always appropriate since 15 percent of those have Gulf War illness symptoms. Therefore, you have the opportunity to look at

veterans who were discharged before 1990, those who entered after 1991, and they should be very appropriate control groups as well. I suggested that four or five years ago at the VA RAC and nothing has been done.

MR. KUPERSMITH: Okay. Let's open it up to the audience. Any questions? Yes, sir. Yes.

SPEAKER: What about this current discussion related to increasing access to care as well as complimentary therapies using nurse practitioners, physician's assistants in the terms of the VA currently?

And the second one is what's the status of the depleted uranium exposure. Was that not an issue of concern at the time, or --

MR. KUPERSMITH: Anybody want to take that?

MS. CLANCY: So briefly on access, this is the beginning, middle, and end of every single day at work for us. No, I mean, it is a huge, huge focus for us. So I can tell you very concretely that we have provided a lot more clinical care, and it's not enough.

As you know, we have a proposed rule out to allow nurse practitioners to practice to the full extent of their license, if you will, and what they, their skills.

To say we're getting a lot of feedback on that would be a profound understatement. I do believe we've had something like 50,000 comments already. So that's where we stand on access.

MR. KUPERSMITH: Okay. Go ahead.

DR. CLANCY: Oh, I'm sorry. I know that there is ongoing work in that area, and I would be happy to follow up with you afterwards. I'm just not, off the top of my head.

MR. KUPERSMITH: Go ahead.

MR. BALTIMORE: Ken Baltimore. Yes, thank you.

MR. KUPERSMITH: I'm sorry. Let me ask you the question from before though, if I might. There is going to be work on PTSD, genetics of PTSD, and I think most people feel that there is both a genetic susceptibility to PTSD, and a genetic resilience to PTSD as affected by battle and other things.

So that is something that will be studied. Go ahead.

MR. BALTIMORE: My next question is a two point, two point question.

The first is, is there any data about the percentage of Gulf War veterans, the percentage who began treatment, then subsequently stopped treatment for whatever reason and that accelerated their premature death?

And the other question is do you think there is third pillar to treatment not only of Gulf War veterans, but veterans in the future if the Department of Defense moves towards having a smaller standing army that does not take the role of the world's policemen, and, therefore, send fewer troops into harm's way, and start using drones and also robots?

MR. KUPERSMITH: Yes? Anyone? Want to take that? Jim. I think --

MR. BARANIUK: Could we go with the first question first?

MR. KUPERSMITH: Can you rephrase the first question?

MR. BALTIMORE: Do you know of any data or statistics that have been, that has been accumulated which can give the percentage of veterans who have been starting a treatment program from the Gulf War and stopped because I work for Social Security Administration and I see a lot of the veteran who apply for disability and it shows no-show, no-show, no-show, and they wind up dying.

MR. BARANIUK: Sure. So Dr. Han Kang, who as at the D.C. RISK was, did a lot, did some large-scale population studies, and the last one, actually, was the one that kind of settled the case that followed this issue about the (inaudible) status, and basically saying they're worse.

The best we can describe ill Gulf War veterans is they've either maintained or gotten worse. And in that study, there might be some information you can glean to see who has maintained seeking care for their symptoms, but as far as making a leap to say that because they stop, or those that have stopped have, thus, prematurely died is a little bit of a, is a hard leap. I don't know if anybody has actually looked at --

MR. KUPERSMITH: I don't think we have that, would have that on that. I would doubt it very much.

MR. BARANIUK: But on the second one, I -- the key issue is that there's no clear treatment for Gulf War illness. So if the patient gets frustrated and never comes back, that may be the answer to the no-show issue. We don't have a good treatment so there's no way to stop it prematurely.

It's basically just symptomatic.

DR. CLANCY: And just to your question about the future, I can't comment on methods of warfare, or (inaudible), or whatever. What we are doing right now is working very actively with the Department of Defense to enhance the transition process so that there is not information lost as there has been in the past, and certainly in the area of traumatic brain injury and related issues. There's a lot of interest in being able to collect better data about the actual injuries in defense so that we've got some sense about when was the injury, which were the injuries, is it these specific injuries at multiple deployments, is it some combination thereof, and so forth.

So I'm optimistic about that, but it's going to take some time to get that moving right.

MR. KUPERSMITH: Okay. Next question. Yes.

MR. RINEHART: Hi. Matt Rinehart. I'm the director for the War Related Illness and Injury Study Center in D.C. here. Dr. Clancy had mentioned it. Thanks for that. Saying kind words. It's always good when my boss' boss's boss says good things.

