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Chair

Mr. Neil Ellis

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● (1530)

[*English*]

The Chair (Mr. Neil Ellis (Bay of Quinte, Lib.)): I would like to call the meeting to order, pursuant to Standing Order 108(2), to resume our study of mental health and suicide prevention among veterans.

Today we have four panel groups. Each has been notified that they can start with up to 10 minutes. Then we'll move to questions.

The four groups consist of the Mental Health Commission of Canada, Mission Butterfly Inc., the Royal Ottawa Health Care Group, and The LifeLine Canada Foundation.

Via video conference, we'll start with Liane Weber of companion paws Canada, and chief executive officer of The LifeLine Canada Foundation.

We'll turn the floor over to you, Liane. Thank you.

Ms. Liane Weber (Chief Executive Officer, Companion Paws Canada, The LifeLine Canada Foundation): Thank you so much for inviting me to speak with all of you and for allowing me the opportunity to present to you today.

My name is Liane Weber. I am chief executive officer and founder of The LifeLine Canada Foundation, also known as TLC. TLC is a registered non-profit organization in B.C. doing work across Canada and worldwide, with its head office based in West Kelowna.

The foundation is not a crisis hotline. We work on newly developed initiatives, such as the LifeLine mobile app, the free national suicide prevention and awareness app, and companion paws Canada.

TLC was founded in 2015 as an organization committed to reducing the frequency of suicide deaths and attempts across Canada and worldwide, while developing positive mental health initiatives.

I am not a mental heath professional, nor am I a dog trainer in companion paws Canada. I was deeply affected by two suicides in 2012. After overcoming the worst part of my grief, I used my entrepreneurial mindset to create and launch the LifeLine app in 2013.

The app and website offer immediate access to guidance and support for those suffering in crisis and those who have suffered the devastating loss of a loved one from suicide, including veterans and active military personnel, and their families. They provide a wealth of information, awareness education, and prevention strategies to guide people in crisis.

TLC's newest program is called companion paws Canada, which I understand is of most interest to you. We call this CPC. The program is dedicated to supporting veterans, active military, first responders, and seniors in need, while providing a second chance for pets by rescuing, training, and pairing them with those who would benefit from a therapy-certified animal. The concept of companion pets and therapy dogs for veterans is not a new concept. There are organizations across the globe doing exactly this.

Sadly, there are alarming statistics of suicide, family abuse, and post-traumatic stress disorder facing veterans returning to civilian life after military duty. This can cause a downward spiral of apathy, unemployment, broken relationships, addiction, and depression.

It is our belief that companion animals can be the lifesaving therapy or friend that many returning servicemen and servicewomen need. Medical studies have shown that companion animals significantly improve mental and physical health, including by reducing stress, depression, and anxiety symptoms. Individuals with emotionally-based disorders in particular may find it difficult to open up and trust another human being but find this process much easier with a therapy animal.

Companion paws Canada pets are not service dogs or guide dogs. Therapy dogs are trained and tested in therapy obedience. Interaction with a therapy pet provides therapeutic, motivational, emotional, and recreational benefits to enhance quality of life, while a service dog is trained to perform specific tasks that are unusual dog behaviour.

Up until companion paws Canada's new program, a therapy dog was a dog that might only be trained to provide affection and comfort to people in hospitals, retirement homes, nursing homes, schools, hospices, and disaster areas, and to people with autism. With companion paws Canada, these types of dogs are trained and now can live permanently with a veteran in need of a therapy dog.

Through our website, individuals confidentially submit a letter from their doctor or mental heath professional, which is required, as well as a permission letter from their landlord, and proof of ability to pay for costs after placement and to take care of the animal.

The companion paws Canada team interviews each individual to ascertain what he or she is looking for in a therapy animal. We pair this with his or her personality and lifestyle to make the perfect match. We fully expect that they are already covering their bases with regard to talk therapy, medication, and reading up on their illness. By adding a very well-trained dog to their treatment plan, something profound and wonderful begins to percolate. Their ability to cope improves, because they are no longer alone on this painful journey. They have a soulmate in their dog, who is ever loyal and compassionate.

Once a suitable match is selected, the animal will spend the time required in the home of one of our trainers, who teaches the pet intensive therapy obedience and other valuable behaviours needed to live with his or her new owner. During the course of training, the new owner will be introduced to his of her new companion, which will include training sessions together.

● (1535)

Companion paws Canada works with physiologists, professional trainers, and behaviourists who identify the best canine candidates. All participating dogs must meet strict guidelines relating to their temperament, health, and age. Once a suitable dog is found, he or she begins a minimum 10-week training period. During that period, the dog is matched with an individual in need and paired with their "forever companion".

The dogs will come from rescue shelters across the country. They will be between the ages of 2 and 8 years old. Companion paws Canada dogs are common domestic animals that provide therapeutic support through companionship, non-judgmental positive regard, affection, and a focus in life. We are working with rescue dogs and retired service dogs. Certifying one's own personal pet as a companion animal is not part of our program. CPC dogs will not be certified as service animals, as the dogs will be trained as therapy companion animals. However, that may be an obtainable goal with further training.

The strict level of training needed to complete the program, which includes manners, obedience, and socialization, is to the highest standards set by Therapy Dogs International, while the certification exam is performed by accredited therapy dog evaluators.

Our trained coordinator is a professional service dog trainer with decades of experience working with many kinds of service dogs on mental health illnesses such as PTSD, severe depression, anxiety, and autism.

Upon completion and passing of the exam, the new owner will receive a Companion paws Canada therapy dog vest and certificate card for the CPC dog. They will also receive a letter from The LifeLine Canada Foundation showing the authenticity of the therapy dog. The highest standards of training will be carefully monitored to ensure the standard is met across the nation.

There are no laws regulating the term "therapy dog". The organization responsible for the CPC dog evaluation and certification was approved with permission in a joint ruling by the departments of the solicitor general's office, the Office of Consumer Affairs, Consumer Protection, and Public Safety in Victoria, with outlined expectations.

Dogs can draw out even the most isolated personality, and having to praise the animals can help traumatized veterans overcome emotional numbness. Teaching the dogs commands develops the patient's ability to communicate, and to be assertive but not aggressive, a distinction some struggle with.

Dogs can also calm the hypervigilance that is common in veterans with PTSD. Researchers are accumulating evidence that bonding with dogs has biological effects, such as elevated levels of the hormone oxytocin, the opposite of PTSD symptoms.

With the additional benefits of the companion paws training program, and given the positive effect that this sort of therapy in similar programs across the globe has been shown to deliver, we have chosen to make Companion paws Canada one of our top initiatives.

As for examples of how dogs can help veterans with PTSD, depression, and anxiety, number one is that dogs are vigilant. Anyone who has ever had a nightmare knows that a dog in the room provides information; they immediately let you know if you are really in immediate danger or if you have just had a nightmare. This extra layer of vigilance mimics the buddy system in the military; no soldier, grunt, or sailor is ever alone in the battlefield. The same is true when you have a dog by your side: you are not alone. You can use your mind in searching for data in the environment because you know the dog is doing it for you.

Number two, dogs are protective. Just like the buddy system in the military, someone is there to have your back.

Number three, dogs respond well to authoritative relationships. Many military personnel return from their deployments and have difficulty functioning in their relationships. They are used to giving and getting orders, and this usually doesn't work well in the typical home. I've talked to many servicemen and -women who have been told to knock it off once they get home. Well, dogs love it.

Dogs love unconditionally. Many military personnel return from their deployments and have difficulty adjusting to the civilian world. Sometimes they realize that the skills they've learned and used in the service aren't transferable or respected in the civilian sector. This can be devastating when they were well respected for their position in the military. Dogs don't play any of these games. They just love.

Dogs help people relearn trust. Trust is a big issue in PTSD. It can be very difficult to feel safe in the world after certain experiences, and being able to trust the immediate environment can take time. Dogs help heal by being trustworthy.

Dogs help to remember feelings of love. The world can look pretty convoluted after war. The love of a very well-trained dog is a friendship and a partnership, but also a medical therapy.

These behaviours are intended to assist veterans with PTSD because the dogs provide support and an increased means of coping with the associated symptoms, such as hypervigilance, fear, nightmares, the fight-or-flight response, and impaired memory.

● (1540)

The benefits of having a therapy dog can also include a reduction in required treatment and medication. Dogs can sense when their owner is not doing so well. There's no real command for it, but they respond to emotions and give a little more attention than they normally would.

When vets have a PTSD reaction, their body gets very excited. Their heart starts to race, and they begin breathing very quickly. Petting a dog is naturally relaxing. It slows their heart rate and lowers their blood pressure.

