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Chair

Mr. Neil Ellis

Standing Committee on Veterans Affairs

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• (1525)

[English]

The Chair (Mr. Neil Ellis (Bay of Quinte, Lib.)): Good afternoon, everybody. We'll get the meeting started.

Pursuant to Standing Order 108(2), the committee is studying the effects of mefloquine use among Canadian veterans.

Today we have with us Rear-Admiral Edmundson, deputy commander, military personnel command; Brigadier-General Downes, surgeon general; Colonel Jetly, senior psychiatrist and mental health adviser, directorate of mental health, Canadian Forces health services group; and Dr. Courchesne, director general, health professionals division, chief medical officer.

We'll start with a presentation from Rear-Admiral Edmundson.

Thank you.

Rear-Admiral Haydn Edmundson (Deputy Commander, Military Personnel Command, Department of National Defence): Good afternoon, Mr. Chair and members of the committee.

I'm Rear-Admiral Edmundson, deputy commander of military personnel command in the Canadian Armed Forces.

Within our organization, our focus is people from the point of recruiting until they transition to life after service. Integral to the military service is our obligation to take care of our members and to provide them the highest standard of medical care available.

[Translation]

With me today are Brigadier-General Andrew Downes, surgeon general and commander of the Canadian Forces health services group, who will deliver opening remarks, and Colonel Rakesh Jetly, senior psychiatrist and mental health adviser within the Canadian Forces health services group.

[English]

Also joining us is Dr. Cyd Courchesne, chief medical officer from Veterans Affairs Canada.

I will be speaking initially about the general approach for the care of uniformed personnel. My colleagues will address more specifically technical aspects in considerations related to mefloquine.

We take the health and well-being of our Canadian Armed Forces members very seriously, whether at home during their normal duties or when they're supporting operations such as the floods recently in

the Ontario region, and more importantly, when they conduct operations overseas.

[Translation]

Overseas missions, in particular, often require our personnel to perform their duties in extreme environmental and operational conditions.

[English]

In such conditions, force protection, that is, the protection and the well-being of our soldiers, our sailors and our aviators, is always a top priority and one that we must balance with the fighting efficiency and operational effectiveness of the force that we have deployed.

Force protection can include the need for specialized medications designed to protect against the environmental and operational hazards in the area. I personally have deployed on several occasions and have been prescribed anti-malarial medication, which I believe was beneficial to me, given my experience of being eaten alive, literally eaten alive, by mosquitoes when I was in Djibouti, Djibouti just a couple of years ago when deployed as the commander of Combined Task Force 150.

• (1530)

[Translation]

In making decisions on medical treatment and medications, we base our judgments on research and science and best practices from the broader medical community.

The office of the Canadian Armed Forces surgeon general engages and works with the wider Canadian medical community and allies to stay informed of new developments. When these engagements and research alert us that change is required, we act on this and we adjust to ensure the continued provision of the best possible medical care and force protective measures available.

[English]

Given the nature of what we do in the Canadian Armed Forces and where we do it, there will be some who, as a result of their operational tours, will experience injuries and symptoms of injuries not seen. We acknowledge that some of those affected are not well and need assistance. We encourage them and anyone who knows of anyone who is in need of assistance to reach out to their friends, to their colleagues, to health practitioners inside and outside the Canadian Armed Forces or to whomever they trust so that together we can assist them and their families in their time of need.

I will now turn it over to Brigadier-General Downes.

Thank you.

Brigadier-General Andrew Downes (Surgeon General, Department of National Defence): Good afternoon, Mr. Chair and members of the Standing Committee on Veterans Affairs.

Thank you for the opportunity to discuss the use of mefloquine as a medication to prevent malaria in the Canadian Armed Forces.

[Translation]

As you know, malaria is one of the world's most significant infectious diseases. In 2017, the World Health Organization estimated the global burden of this disease to be 219 million cases and 435,000 deaths. The overall fatality rate of malaria is about 1%, and this rises to about 20% for individuals with severe disease.

When deploying to a malaria-prone area, we use a number of complementary countermeasures to prevent malaria. Most important in this regard is the use of prophylactic medications.

[English]

Our approach to malaria prevention is based on guidelines developed by the Canadian Committee to Advise on Tropical Medicine and Travel, CATMAT. This group, which advises the Public Health Agency of Canada, recommends a number of different medications, including mefloquine, as being suitable for the prevention of malaria.