So couple things. There was some talk about mind/body and research and treatment, and, you know, the VA does have a funded clinical trial. I'm the principal investigator on it looking at meditation and acupuncture for Gulf War veterans. And so that has started, and, you know, we're recruiting participants as we speak.

From an education perspective which was another topic that was brought up, you know, we do have webinars that are developed that are attended by many hundreds of VA providers, and it is a continuing issue to keep educating the VA and to educate ourselves. And so we're doing that as well. And I think that's about it.

MR. KUPERSMITH: Okay. Any comments? Yeah. Go ahead, Adrian.

MR. ATIZADO: So DAV has, as part of our communication platform, we have a magazine, a DAV magazine that goes out. It covers two months. And the reason why I mention is because a lot of researchers ask us to publish some of their recruiting material, and I had alluded to this earlier, and it has been pleasantly talked about, but it's becoming increasingly harder to engage ill veterans, ill Persian Gulf War veterans, into these trials. I wonder whether that is partially effective getting bombarded and actually getting the same individuals involved, or this was the effect of, you know,

disenfranchising them early on. But it's a growing concern for us.

MR. KUPERSMITH: Carolyn, is that a general observation now, would you say? Okay. Yes, question? Go ahead.

SPEAKER: I compliment all of our researchers and our doctors. One area that we are leaving out that our lead researcher is in Minneapolis with Dr. Ron Back with the hypercoagulation problem (inaudible).

There has been little focus on that. We've had focus on the neurological, the FMRIDTs, arterial stem technique, a Dr. Haley. The meg studies are being done at Minneapolis VA. But very little, and we've got the (inaudible) records going into (inaudible), but very little on the hypercoagulation thick blood that can cause a problem. Transfer of oxygen that can lead to these pain syndromes. The transfer of oxygen to the brain. And there hasn't been the focus on that. And I certainly hope that Brookings continues, that other institutions continue to bring focus to this because it's through that focus that we get other researchers involved, and we can answer more questions.

But I've seen strokes occur, heart attacks occur, (inaudible) carotid arteries. We have a problem with our weight. I've seen it both now in female veterans and looking at the problem of hormonal endocrine disorder.

I mean, I look at these people from their pictures during the war to their pictures now, and these were motivated individuals. They were a highly educated group of soldiers. They don't want to be that way. And they get blamed a lot on their weight.

Well, if you have hormonal endocrine problems, the hypercoagulation is going to interfere with that. So I think we need greater focus. I mean, 25 anniversary is a great time, and having our build out for a memorial. For the first time, they got four vets marched in the Memorial Day Parade here in D.C. We've been invited back, and also New York. Twenty-five years went by. Many groups have had their reunions, but one of the problems is the cost to the individual vet getting to research.

They want to do it. They truly want to, but the funding is not there to provide for their travel. So I hope that more attention can be paid to that maybe through Brookings Institute, more public awareness and fund raising if we have to be able to facilitate the Gulf War veterans being part of the research.

So I encourage more. Thank you.

MR. KUPERSMITH: Any response to that?

DR. CLANCY: Nothing except to say thank you. No disagreements, but thank you for mentioning the work in Minneapolis because I do think that's very promising.

MR. KUPERSMITH: Yes, that's interesting. And I think the comments you made about the recognition now perhaps will be against the idea of a forgotten war. Maybe the war won't be forgotten. Maybe we can keep remembering it, but I think it's a good point that unless we do things like that it may be forgotten. Yes.

MR. GOLDSMITH: Thank you very much. My name is David Goldsmith. I'm on the faculty at George Washington, and also at Georgetown.

MR. KUPERSMITH: We'll forgive you.

MR. GOLDSMITH: We have to be equal --

MR. KUPERSMITH: Nobody's perfect.

MR. GOLDSMITH: I teach a summer class actually that starts on the 5th of July that focuses on veterans and environmental exposure, and looks at a variety of topics that we've been talking about today.

And I wanted to say to Dr. Baraniuk, and I appreciate very much his work. He's going to be a guest speaker in this class, he mentioned the importance of good epidemiology for looking at several of the questions that are sort of part of our issue that we're dealing with today.

Would you be kind enough to elaborate on that a little bit more? What do you think that should entail? Should this be specialized training for physicians who are already seeing veterans, or who are working with Tricare seeing soldiers who are on active duty? What kind of training, additional training should they get that will help them in their work, and also what kinds of recommendations would you think we need to have in terms of increasing the strength of the epidemiology input or output as it relates to veterans' health?

DR. BARANIUK: I have to congratulate you on your course and its location within the School of Public Health because I think the Masters of Public Health students are in a very excellent scientific location to learn the statistical and epidemiological methods.