Therapy dogs serve as anchors for veterans and help keep them from having flashbacks to their time in war zones. They can be standing in the middle of a supermarket, but to them it can feel like a combat zone. A therapy dog can help ground the individual and bring them back into reality. Petting the dog and realizing the dog is there, they realize they aren't in a combat zone.

Many veterans are isolated and withdrawn when they return. A therapy dog is a way to reconnect without fear, judgment, or misunderstanding.

I hope I have been of some help to you on how The LifeLine Canada Foundation can be a service provider for veterans and how Companion paws Canada therapy dogs can be lifesavers.

This concludes my presentation. I look forward to answering any questions.

The Chair: Thank you, Ms. Weber.

Next we have, from the Royal Ottawa Health Care Group, Ms. Hale, the director of the operational stress injury clinic, and Mr. Merali, the president and chief executive officer of the Royal's Institute of Mental Health Research. Welcome, and thank you for coming today.

Ms. Shelley Hale (Director, Operational Stress Injury Clinic, Royal Ottawa Health Care Group): Good afternoon, Mr. Chair, members of the committee, ladies and gentlemen. Thank you for the opportunity to speak with you this afternoon.

My name is Shelley Hale. I'm the director of the Royal Ottawa's operational stress injury clinic.

Our clinic has been in operation for eight years now, and we've worked with over 1,700 clients as you can see. We belong to and work within the national network of operational stress injury clinics and are fully funded by Veterans Affairs Canada. We are one of 11 clinics and the only one situated in a specialized mental health facility. Veterans Affairs, the Department of National Defence, and the Royal Canadian Mounted Police are the only agencies that can make referrals to our clinics, and we provide comprehensive assessments back to them about each referral that comes through our doors. Our clinic in Ottawa is responsible for half of the province of Ontario and western Quebec. We collaborate with seven area offices, three active bases, five integrated personnel support centres, and two RCMP divisions.

This is a snapshot of where the referrals are coming from for our catchment area. It's no surprise that Ottawa and Pembroke are our largest referral sources.

Our average client, just to paint a picture for you, is a 46-year-old male veteran who has deployed an average of two times and has served in the Canadian Armed Forces for almost 20 years. He has served on peacekeeping missions, and he has been diagnosed with both post-traumatic stress disorder and major depression. If treated at our clinic, he will stay for approximately 18 months and attend evidence-based group and individual work to process his trauma. He will leave our clinic having met his treatment goals and will feel prepared through the work he's done to carry it over into his day-to-day life. He will also recommend our clinic to his friends.

Our referrals from DND have grown at a steady pace over the last few years. What we find has been working well is a warm transfer between Veterans Affairs Canada and the Department of National Defence while the member is still serving.

We have worked with our DND colleagues in Ottawa to accept referrals for our clinic for still-serving members with up to two years left to serve so we can ensure a smooth transition of care and so no one falls into the gaps.

The feedback from clients is that this process is facilitating a smoother transition between services, and we're also beginning to see referrals from Petawawa following the same process.

In addition to services at our clinic, a few years ago we launched OSI Connect, a mobile application with self-screeners for depression, PTSD, and sleep, the three big issues for our clients, information we target to family physicians whose resources are on there for families as well. We also launched OSI Resource for Caregivers with the Department of National Defence and Veterans Affairs Canada. We filtered that with family members from across our catchment area as well, with much positive feedback from that group and our clients.

We know that not all veterans are affiliated with VAC and that the system is sometimes complicated for both veterans and service providers to navigate. What we would love to see adopted and tried is a national public awareness campaign that would cue veterans as they enter into any avenue of the health care system whether it's the emergency room, their family physician's office, or a walk-in clinic. If we could teach all health care providers to ask someone if they have served, that would open up a whole avenue for clients who aren't attached to Veterans Affairs Canada. Having all service providers educated to ask that one simple question would mean more veterans could access services that have already been established for them.

Thank you for your time.

● (1545)

The Chair: Dr. Merali, you are going to add to this?

Dr. Zul Merali (President and Chief Executive Officer, The Royal's Institute of Mental Health Research, Royal Ottawa Health Care Group): Yes, I am. Let me introduce myself. I'm Zul Merali, the president and CEO of the Royal's Institute of Mental Health Research in Ottawa. I'm also the founding scientific director of the Canadian Depression Research and Intervention Network.

As you know, over 4,000 Canadians commit suicide every year. This is almost like a couple of planeloads crashing with no survivors every month of the year. You can imagine that if that were the situation for any other condition, what a public outcry there would be.

Suicide is one of the seven leading causes of death in Canada, and we have to take a public health approach. We also need to better understand the underlying causes or underpinnings of suicide or suicidal acts.

The biology of suicidal ideation and suicidal acts remains unknown, and this is particularly important because we need to understand what goes awry in the brain and why some people are susceptible while others are resilient under the same set of circumstances.

My objective here today is to call for research. We know that getting into care is not necessarily enough. About half the many people who are in care already will still go through suicidal acts and sometimes succeed in taking their own lives. The vast majority of the individuals who have experienced major trauma or are depressed do not necessarily kill themselves. We do not have a robust way of predicting who will attempt and who will complete suicide.

At the Royal, we are making a particular effort to understand suicide a lot better. I'll tell you a little about our approaches. One of them is that we have created a brain imaging centre in partnership with philanthropists, the Department of National Defence, universities, and the Legion, etc. This was a public effort to come together to bring in tools that can help us make the invisible visible. We need to look inside the brain because that's where the suicidal ideation and the will to commit suicide reside.

To make a point, this slide shows that the brains of people who have post-traumatic stress disorder look very different. They light up like a Christmas tree, as you can see here, using specific ligands in the brain as compared to the other two brains that are matched controls. Here's a demonstration not only of how imaging can be a very strong diagnostic tool, but also very powerful in understanding what some of the underpinnings of those conditions might be.

I'm happy to share with you some information that we have of late. As you know the development of anti-depressants has been rather slow, but of late we have had significant advances. I'm presenting data here that shows you that if you treat people with a certain new class of drugs—although the drug itself is not new, the use of this drug is very new, involving the use of an old anaesthetic at a very low dose, acting as a very powerful anti-depressant—it can alleviate symptoms of depression within hours or days, as compared to weeks or months with traditional anti-depressants. What's even more exciting with this line of treatment is that the suicidal ideation seems to be affected even more powerfully. It goes down much faster than the anti-depressant action, and even those individuals who do not respond with an anti-depressant action will have their suicidal ideation plummet within hours. This is really very exciting, because we can now intervene very quickly and very effectively in alleviating the suicidal ideation.

● (1550)

What's even more interesting are the green bars in this graph, which I would like you to focus on, showing people expressing very little suicidal ideation. The blue and the red are showing high to moderate amount of suicidal ideation. As you can see, almost 90% become free of suicidal ideation within two weeks of ketamine treatment.

This is very exciting, but what's even more exciting is the fact that it gives us an opportunity to disassociate the depressive symptoms in general, on the one hand, from suicidal ideation on the other. We want to be able to image this in the brain to see if we can identify where in the brain suicidal ideation resides. In other words, what are the brain's circuits that are responsible for suicidal ideation? If we can understand that better, I think we can then begin to target treatment much more effectively in those cases.

The action plan we have is that we want to focus on depression, because very often depression is associated with suicidal ideation. We want to also focus on post-traumatic stress disorder, which is highly correlated with suicidal acts.

We have recently created a chair in military and veterans mental health research. We have created a chair in stress and trauma research. I am very proud to say that the individual studying the use of the tool I showed you earlier, which showed you very clearly the brain of someone with PTSD, we have recruited from Yale in New York. He just started last week at our organization.

We are partnered with the National Network of Depression Centers, in the U.S., and with the European Alliance Against Depression, so that we are in tune with what's going on globally. Also, we are partnering with the Mental Health Commission of Canada to test a four-pronged approach to reducing suicidal acts in Canada.

There is a strong need to create a centre of excellence that is focused on military and non-military trauma and related outcomes, including suicidal acts.

With that, I'd say thank you for giving me this opportunity to share our excitement and our concerns. I'm happy to take any questions.

● (1555)

The Chair: Thank you.

Next, we'll turn to the Mental Health Commission of Canada, Ms. Bradley, president and chief executive officer; and Mr. Mantler, vice president, programs and priorities.

Good afternoon.

Ms. Louise Bradley (President and Chief Executive Officer, Mental Health Commission of Canada): Thank you very much.

The Mental Health Commission of Canada is delighted to be here today. Thank you for inviting us.

It's really encouraging to see government making veterans' mental health a key priority. As we all know, suicide is a devastating reality. This is not just the case for military and veterans' communities, as you've heard today, but is in many communities across Canada, each with its own unique challenges.