[Translation]

Mefloquine is also one of the medications recommended by many other agencies around the world, including the U.S. Centers for Disease Control and Prevention and the World Health Organization.

[English]

Health Canada is the agency that regulates and approves drugs for use in Canada. Health Canada continues to approve the use of mefloquine for malaria prevention and treatment. From the 1990s until recently, mefloquine was one of the primary malaria prevention medication options for CAF members. Compared to alternatives, it does have some advantages, including that it need only be taken once a week.

Since its first use in the CAF, approximately 18,000 prescriptions for this medication have been given to CAF members. By contrast, mefloquine has been prescribed to hundreds of thousands of civilian Canadians.

[Translation]

In 2016, recognizing the ongoing concerns about mefloquine, the chief of defence staff directed that a review be conducted on the use of mefloquine by the Canadian Armed Forces. The surgeon general formed a task force to conduct the review. Its work was completed in the spring of 2017.

[English]

The task force concluded that the CAF policy on malaria prevention was consistent with Canadian clinical practice guidelines. It also reported that mefloquine use had significantly declined in the CAF in the previous number of years.

The task force reviewed the scientific literature, concluding that the weight of scientific evidence did not support the notion that

mefloquine was less safe or less well tolerated than alternative medications. However, it did also note limitations of this evidence and that there was insufficient research evaluating the long-term effects of mefloquine.

• (1535)

[Translation]

The task force recommended that mefloquine be prescribed only under specific circumstances, like intolerance to other medications. Other recommendations led to an enhanced patient screening process for all malaria medications and an online supplemental training program for providers. Since January 2018, three Canadian Armed Forces members have received a prescription for mefloquine.

[English]

I know there are Canadian military members and veterans who have or have had long-term neurological or psychiatric symptoms, and many worry that mefloquine contributed to their illness. Their concern is understandable, especially given the level of discussion and debate in the media and in the scientific and medical communities. We know that mefloquine, like any medication, has short-term side effects, and we acknowledge that there is some scientific evidence indicating the possibility of long-term or even permanent neuropsychiatric effects. Certainly, this is listed as a potential in the product monograph.

Our assessment of the literature is that there remain many unanswered questions around this hypothesis. The evidence supporting it is insufficient and has been challenged by many experts. Additionally, population-based studies, which give us an indication of the level of risk, have not demonstrated a significant burden of long-term illness in those who have taken mefloquine. I acknowledge that these population studies have their own limitations as well.

I think there is still much to be learned about the health impacts of mefloquine, so I am pleased that the U.S. National Academies of Sciences, Engineering, and Medicine are undertaking a project specifically to assess the long-term risk of anti-malarial medications, particularly mefloquine. We hope that this and other research work will clarify the situation and help us to better care for those who are suffering.

[Translation]

Thank you for the opportunity to speak to the committee today.

[English]

The Chair: Thank you.

Mr. McColeman.

Mr. Phil McColeman (Brantford—Brant, CPC): Mr. Chair, could I ask you to notify me when I have about just under a minute? I have something that I would like to put before the committee at that point in my time.

The Chair: Yes.

Mr. Phil McColeman: Thank you.

Thank you to all of you for being here today.

My questions are for Dr. Jetly.

Homewood Research Institute is the research arm of Homewood Health, which in turn is owned by Schlegel Health Care. Are you familiar with Homewood Research Institute?

Colonel Rakesh Jetly (Senior Psychiatrist and Mental Health Advisor, Directorate of Mental Health, Canadian Forces Health Services Group, Department of National Defence): Yes, I am.

Mr. Phil McColeman: What is the relationship?

Col Rakesh Jetly: My relationship is that I've been asked to be an adviser.

Mr. Phil McColeman: Homewood Research Institute received \$600,000 in funding from Health Canada in 2016. You're listed as an investigator for that research project. Can you describe your role in that research?

Col Rakesh Jetly: I'm not sure what specific project it was.

Mr. Phil McColeman: It was as an investigator for a project that received \$600,000 in funding from Health Canada. Are you familiar with that?

Col Rakesh Jetly: I know that there are lots of projects I am a co-investigator for that are being funded. I'm not sure of the specific one.