Being exposed to veterans' health issues, military healthy issues is often very novel, and may of the people who we've, I've assisted you in teaching often have a military background, so they are there to expand on what they've learned already.

I would like to see more people recognize the opportunities that they have. I think that it would be very appropriate for people from the VA to come and avail themselves of courses like this in order to bring that information back to their jobs. I think that the hiring of people who have that type of expertise and mind set would be very appropriate as well

The question of what types of studies and who does them is going to depend on who's interested and what funding is available, what databases are available.

I think those are available within the VA. Whether it's a VA person or someone associated with it who has an interest will just depend on circumstances.

MR. KUPERSMITH: There are a number of databases. And there's a burn pit database, and there's some that's related to Gulf War that have been mentioned.

I want to just make one comment though in the about the idea of veterans culture in the healthcare system because I think that's an extremely important issue, and this is a way of getting the message across about things like Gulf War illness, and getting people to understand it.

And, you know, as part of it, let me just, little commercial. As part of our newly forming Georgetown University Program for Veteran Studies, this is an issue we're going to address. And I think even sometimes within the VA there isn't an understanding of veterans' culture, although much better in the VA, obviously, than it is outside.

Now, with the number of veterans, the proportion of veterans in society fewer and fewer as time goes by, many physicians may not see a veteran, and they usually don't ask if somebody is a veteran. I mean, you find that in healthcare records.

All these things are crucial I think, to improving, you know, our approach to Gulf War unless as well as every other aspect of veterans' health.

Okay, we have time for maybe a few more questions, one or two.

SPEAKER: Kenneth (inaudible). I'm a student at Ohio State. It's been brought up how these chemicals tend to linger and perhaps the cause is sort of a cumulative effect. Has there been any

effort to maybe observe the civilian population within Kuwait to sort of test this hypothesis and perhaps increase the sample size of people that exhibit these symptoms?

DR. CLANCY: (Off mic) are currently studying the Kuwaiti population. What we can do with the Iraqi population, who knows with all the turmoil still going on? But the Kuwaiti ambassador is very interested in that, in tracking the health of their people.

MR. KUPERSMITH: Good point. Yes.

SPEAKER: Absolutely interesting and fascinating, and thank you so much. I'm a super user of the VA Center, I'm a disabled vet. A question I ask for the panel at large is, is that a large part of veterans' healthcare derives from the family members being engaged in their health services making sure they show up on time, take their meds in the right sequence and orders, and have an open dialogue.

But as our Gulf War veteran, first Gulf War veterans age like myself, that we also continue, some of us continued their multiple deployments in subsequent wars.

What's our strategy to insure that as we become geriatrics for family members to be resilient in handling sophisticated health cases that veterans might propose, might be posing when they're not readily available to get in depth care because they all went to Florida, or North Dakota, or wherever they happen to be hanging out at?

MR. KUPERSMITH: Go ahead.

MR. ATIZADO: So Dr. Clancy can speak probably speak more eloquently than this than I can, but VA has always had in its health benefits package some service that face the family caregiver, the spouse, but we have to understand that generally when you become frail and elderly as a veteran so does your spouse.

So, you know, those tend to be more supportive of them as well as quite a bit of education so that they understand. This is more prevalent in mental health when veterans haven (inaudible) to their mental conditions or -- I'm blanking. Must be getting up there.

MR. KUPERSMITH: Yes.

MR. ATIZADO: But, yes. So they do have primarily education as well as in home supports.

MR. KUPERSMITH: Yeah, this is, this caregiving issue is a huge issue I think in there for veterans.

DR. CLANCY: Well, and it will be. We do provide some supports now, and, frankly, recognize how hugely important it. Adrian's very eloquent point about, you know, spouse and caregivers sort of becoming frail together I think is a huge worry. And, frankly, it's a huge society worry because after all maybe a third of current veterans are enrolled in our system, everybody is living longer.

This is great news on one level. On another level, we have a society that is not prepared for it in any way, shape, or form. I mean, we're encouraging more care at home. Have probably the world's, certainly, the country's largest home based primary care program, but those folks tend to be very, very sick.

But I think over time you will see far less approach focus on institutional and much more focused at home, so we're going to need to step up to that.

MR. KUPERSMITH: You know, it's a point that this is a society problem. This is a problem for everyone. And it often happens that it comes first in veterans to show the rest of society how much of a problem it is, and how you might address it.

I think we'll have time for -- no, we don't. Its five o'clock and I think I'm going to stop now.

Thank you very much for those great questions. Thanks to the panel for the terrific discussion.

(Applause)

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