We will focus our remarks today specifically on the scope of the committee's study, which is to improve support for veterans' mental health and suicide prevention.

As committee members, you're no doubt aware that the population of Canadian veterans is estimated to be just over 700,000 people. Based on the limited data available, somewhere between one in five and one in ten diagnosed with mental health problems will experience suicidal thoughts within a year. As you've heard from Dr. Merali, there isn't a robust way of determining that.

It is also thought that the prevalence of mental illness amongst modern-day veterans is higher than amongst earlier era veterans, but again it is difficult to really determine if that is the case due to the whole issue of stigma, but it's certainly higher than amongst the general population.

The mental and emotional toll exacted on veterans isn't unexpected, given the intensity of the tasks that they are called upon to do. In Canada and worldwide, population studies paint a picture of a complex set of needs and determinants of health specific to veterans. These include everything from the predispositions of those who choose to serve, to the unique stressors of military service, and the complex transition from military to civilian life. There isn't a one-size-fits-all solution to the challenges that veterans face, but we know that a whole-of-community approach is a very good place to start.

That said, there are important government initiatives that are contributing to the well-being of our veterans. For example, Ed Mantler and I are fortunate to have been invited to sit on the minister of Veterans Affairs mental health advisory group, and, while supports offered to veterans in Canada are available, they really fall short of what is needed. We are increasingly hearing urgent calls for improvements, and we certainly hear this from the veterans themselves in the committee that we sit on.

This is particularly true in terms of providing adequate transition support. Current supports include a national network of approximately 4,000 registered mental health professionals who deliver services to veterans with operational stress injuries in the communities where they live. We highlight this initiative in particular because it's extremely important to have services close to the community that they live in.

Before I ask Ed Mantler to discuss some of the successful tools that we at the commission have developed to improve veterans' mental health, I want to highlight an ongoing study that may be of interest to the committee. The Australian government is currently carrying out a targeted review of suicide and self-harm prevention services available to its military members and veterans. Written by its National Mental Health Commission, this report is set to be released next month some time, and I think this report will certainly provide useful insights to the committee's study here.

Now in terms of partnerships that we at the commission have pursued with government, we recently launched a mental health first aid veteran community course for veterans, their families, and caregivers. I will ask Dr. Mantler to outline that for you.

● (1600)

Mr. Ed Mantler (Vice-President, Programs and Priorities, Mental Health Commission of Canada): Thank you, Louise.

The program Louise refers to, mental health first aid for the veterans community, improves knowledge about mental health and builds skills for recognizing and responding to mental health issues at the community level through the use of a tested, evidence-based plan of action. Through funding from Veterans Affairs Canada, this course is offered at no cost to participants.

The program improves the capacity of members of the veterans community and empowers them to address mental health problems and illnesses rather than simply directing them to government agencies. The veterans version of mental health first aid gives family members, community workers, and veterans themselves the tools to recognize a mental health problem and the skills to intervene until professional help can be engaged. These kinds of tangible programs put knowledge on the ground and in the community where it's closest to those who need it.

Last year alone, 14 courses were held across the country. Hundreds of members of the veterans community are now better prepared and better equipped to effectively address a mental health problem or crisis. Our goal for 2017 is to offer 40 veterans community training courses from coast to coast to coast.

Another program of potential interest to the committee is the commission's training called “The Working Mind”. It is an education-based program designed to address and promote mental health and reduce stigma related to mental illness in a workplace setting. It's based on the Department of National Defence's program as a foundation, the road to mental readiness, or as we call it, R2MR program. The training supports the mental health and well-being of employees and offers ways to talk about mental illness in a workplace context as well as means to combat stigma and encourage individuals to seek help when they need it.

The training is based on a mental health continuum model that categorizes one's mental health within a continuum. It allows individuals to identify indicators of declining or poor mental health and reinforces the reality that these indicators exist within a continuum and can move across the continuum. It contains strategies to help return to the best mental health possible. These strategies are based in cognitive behavioural theory techniques to help individuals cope with stress and improve their mental health. They're simple techniques that, once learned, any of us can do, such as purposeful diaphragmatic breathing, positive self-talk, visualization, and proper goal setting, the same kinds of techniques that Olympic athletes use to maximize their performance.

We're very excited to see that the most recent report of the Standing Committee on Public Safety and National Security included R2MR training, mentioned several times as a training tool that could help.

As important as training programs are, work needs to be done now to implement a bolder plan that will save veterans' lives. I thank Dr. Merali for introducing the issue of suicide. The risk of dying by suicide is 32% to 46% higher for veterans than for other Canadians of the same age. Veteran suicide happens within the context of their community.

Last year, in the commission's pre-budget submission, we talked to members of Parliament and Veterans Affairs about a national community development suicide prevention model. The commission would be ready to swiftly deploy a sophisticated suicide prevention strategy in 13 communities across the country, one in each province and territory, and to focus projects on military bases or areas where there is a high veteran population. The project would cost $40 million over five years, a rather modest price tag when one considers the life-saving potential of such a project. The model is based on proven programs in Quebec and internationally that significantly reduced suicide rates by more than 20% in two years.

The suicide prevention project would provide a base of evidence for a nationwide suicide prevention program. The project would focus on specialized supports, including a range of prevention, crisis, and postvention services, such as crisis lines, support groups, and coordinated planning and access. It would provide training to better equip community gatekeepers—family physicians, first responders, nurses, managers, teachers, and others—by providing access to training and ongoing learning opportunities.

The commission would be honoured if the committee would consider reviewing this proposal in full during the course of its study. I'd be pleased to provide the full pre-budget submission proposal, as well as a full briefing note to the committee.

● (1605)

The commission is well positioned to work with all levels of government to continue to implement programs and training for veterans.

I'd like to thank you again for providing us with this opportunity to share some of our experiences with those issues, and I welcome your questions.

The Chair: Thank you.

Now, from Mission Butterfly Inc., we'll hear from Mr. Champion, vice-chair, and Dr. Thirlwell, psychiatrist, executive health team. Welcome.

You may start with your 10 minutes.

Mr. John Champion (Vice-Chair, Mission Butterfly Inc.): Good afternoon. It is an honour, and humbling, for me to be with you today.

My name is John Champion, and I am before you as a prior member of the Canadian Armed Forces, regular forces, a former regional police officer, a former United Nations homicide investigator, a currently serving combat engineer, a Legion branch veteran service officer and zone C-2 veteran service officer, as well as a board member of Mission Butterfly, a not-for-profit organization that provides a multimodal therapy called “healing invisible wounds”.

Throughout my work life I have witnessed the horrors that mankind can inflict, and I have seen the aftermath of destruction that political agendas can make. I have also witnessed the incredible results that Canadian peacekeepers and peacemakers have made while selflessly risking their lives for people they don't know. Unfortunately, I have also witnessed first-hand the long-lasting effects of these actions and the destruction they cause, not just to the veteran or first responder, but to their families and communities.

PTSD and suicide are running rampant within our military, veterans, and first responders. We can no longer sit on the sidelines and do little. PTSD and suicide are like a communicable disease—others around start to suffer and can be triggered.

Among the many hats I wear, the hardest is that of veteran service officer. Twenty years ago, a VSO helped vets and widows navigate the quagmire of Veterans Affairs paperwork. Now it means finding housing, employment, and treatment for vets. Having stared into the abyss myself, I can tell you that the hurdles to seeking treatment are fear of losing your job; being ostracized by your peers, family, or community; and the belief that the therapist can't relate or have knowledge of what you're feeling.

PTSD is different with each veteran. Mission Butterfly has a program with numerous models of therapy. To ensure the success of the client, we do extensive testing before the therapy begins. Veterans don't need a weekend of fly-fishing to heal. They need therapy that heals the mind, body, and soul. That means having their families involved and dealing with topics like finance and nutrition. What it doesn't require is the current medical solution of over-medication. There is a time and place for medication, make no mistake, but masking one's symptoms makes it harder to treat the real cause. Mission Butterfly offers a non-drug therapy that covers all of these.

Mission Butterfly therapists also undergo an intensive Canadian Armed Forces culture workshop so that they can bridge the barrier more quickly. Military members speak a different language. They have a different sense of ethics and respect for each other that the average civilian can't understand. Unless you know the impact of signing the oath with the string of unlimited liability attached to it, how can you relate to a veteran?

Dealing with PTSD has to be started quickly and with the individual's custom therapy in mind. Sending them to a psychiatrist for anti-depressants and time off work is not the answer. That is the current method used, and it needs to stop. Real change starts now, right here, in this room.

Dr. Celeste Thirlwell (Psychiatrist, Executive Health Team, Mission Butterfly Inc.): My name is Dr. Celeste Thirlwell, and I'm an executive health team member of the non-profit organization Mission Butterfly. We are a caring group of Canadians dedicated to improving the quality of life of the men and women who selflessly protect, assist, and serve the Canadian public. I'm a psychiatrist and sleep medicine specialist with a background in neurosurgery, neuroscience research, and pain management. I'm grateful for the opportunity to address the committee.

It is unjust that veterans with PTSD, their families, and their communities continue to suffer without adequate assessment, treatment, and support. The imperative for optimal and innovative treatment of veterans suffering with PTSD is an issue of social justice, military priorities, and federal leadership.

PTSD has been called shell shock in World War I, combat stress reaction in World War II, and during the Vietnam War was finally coined post-traumatic stress disorder. Now, in the *DSM-5*, the diagnostic manual of the American Psychiatric Association, there are four components to PTSD. The first is rear-experiencing, such as flashbacks and nightmares. The second is avoidance. The third is negative mood and cognitions, which includes hostile, aggressive, and even paranoid thinking. The fourth is behavioural arousal, such as hypervigilance, hyper-arousal, and sleep disturbances.

The issue of treating and diagnosing PTSD remains an elusive opponent, both clinically to us, and to military and other services around the world. A key component that has recently been published about is the disorder of sleep. When we train our military personnel, we set them in a combat-ready mindset, which means that their sympathetic nervous system, their fight-or-flight system, is set to overdrive. They are set to “on”. Their neuronal circuitry has been set to “on”, and has been trained to be on. When they come back from combat zones, even where there was no danger, they still perceive danger. Their “off” system, which is called the parasympathetic nervous system—it's like the brakes—is nowhere to be found. What Mission Butterfly has developed is a comprehensive, integrative system to boost that “off” system, that parasympathetic nervous system, so that we can reprogram the neuronal circuitry in these military men.

When we speak about neuronal circuitry and retraining, the shame and the guilt—many of those things that keep veterans from even coming forward for treatment—get put to the sideline. This is neuronal retraining. The good news is that we can reset the neuronal circuitry. The bad news is that it takes time and it takes an integrated approach. Pharmacology alone will not work. Behavioural management alone will not work. We need a comprehensive approach, such as that designed by Mission Butterfly.

The other thing these men need, and that I've read since I presented my literature to you, is a mission. They need a new mission. These are people who were trained to protect and serve. They come home, and there's no protection goal and no service goal. The men and women who are doing the best in the U.S. now are independent veterans who have banded together to find goodwill missions, such as helping to rebuild schools and houses. These are people who are ready and willing to serve, and who need a mission. Not only do we need to calm down their nervous systems and retrain them from the mindset of combat-ready, which is the fight-or-flight, and to boost the “off”—relax and restore, you're safe now—but we also need to heal their hearts. For their hearts to heal, they need a mission.

We all need a goal in life; we all need a mission. Without that, life is not worth living. Without that, we see the suicides.

Thank you.

● (1610)

The Chair: We'll begin our first round of questioning.

Mr. Brassard.

Mr. John Brassard (Barrie—Innisfil, CPC): Thank you, Mr. Chair.

I apologize to all of you at the onset, as seven minutes will not give me enough time to ask the questions that I need to ask. Hopefully, my colleagues can pick up on some of the direction I'm taking.

The first thing I want to talk about is the research that you're doing, Mr. Merali. What I found interesting from the slide that you put up was the distinction between the brain that apparently suffers from PTSD and some of the other brains that don't. I know you're in the research stage, but why are we not doing this right at the onset with those who are coming to us with PTSD? Why are we not putting them in a position where we can diagnose, similar to what we see here?

● (1615)

Dr. Zul Merali: That's a very good question, a very important question. That's exactly why I was showing you the slide. We now are developing tools that can be applied, but right now these are not standardized diagnostic tools.

For instance, when you have cancer, you can go for cancer diagnostics. It is a standardized tool. When you get your blood pressure taken, it's a standardized tool. Brain imaging is only coming into its own now. That's why I think we need to put time and effort into making these sorts of tools standardized, so they can become diagnostic tools available much more widely.

Mr. John Brassard: Are other countries doing something similar to this? Have they completed the process of this research?

Dr. Zul Merali: In the United States, for example, the biggest project right now, after the genome project, is something called the human connectome project, which is designed to understand the connections between different aspects of the brain circuits and how they get activated or deactivated under certain conditions. That's the major thrust right now, not just for PTSD, but in all walks of life where the brain circuits get dysfunctional and give rise to certain symptoms or certain illnesses. That is now the biggest ongoing project in the United States.

Mr. John Brassard: Interesting.

You also mentioned ketamine. I hope I pronounced that properly.

Dr. Zul Merali: Yes.

Mr. John Brassard: Ketamine as opposed to which other prescription drugs?

Dr. Zul Merali: In particular, I was talking about ketamine in the context of depression—which often coexists in individuals who attempt suicide or commit suicidal acts—as compared to other, traditional antidepressants such as serotonin reuptake inhibitors and monoamine oxidase inhibitors. Those are traditional classes of antidepressants.

Those take weeks or months to kick in, and they do not effectively treat everybody, as we just heard from the panel. It has to be individualized, and we need to figure out a way.

The main point I was trying to make with ketamine is that not only does it have a fast-acting antidepressant action but it is an even stronger anti-suicidal ideation medication.

Mr. John Brassard: Is it that much more measurable?

Dr. Zul Merali: It is. It is immediately measurable, within hours.

Mr. John Brassard: Okay.

I don't want to miss out on you Liane. In terms of the difference between therapy dogs and other types of dogs, one of the issues that has come up recently is tax credits.

Because of the cost associated with both therapy dogs and service dogs, not just training them but the constant, ongoing upkeep of food, veterinary care, and all that stuff, would you be looking for or want tax credits for these types of animals, for veterans specifically?

The line is frozen, I think.

Ms. Liane Weber: Can you hear me now?

Mr. John Brassard: Yes, we can.

Ms. Liane Weber: Okay, sorry about that. I was on mute.

Mr. John Brassard: The issue is regarding tax credits. I'm not sure how your program is funded, but one of the things that we've heard about from others in the service dog industry and the therapy industry is the need for tax credits for veterans who have this type of service dog, because of the costs associated with the training, food, veterinary care, and so on. I'm just wondering if you can speak to that.

Ms. Liane Weber: Well, I have to say that I never actually took that part into account. I haven't heard that aspect.

As for us, we get our funding strictly from community fundraising, and we fund all of it.

Once the veteran receives the animal, it is up to him or her from then on to afford the food and any vet costs. However, we will be working with veterans right across Canada to be able to offer—at no cost, we hope—anything that is required once the new owner has received our animal.

When it comes to tax credits, it has never actually been discussed or requested. However, I think it is something very good to look at with respect to the veterans, not for our foundation.

Mr. John Brassard: Okay, thank you Liane.

How much time do I have?

The Chair: You have one minute.

Mr. John Brassard: I'll move quickly then to Louise and Ed.

One of the things that the minister has in his mandate letter is the need for specialized services for veterans. I know that Sunnybrook has issued a proposal to the government for a specialized in-patient program for PTSD. Is that something you would like to see happen? Would it be beneficial to our veterans?

● (1620)

Ms. Louise Bradley: It likely would. I'm not familiar with that piece, but what we are proposing is a community-based program. What we are proposing is one in each province and territory. It would be outside of the hospital setting.

Mr. John Brassard: Thank you.

The Chair: Mr. Eyolfson.

Mr. Doug Eyolfson (Charleswood—St. James—Assiniboia—Headingley, Lib.): Thank you, Mr. Chair.

Dr. Merali, in my previous life up until a couple of years ago, I was an emergency physician. I was familiar with ketamine and its use, but in much different phases. We'd be playing anaesthetist when we used ketamine. In that life I had heard in some conversations that some literature was showing up on ketamine, and that it was looking very exciting at that point.

Is its use still in the experimental stage, or is it becoming widespread and an accepted use for ketamine?

Dr. Zul Merali: It is getting more widespread. One of the issues with ketamine, as you know, is that it has to be injected intravenously, which is not an easily accessible modality of administration in other settings, but right now a clinical trial is ongoing for an intranasal administration of ketamine. That's being tested as we speak, but it is still an experimental venture right now. It is not a mainstay therapeutic intervention.

Mr. Doug Eyolfson: Is there no oral form of ketamine? I have a vague memory of patients who would come into the department very occasionally who were on that.

Dr. Zul Merali: It's not effective.

Mr. Doug Eyolfson: Thank you. That's good to know.

Ms. Hale, I agree completely with your statement on public education for health care providers. Sometimes we would see veterans or even active duty soldiers who would come into the department and we'd know our general treatments. We'd treat anyone else with mental health issues, but we'd know there was something more, and we wouldn't always know.

You talk about public education for health care providers. Has your organization reached out to date to any of the regulatory agencies like the Canadian Medical Association or the College of Physicians and Surgeons or anyone like that?

Ms. Shelley Hale: Veterans Affairs—mostly through DND and Dr. Alex Heber—created a platform for physicians and surgeons. That's available online, and it's for CMEs.

There has been some work with the social workers in Ontario. It's more of a public awareness campaign, because I think a lot of education is already out there. It's just that people don't know where to tap into it, nor do they know to ask the questions. That was primarily the thrust of my point. If people just ask the question, then it opens up services already available to veterans. They just don't know they're there. Maybe we need more awareness of what services there are for community providers, but that would be it for me.

Mr. Doug Eyolfson: Thank you.

Apparently, you have a self-directed tool for caregivers and there's input from DND and VAC. I may have missed this. Can you tell us what the uptake and the response has been to this?

Ms. Shelley Hale: The caregiver resource for families?

Mr. Doug Eyolfson: Yes.

Ms. Shelley Hale: It's a mobile app and a website platform that was created by some of our clinicians with DND. We ran it by focus groups with military family services. It's a CVT-based online module that caregiver family members can walk themselves through to be educated. First responders are using it as well.

Then we have the mobile app, which is aimed more toward the guys who don't present themselves. They tend to do some self-screening to see where they rate on the scales that would help them. It doesn't diagnose them, but it will cue them whether or not they should be seeking more help. There's information on there for family members and physicians too.

Mr. Doug Eyolfson: Thank you.

Dr. Thirlwell, how many applications would you say you've received through the contact information on your website so far?

Mr. John Champion: I know it's six recently. I know that LFCA Meaford requested us to do a run of eight people from the base.

Mr. Doug Eyolfson: Thank you.

With regard to the proposed treatment therapies in your submissions, what type of research has your organization collected to support the efficacy of these therapies?

● (1625)

Dr. Celeste Thirlwell: The efficacy of the therapies mainly focuses on the whole holistic approach. There isn't the hard data that's available for the drug therapies, but it's definitely showing promising results in clinical reports and data.

The most rigorous data comes from the study by Dr. Harvey Moldofsky and Dr. Richardson from OSI London. They followed 14 years' worth of veterans in sleep studies. They can predict through sleep studies who is going to be more likely to develop PTSD and show signs of PTSD.

Everyone who goes through our program has a rigorous sleep study as well.

Mr. Doug Eyolfson: Thank you.

I have 15 seconds. I don't think I have any more questions at this point.

The Chair: Ms. Mathyssen.

Ms. Irene Mathyssen (London—Fanshawe, NDP): Thank you, Mr. Chair.

Thank you for this incredible testimony. It's very helpful and I appreciate it very much. I want to ask everyone many questions. I'll see if I can be orderly and make sense of it all.

I'll start with you, Ms. Bradley and Mr. Mantler.

How does your program target a veteran's family? What kind of supports do you provide for spouses or children?

Ms. Louise Bradley: Are you referring to the community approach we were talking about, or is it mental health first aid and R2MR?

Ms. Irene Mathyssen: We'll start with the community.

Ms. Louise Bradley: Okay.

There are four different priorities that would be implemented in each of the communities. Families are very much included in that. They're a vital part of the approach and so are definitely very much included in that.

With regard to mental health first aid, that's available to....

Mr. Ed Mantler: The mental health first aid version for veterans first and foremost was designed with veterans and their families at the table. There was very direct input from those groups into what was needed. It's designed in a way that's intended for veterans themselves as well as for their families and caregivers.

Ms. Irene Mathyssen: Thank you.

Ms. Bradley, you said that you were on the minister's advisory committee. How many women are there, and how many of those women are veterans so that they can understand or at least communicate that perspective?

Do you have any programs that have been developed specifically for those living with military sexual trauma?

Ms. Louise Bradley: I don't believe there are any female veterans on the committee. There are none. They are male veterans.

What was your second question?

Ms. Irene Mathyssen: It was on programming for those living with military sexual trauma.

Ms. Louise Bradley: In any of the meetings I've attended, and I believe the same is true for Ed, that has not been a focus of discussion.

Ms. Irene Mathyssen: Thank you. I appreciate that. It's come up at this committee, and it's a very real and profoundly concerning reality for all of us.

Dr. Merali, you talked about the need for a centre of excellence. I have to tell you that this is something that my party, my colleagues, have asked for over and over again.

What kind of response are you getting from VAC in regard to that proposal? I'm thinking specifically of your call for research funding. In the information you presented, and in Dr. Thirlwell's research as well, I can see the correlation there, and it is fascinating in terms of what it reveals about what more needs to be done, and it's exciting in that it suggests that there is a great deal we can do to reduce these catastrophic suicides.

● (1630)

Dr. Zul Merali: Thank you.

I'm very delighted that you picked up on this, because I think we need to invest in research like that. I think there needs to be a centre of excellence, because this is a very important issue and it's not going to resolve itself if you don't pay attention to it.

Just recently I finished writing a paper—it's under submission right now—that talks about the investment in mental health research in Canada. To paraphrase the title, what if mental health were cancer?

I was trying to draw the analogy between the progress made in cancer due to the investments made in that field versus those in mental health. I'm sorry to say that we have less than 16% of the funding that would normally go to cancer, prorated, for mental health, despite the fact that the burden of illness is number one. I think that these areas—and post-traumatic stress disorder is one such condition—really need focused care and attention. I think having a centre of excellence would serve not only people who have served in theatre before but also people in the other walks of Canadian life, such as first responders and people who suffer from traumatic events, because the underlying mechanisms might be very similar and the treatments might be very similar.

We need to have a concerted, focused, and central place where the mission is to solve this issue and to find more effective solutions, which are few and far between right now.

Ms. Irene Mathyssen: It's extremely interesting and compelling, inasmuch as I think Roy Romanow was right when he said that mental health was the orphan of the health care system. There is so much need in that regard. It would seem that this research you're talking about has, as you say, implications for the broader community. We know that mental health issues are profound and significant in the general population as well, and very few ever get treatment.

How am I doing for time, Mr. Chair?

The Chair: You have about 30 seconds.

Ms. Irene Mathyssen: All right.

It's my understanding that in order to be served in an OSI clinic, a veteran must be referred by his or her caseworker. How long is the delay between reaching out to the caseworker and getting in to see someone at the clinic, specifically a doctor, so that help is received?

Ms. Shelley Hale: At our clinic by the time we get the referral to the time the assessment's done is about six weeks. The referral comes to the clinic, not specific clinicians within it. We operate as an interdisciplinary team.

Ms. Irene Mathyssen: Okay. I appreciate that answer. I guess the concern is that suicidal thoughts are a crisis, and six weeks is not a good response.

Ms. Shelley Hale: They're contacted within 48 hours of receiving their referral. We do a triage and then they're contacted weekly by one of our nurses...for a wait-list management strategy we've put in place. We have contact with them and we're assessing them. We're also assessing their outcome monitoring on CROMIS, which I believe the committee has heard about before.

Ms. Irene Mathyssen: Okay. So the triage involves active monitoring, because I worry about that time lag?

Ms. Shelley Hale: Yes, there is the assessment.

Ms. Irene Mathyssen: Thank you.

The Chair: Mr. Graham.

Mr. David de Burgh Graham (Laurentides—Labelle, Lib.): The topic I want to cover might require a bit of a game of Whac-A-Mole.

I'll start with Dr. Merali. You are a doctor, or not?

Dr. Zul Merali: Yes, I am a doctor.

Mr. David de Burgh Graham: Okay.

I found this very interesting. This is the chart that we saw on the presentation on brain scans. I don't know how to read this; I think most of us here don't. It looks very impressive, but I wonder if you could explain what we're actually seeing on this chart.

Dr. Zul Merali: Okay, that's a good question.

What you're actually seeing is a PET image—that's positron emission tomography. In that type of analysis you inject a radioactive ligand that traverses through the blood and ends up in the receptors in the brain. The receptors that you're seeing light up in that graph are what's known as the CB1 receptors. These are the cannabinoid receptors, the endocannabinoids. They are receptors in the brain that bind to marijuana-type molecules. The brain produces endocannabinoids, endogenous marijuana-type molecules that it uses in its circuits. What you are seeing there is an injection of a ligand that's binding to those receptors. You can see that those receptors are much more abundant than you would see in non-traumatic brains, which are the other two controls that you see on the right-hand side.

What's very interesting about this is that, as you know, of late there has been a lot of discussion about the use of marijuana by veterans, and a lot of anecdotal evidence indicates that they get relief from some of their symptoms by using these drugs.

What concerns me is that there is no large-scale clinical trial that actually shows the efficacy and safety of using marijuana and marijuana derivatives in the treatment of post-traumatic stress disorder. I think this really needs to happen sooner than later.

● (1635)

Mr. David de Burgh Graham: Speaking of large scale, how many people are you testing in your studies? Are you getting these results very consistently, or is this one person?

Dr. Zul Merali: No, this is a statistically significant effect, and this was the study conducted by Dr. Alex Neumeister at Yale. He's the guy whom we have recruited right now. That's not a study that was conducted on our side per se, but we plan to really expand it much further.

Mr. David de Burgh Graham: Is this consistent for all PTSDs? Does somebody who's been at war versus somebody who's working in the police get a different kind of result, or is this what it looks like?

Dr. Zul Merali: That's a very good question, and I'm sorry I cannot answer that because I really didn't conduct that study myself.

Mr. David de Burgh Graham: If we go further back in the process, is there any effort to do before-service brain scans? When somebody enters the military service or police service, take a brain scan so you have a baseline for when they inevitably run into trauma over the course of their careers, so that you then have that comparison. Is that kind of study happening?

Dr. Zul Merali: That's happening in Netherlands right now. It is starting to happen here in Canada, but we are behind in taking measures pre-deployment. There are a lot of concerns about that, because, if you see indicators of vulnerability to PTSD, does that mean that we do not deploy someone? The debate is, do you want people who are hypervigilant, ready to go, are able to grab somebody from a disastrous situation and carry them to safety, and things like that, or do we weed them out with early predictors?

It's a very interesting question of whether we can predict who's going to develop PTSD and who's not. The concern of the user community is that it will be used in a negative way, or with how it will be used. Those are the kind of debates that are ongoing right now. But I think we need to get to that point where we assess people before they go, during, and afterwards to have a much clearer idea of what is happening to the physiology and chemistry of the brain.

Mr. David de Burgh Graham: And if you identify what you are looking for, the suicidal ideation in the brain as you describe it, what can be done about it? If you say this red dot here represents a part of the brain that's affected, clearly we know that now. What can you do about it?

Dr. Zul Merali: Let me compare it to another condition, such as cancer. If you see a cancer and that it's responsive to a certain kinds of hormones, for example, if it's hyperactive, then what kind of treatment do we use for that particular individual? The treatment is not going to be the same, and that's exactly what we need to do for people with mental illnesses, including post-traumatic stress disorder. We need to understand the individual difference and how to treat that person rather than a category of illness. We're not there yet, but we need to get to that point of personalized intervention.

Mr. David de Burgh Graham: Thank you.

I'll go to Ms. Bradley. I have some questions for you as well.

We've heard about the whole-of-community approach. I think this is a really important step, but to tie in what I was talking about, what about a whole-of-career approach? So there's the idea of having brain scans of people in preparation before they go into battle, before they go into the service, of what they're going to be facing and how to prepare for it. In pre-treatment, are there any efforts on that side of it?

That questions open to everybody, but I'll start with Ms. Bradley.

Ms. Louise Bradley: The proposal that we are talking about is specific to suicide prevention. It's very specific to that, so we had not contemplated looking at.... This is something that we would like to do right across the country because, as a commission, we have to look at the suicide rates in the country as a whole. As part of the proposal that we're putting forward, we thought that we would be able to choose to include communities with a higher number of veterans in them, but this proposal is meant to be an action program at the same time as a research one, using a similar structure to one we had with homelessness, At Home/Chez Soi, in the past. It's specific to suicide reduction in specific communities.

● (1640)

Mr. David de Burgh Graham: Thank you.

The Chair: Mr. Fraser.

Mr. Colin Fraser (West Nova, Lib.): Thank you, Mr. Chair.

Thank you all very much for your presentations today. This is very helpful.

I'd like to start with you, Ms. Bradley. You talked a little bit about care for veterans. I'm wondering if you can expand on differences that you've seen between treating mental health issues within the veterans community versus the general population.

Ms. Louise Bradley: I'm not an expert in that area, and we haven't done specific research on that within the commission. We do know that the rates are much higher within the veterans communities, but there has been nothing specific to deal with that.

Mr. Colin Fraser: I thought you made a very good point in your testimony when you said that you'd like to see more outreach to all health care service providers across Canada so that everybody is on the same page and aware of the programs that are available to reach out to veterans' communities and service personnel. How do you see that taking shape as a national outreach to these health care providers? Is it something that should be worked on with the provinces or with medical professional bodies themselves? What are your thoughts on that?

Ms. Louise Bradley: It's a very complex issue that you are raising. We have hopes that with the monies tied to mental health from the health accord, there would be a bringing together of some of the knowledge. What we're seeing now is that there are pockets of excellence in various provinces and territories, and yet Province A doesn't know what Province C is doing.

What we were hoping for with this funding is that there would be a small number of indicators that would be developed, so we could collect the same data in the same way in each of the provinces and territories. That is not happening right now. We would then be able to look at the issue across the country as a whole. It's very confusing when we talk to other countries. They say, “Well, this is a great program you're doing”, but it's hard to explain to them that it's really only happening in three or four different places.

It's one of the needs that we have at the commission. We have tried to close that gap with the work that's done in our knowledge exchange centre, and we've certainly made headway, but it's really only just the beginning. It's something that requires a much closer look and targeted efforts.

Mr. Colin Fraser: Thank you very much.

Mr. Mantler, I believe it was you who touched on the first aid programs for veterans and their families. It seems as though we've gone through one year of 14 courses that were delivered across the country, and this year 40 are planned. It seems to be ramping up. Can you tell us preliminarily, after the first 14 courses, about some of the results and the feedback you've received? How worthwhile is this program?

Mr. Ed Mantler: The development phase of the mental health first aid for the veterans community and the first year of production were accompanied by an extensive evaluative research data collection component. We know early on that the user satisfaction with what they learned from those programs has been very high and very significant.

We also know that mental health first aid has many versions for various populations across the country, including seniors, youth, first nations, Inuit, etc. We know that there have now been close to 250,000 Canadians trained in mental health first aid overall. The outcomes from those many training opportunities across the country over the last six years have been consistently very good.

● (1645)

Mr. Colin Fraser: Do you think it's important that there's outreach to all communities and there's access to this program, so it's not just in large centres, but also in more rural and remote areas? I would imagine the 14 that took place were spread across the country and now there are 40 more, so they will be going into other communities that maybe weren't selected in the first cohort.

Mr. Ed Mantler: The first 14 communities were ones in which there tended to be a significant veteran population, that were natural gathering communities for veterans, so many of them were tied closely to bases. Over the course of the next year, we have an opportunity to broaden the communities where the course is offered.

The vision for the future, much like all mental health first aid courses, is that be responsive to market demand. Having a network of trainers across the country gives us an opportunity to, in a flexible way, make that training available quite broadly.

Mr. Colin Fraser: Thank you very much.

Do I have a little bit more time?

The Chair: You have one minute.

Mr. Colin Fraser: Ms. Weber, thank you very much for appearing today.

I'm wondering about standards for service dogs. My understanding is that VAC has initiated some questions about whether there should be standards for service dogs. What are your thoughts on that? How could that be developed?

Ms. Liane Weber: Well, service dogs are not my full zone of expertise. One of the reasons that we are focusing on therapy dogs and not service dogs is that it is a little confusing about the regulations going across....

There needs to be a standard. We are requesting on our end to have a special standard for therapy dogs. When it comes to service dogs, it's a little different because they are trained to perform tasks that are unusual dog behaviour. For example, a service dog could be trained to flick on a switch so the light turns on, or they could go into a room that is dark, check out the room, and let their new handler know that it is safe to go in.

With therapy dogs, we will not be teaching unusual dog tasks. However, each veteran who comes to us, or any individual for that matter, will be offered specific training that they will be able to perform at home if they choose to teach a specific task that otherwise would only be taught to a service dog.

It is quite confusing what is going on across Canada with regard to service dogs and the regulations. Here in British Columbia, the province has started an assessment, which I believe is absolutely fantastic, to make sure that all of these service dogs go through the right assessment and that we eliminate any fraud or any issues that can come along with not having a properly trained service dog.

Mr. Colin Fraser: Thank you.

The Chair: Ms. Wagantall.

Mrs. Cathay Wagantall (Yorkton—Melville, CPC): Thank you.

I have a question for Dr. Merali, and then one for Dr. Thirlwell.

Dr. Merali, we've been working a lot with veterans exposed to the malaria drug mefloquine. It causes permanent damage to the brain stem and it mimics PTSD. The U.S., Britain, Australia, and Germany have all limited the use or completely removed the use of this anti-malarial drug. Health Canada has recently, this last summer, changed the label to indicate that it can cause damage to the brain stem, and depression, hallucination, nightmares, psychotic behaviour, numerous physical side effects, and suicidal ideation. There is a strong correlation that we're finding between suicide rates and mefloquine use.

We had David Bona, a veteran from Somalia, from our Canadian Airborne Regiment, saying that after 20 years he was finally able to get proper treatment and relief after a brain scan. He was previously treated for PTSD and was now able to see that he had mefloquine toxicity. It causes a physical brain stem injury.

Looking at the work that you're doing here and seeing the results of this study, has your facility been asked, or has it ever considered doing brain imaging with respect to identifying mefloquine toxicity to see the scarring on the brain?

● (1650)

Dr. Zul Merali: Yes, it's a very interesting observation and I think an area of concern.

No, we have not been asked. What we're doing right now is providing the platform, which for the first five years is strictly going to be for research. Anybody who has a research project and who is interested in studying any issue that may have an impact on brain functioning is free to do so, and we facilitate that. However, we had not had a request for that particular type of a scan on people who have been on anti-malarials.

Mrs. Cathay Wagantall: In light of the ongoing concerns about this, if the government were to seek out this type of a study, it would be possible to do that.

Dr. Zul Merali: Absolutely.

Mrs. Cathay Wagantall: Okay, thank you very much.

Dr. Thirlwell, I so appreciate what we've heard from you today. I think that around this table what we want to find is an effective way to deal with PTSD and suicide.

We talk a lot about this whole concept of building up a soldier. Can we not, then, when they come home, rebuild them, build a proud veteran? I started to write down “fight, flight” when you were talking about whether it can be...and you talked immediately about it being reset.

I would like to hear more about that, but I also want to make note of something. In your notes to us, you indicated that PTSD and depression are treatable, which means they can be prevented. So much of the cost and the pain we are seeing is due to it being dealt with in a crisis: the house is already on fire.

Could you share more on that, please?

Dr. Celeste Thirlwell: I want to draw a bit on your questions about the civilian versus the veteran population in terms of PTSD. My background is in neuroscience. I'm a neuroscientist first, a clinician second. Much of what medicine runs on now is dogma. Wars have been won with innovation; we need medical innovation.

What's happening is that when the brain is in PTSD fight-or-flight mode, it's in the reptilian brain, the lower part of the brain, and it cannot access higher centres to use for CBT, to use to see how you connect to other people. Where the civilians might not be in the same fight-or-flight mode, a military person is in fight or flight. Until you take them out of that fight-or-flight mode, many of the treatment modalities we use for common civilians will not work. That's why I emphasize taking them out fight-or-flight mode.

Please refer to Stephen Porges' polyvagal theory. It will explain to you the fight-or-flight mode being stuck in this brain stem, the reptilian part of the brain, where the autonomic nervous system disregulates, going into the limbic system where the emotional part of the brain is and not being able to access the frontal brain, where there are societal cues. When we're stuck in fight or flight, we can't access those other parts of the brain and our executive manager can't control the emotions. It can't control the fight or flight, which is why we see these anger outbursts and physical outbursts.

Part of polyvagal theory also talks about attachment, and this is what we've done: we've detached these servicemen, through training, from their heart so they can kill. To reintegrate them back into society, you have to undo that programming to get them to reconnect with their hearts, which is why I suggested we do it through positive missions. That is why the dog therapy is so effective: they can finally attach to a trusted entity, a trusted being. Part of our therapy also uses horses, equine therapy, which has been shown to be very successful, and followed with neurofeedback. That also has to speak to attachment. When you take them out of fight or flight and they learn to reattach, they can use the executive processing again, but as long as they're stuck in fight or flight, we're not getting anywhere. That can be from physical trauma, mental trauma, emotional trauma, drug trauma, viruses, or bacterial trauma.

That's the beauty of sleep studies. We can pick that up before they go into service, while they are in service, and after service, which is why we have sleep studies as part of our program, so I can actually see just how unstable the fight or flight is. It's called the autonomic nervous system. It was believed that you couldn't control it, but you can through yoga and other modalities that we use. They've shown scientifically that we can boost the parasympathetic nervous system. That's why it's so important for us, as you were suggesting, to screen before they go into service, while they're in service, and once they come home. When they get off the plane, immediately have a sleep study, and a scan as well.

I would also suggest using SPECT-II, which isn't well regarded and necessarily in the mainstream field, but in cutting-edge neuroscience, SPECT scanning is also showing very subtle changes and different connectivity of the brain. There are subtle connectivity processes that change and aren't picked up by regular MRIs and might not even be picked up by PET.

● (1655)

Mrs. Cathay Wagantall: I have just one more quick question.

The Chair: I'm sorry, but you're way over time. That was seven minutes.

Mrs. Cathay Wagantall: Thank you.

Can we get that study as part of our research?

The Chair: Yes, we can ask for that.

Could you send that study to us, please, or to the clerk? Thank you.

Ms. Lockhart will be splitting her time with Mr. Bratina.

Mrs. Alaina Lockhart (Fundy Royal, Lib.): Thank you.

Thank you very much. It's great for us to have so many professionals at the table today, and we have tons of questions.

I want to carry on with what you were just talking about. What benchmarks are you using now to gauge success with the type of therapy you're doing with those you're working with?

Dr. Celeste Thirlwell: We use multiple self-report inventories, but right now I'm looking at getting a wristband from MIT that monitors the autonomic nervous system. The participants in our program can wear it for the duration of our program so we can get more objective data about how we're helping the fight-or-flight system and the relax and restore system.

Mrs. Alaina Lockhart: At this point we're back to the need for more research, so we're still building that body of research.

Dr. Celeste Thirlwell: Yes, we're still building that body of research.

Mrs. Alaina Lockhart: Okay, very good.

You also mentioned the Canadian Armed Forces cultural workshop.

Can you tell me about that? That's the first time I've heard about that.

Dr. Celeste Thirlwell: John will speak to that.

Mr. John Champion: In order for anybody to bridge the gap with a military member, trust is required. The military people don't trust very easily. That's why you'll always find them sitting with their back to the wall and facing the door.

Anybody who is going to do any therapy needs to understand where these people are coming from. We talk a different language. It's all TLAs, three-letter acronyms. If you don't understand what they're saying, how can you help them?

Right now we have an eight-hour immersion on “military-ese”, on rank structure, brotherhood, family, brother and sisterhood, the dynamics within units, the regiments, the military as a whole.

If you get an army person, an air force person, and a navy person in a bar, they're likely to start a fight, but if there are three of them in a bar and a civvy starts a fight with them, they're all jumping in together to help each other.

Mrs. Alaina Lockhart: Who's offering this? Are you offering this cultural workshop?

Dr. Celeste Thirlwell: Yes.

Mr. John Champion: I developed it.

Mrs. Alaina Lockhart: You developed it. Thank you.

Back to the research question again, I have a question about therapy dogs as well. What research were you relying on for your program?

Ms. Liane Weber: There have been studies that have been going on all across the United States and internationally for many years. Because I'm in a position where I do my own type of research with effective programs that are out there, I am able to create them here in Canada.

For several years, I had gone across the United States and internationally to other organizations that are doing this exact same thing, which has just kept growing. It gets better. There are more studies that are being done to prove how effective dogs are. That is the reason we decided to take it on, understanding that this has been going on for so many years and has shown its effectiveness.

When we're talking about PTSD, of course, that's a bit of a different story. That is new. There are studies all over.

There are service dogs for PTSD, and they are trained in specific tasks. What we have realized is that many times a service dog is not required for PTSD; however, a very highly trained companion animal is. That's what we have surmised through the studies.

● (1700)

Mrs. Alaina Lockhart: Thank you.

The Chair: Thank you.

Mr. Bratina.

Mr. Bob Bratina (Hamilton East—Stoney Creek, Lib.): Thank you.

I want to tell you all that we've heard a lot of testimony at our committee about the problems, and we're hearing a lot about potential solutions and studies. That's really positive. I'm sure we all agree that this is a good meeting today.

Ms. Bradley, I'm going to quote you forever, that “Province A doesn't know what Province B is doing.”

Voices: Oh, oh!

Mr. Bob Bratina: In Hamilton 10 years ago, we had lead exceedance in our water. This week, cities across Canada are finding out that there's lead in the drinking water: “Oh, what are we going to do about it?” We already looked at this 10 years ago.

That brings me to you, Dr. Merali. I know that exposure to lead at levels generally considered safe is showing in more recent studies to be problematic, especially with regard to depression and behaviours and so on. You did the brain imaging. I know that some of the other researchers have found a decrease in the frontal lobe.

As regards our topic, are there predictors of behaviour that you could test even in recruits, as well as veterans, to see whether they might be predisposed to mental behaviours?

Dr. Zul Merali: Yes.

I think that's a very important and loaded question, in the sense that what if you were able to detect something, then what would you do? I've had discussions with people in our military mental health centre, and one of the dialogues we have is that if you were to detect somebody who was likely to be at risk, does that mean that you don't deploy them? Would that be the right thing to do?

That's a question that needs to be answered. I don't have answers for you, but that's an issue. I think the fact that we need to be able to monitor, to see some of the risk and resiliency factors, is a given, but whether we do that prior to deployment is a separate question that's more loaded.

Mr. Bob Bratina: Thank you.

The Chair: Thank you.

Mr. Kitchen.

Mr. Robert Kitchen (Souris—Moose Mountain, CPC): Thank you, Mr. Chair.

Mr. Champion, thank you for your service.

Thank you all for being here.

I don't have a lot of time and I've got a couple of pages of questions.

First off, to Dr. Mantler and Ms. Bradley, can you tell me what percentage of your services are given to veterans? Have you calculated that? Basically, you're the Mental Health Commission of Canada and you deal with mental health in all areas, but to what extent would it be to veterans? Maybe I missed that.

Ms. Louise Bradley: I'll start.

We don't actually provide services as such. The mental health first aid and the R2MR are programs that are train-the-trainer based. We've recently done the one for veterans.

Do you want to add to that?

Mr. Ed Mantler: Regarding the programming of the commission, the bulk of it is really knowledge exchange, coalescing research, and spreading that research to put it into action, and doing so in a way that is intended to address all Canadians. It's difficult to pull out specifically what proportion is going to veterans and what's not. Much of the work of the commission has been focused in workplaces.

Mr. Robert Kitchen: Great, thank you.

Dr. Merali, people are very visual, and when you put something like this out, they key on to it, and they see nice red and green things. I do have a bit of a background in research, so it's nice to see this study. I'm wondering, with the PET study, what was the size of the population that came with this. This is one snapshot of one individual, but across the board, what would be the percentage that would have this type of...?

Dr. Zul Merali: I think one of the studies was about 32 in the treatment group versus matched controls.

Mr. Robert Kitchen: When you look at this, we're looking at those with PTSD and a control group. Have you also done it with a group that might have had a long-term history of opioid use?

Dr. Zul Merali: No. We have—

Mr. Robert Kitchen: No?

Dr. Zul Merali: We have not. We do have a treatment program for opioid addiction at The Royal. In terms of the imaging studies, we have not done them.

Mr. Robert Kitchen: Do you have one with veterans who might have used cannabis to an extent?

Dr. Zul Merali: In terms of the imaging studies?

Mr. Robert Kitchen: Yes.

Dr. Zul Merali: No. The imaging facility is a multi-modal imaging set-up that does FMRI, PET, SPECT analysis, as well as EEG right in that same machine. It is highly sophisticated, and we are building capacity to bring experts who can do different modalities of imaging. The PET one you're looking at there, the person who did that study is now part of our team, and that's exactly what we plan to do.

● (1705)

Mr. Robert Kitchen: You mentioned that a lot of this is looking at cannabinoid receptors. You did bring up the issue of the limited research out there on dealing with the benefits or non-benefits of cannabinoid use and the use of cannabis by veterans for whatever reason. Do you think that would be a worthwhile study that we as a committee should be looking into, not only the use of cannabinoids, but also what effects may have occurred with changes from ten grams to five grams to three grams?

Dr. Zul Merali: Yes, absolutely. I think that's critically important. The fact that people are using it is backed up by anecdotal data. Some people find it highly beneficial, but there is no single large-scale study that looks at the clinical efficacy to see whether it's really effective in a measurable way and, more importantly, whether safety is an issue with the use of those cannabinoids. They have other effects, cognitive effects, effects on concentration and on sleep, etc. that need to be looked at very carefully.

Mr. Robert Kitchen: Thank you.

Ms. Weber, I didn't really hear what cost you were looking at for putting into service the use of the therapy dogs.

Ms. Liane Weber: We expect therapy dogs to cost anywhere between $2,500 and $3,500 maximum. It really depends on where the animal is coming from and if the animal has been spayed or neutered. We will have all the accessories and medicines that are required, and of course, we actually pay the home and training provider where the animal will stay. One of the things we do have the ability to do is to reduce these costs with veterans being able to offer their services, with manufacturers of dog food, collars, crates, and any type of accessories we require. It's between $2,500 to $3,500 maximum per animal. The recipient is then responsible for any further food or vet visits that are required.

Mr. Robert Kitchen: Thank you.

The Chair: Thank you.

Ms. Mathyssen.

Ms. Irene Mathyssen: Thank you very much. Again, I'd like to speak to Mission Butterfly. It sounds like an incredibly comprehensive kind of programming. I just wonder how many veterans have participated in the 12-day program. If you said that already, please forgive me but I didn't catch it. Do you know how many veterans have participated?

Mr. John Champion: We are just starting the first program for veterans this summer. The military has been a little bit slow at getting involved. We are targeting the currently serving veterans first. We do have one program starting in March, which is for first responders. Although we are a new organization, every therapist we have has had extensive dealings with PTSD therapy, and we're bringing them all together under one roof.

Ms. Irene Mathyssen: Okay. So there was a reluctance to look at your program. It that because it's different or innovative?

Mr. John Champion: It's new.

Ms. Irene Mathyssen: It's new. Okay.

How much does it cost to register in a 12-day program?

Mr. John Champion: I believe the final cost is $43,000 per person, because they have to be billeted, and there's the equine therapy and everything else.

Ms. Irene Mathyssen: Okay. That could explain the military's reluctance to become involved.

Mr. John Champion: Yet they're spending more than that now.

Ms. Irene Mathyssen: That's true, and we're back to prevention and how we can help folks.

Thank you very much.

Ms. Weber, with regard to the dogs, I was intrigued by the fact that you use rescue dogs. What's the rationale for using these animals? Are they more sensitive to the sorts of emotional needs of a veteran or someone suffering from PTSD? What is the reason for you using that specific kind of dog?

● (1710)

Ms. Liane Weber: We're using rescue dogs for the simple reason that there are many unloved and uncared for dogs across our country. We are very specific about the animals that we use, so not all rescue dogs will be approved within our program. Good behaviours and temperament are mandatory, and we have no aggressive breeds among our trained animals. So really, it's just a matter of saving an animal to help save a veteran, and the understanding that he also just saved an animal is another type of emotion that might help the veteran.

Ms. Irene Mathyssen: Okay. Thank you.

Dr. Merali, reference was made to the use of marijuana as a therapy, and of course there has been lots of discussion, as you alluded to. Has VAC approached that in any way with regard to clinical trials? We know that the THC part is more recreational. Have they asked about the difference between that component and CBD in terms of what should be available?

Dr. Zul Merali: It's an excellent question. Obviously you know the field. There are many components within the THC plant, and we need to study it very carefully. If you study the effects of marijuana, you will know that one strain is not the same as the other because there are different components. THC and CBD are the two active ingredients with different properties, and we don't really understand exactly the advantages and disadvantages of the different components. It would be very interesting to get studies that look at the different kinds of mixes in a known amount so that you would know what you were dealing with. If you open it up to its just being a marijuana study, the question is whether a marijuana species here would be the same as the one that you're going to get in Toronto or Vancouver, and the findings might not be transferrable. Therefore, it's very important to initially do a study in which you're looking at the actual components in a titrated way just as you would give a drug treatment, so that you would know what you're dealing with. Once you have clear answers, you can match up the strains of marijuana with the specific kind of profile that you want.

Ms. Irene Mathyssen: There's a study being done at UBC on PTSD through one of the licensed producers, Tilray. I could give you the names of the people who are in charge of that study if you like.

Dr. Celeste Thirlwell: That would be wonderful.

The Chair: That's it for testimony today. If there's anything you would like to add to your testimony or those studies, if you can get them to the clerk, the clerk will distribute them to the committee.

On behalf of the committee I'd like to thank all four organizations for all the great things that you do for our men and women who have served.

With that, I need a motion to adjourn.

Mr. Bob Bratina: I so move.

The Chair: All in favour?

Some hon. members: Agreed.

The Chair: Thank you.

The meeting is adjourned.