Mr. Phil McColeman: I'll move on.

Mr. Jetly, are you still the chair for military mental health with The Royal's Institute of Mental Health Research in Ottawa?

Col Rakesh Jetly: Yes, I am.

Mr. Phil McColeman: In 2017, Veterans Affairs announced \$17 million in funding for a centre of excellence in PTSD research at The Royal. Veterans were left with the impression, during the last election campaign, that this money was to be put toward an in-patient facility.

Can you describe what is being done with the money? Is any of this money going toward research on the effects of mefloquine exposure?

Col Rakesh Jetly: Could I defer that to my colleague from Veterans Affairs?

Mr. Phil McColeman: I'd prefer that you answer it, sir.

Col Rakesh Jetly: I don't know.

Mr. Phil McColeman: You don't know? Fair enough. You can't give us a description of the research that's going on with that funding?

Col Rakesh Jetly: I know they've just announced the chair. They've just started the hiring.

Mr. Phil McColeman: Okay.

Col Rakesh Jetly: Not the chair, sorry, the CEO.

Mr. Phil McColeman: For the centre of excellence.

Col Rakesh Jetly: Yes

Mr. Phil McColeman: Okay.

Homewood Health bills itself as Canada's leader in mental health and addiction services, with a national network of over 4,500 employees and clinical experts. In addition to the agreements,

Veterans Affairs Canada also has agreements with provincial health authorities, and the department claims it funds "a well-established network of over 4,000 mental health professionals across Canada".

Is Homewood the "well-established network" that Veterans Affairs Canada is funding?

• (1540)

Col Rakesh Jetly: Again, you're asking a military person about Veterans Affairs Canada, so would you like me to continue answering it?

Mr. Phil McColeman: Yes, if you could.

Col Rakesh Jetly: It's up to Veterans Affairs to decide what their network is.

Mr. Phil McColeman: So you're not aware of whether that well-established network is Homewood?

Col Rakesh Jetly: I'm a military member. I focus on military matters.

Mr. Phil McColeman: Okay.

The research being done by Homewood is delving into PTSD in military personnel and veterans. Does the research address mefloquine exposure in any way?

Col Rakesh Jetly: I don't think so. I'm not positive though.

Mr. Phil McColeman: You're not sure.

You may have been able to look at the testimony of our previous witnesses who were here. We had Dr. Nevin and the chief psychiatrist who were here from the United States. In both cases, in their testimony, they came to a point that I would describe as somewhat outraged by the response of the Minister of Veterans Affairs to their request to assist in the study of mefloquine by screening military members on whether they took mefloquine, which would be step one. It would be an acknowledgement of "Did you take mefloquine, yes or no?"

From your positions within your departments, would you be opposed to a screening of military members as to whether they took mefloquine, yes or no?

We can just go across the table, unless one of you wants to take that on in a more fulsome way.

BGen Andrew Downes: Thank you.

I'll start by trying to provide an answer to the question prior to passing it on to my colleagues.

One of the purposes of doing screening is to be able to do something about it. The current situation is that, although we could ask questions about what people did or did not take, as far as the understanding or the science around actually conducting a test is concerned, there is no specific test to be conducted.

Mr. Phil McColeman: I'm going to have to end it there. I didn't know I was that far down the line on my time.

I will take that as a no, because you were elaborating as to perhaps why you are not doing it.

Chair, I'd like to ask for unanimous consent to distribute the actual monogram that is on the product that was described in our last meeting by the experts that we have. I have copies of that monogram, and just for your information, it describes what is put on the packaging of the product.

Could I have unanimous consent for that?

The Chair: Is there unanimous consent?

Some hon. members: Agreed.

An hon. member: [*Inaudible—Editor*]

Mr. Phil McColeman: No, we only have it in one....

The Chair: Okay, we will get it translated and give it to the committee at the next meeting, then.

Mr. Phil McColeman: Do we have unanimous consent?

Ms. Marilyn Gladu (Sarnia—Lambton, CPC): They gave unanimous consent to give it out, but in the future, [*Translation*]

it needs to be in both official languages, please.

[*English*]

The Chair: Okay.

Mr. Eyolfson.

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

Thank you, all, for coming.

Dr. Downes, I was reading your testimony. You stated that there are a number of military members and veterans who are concerned that they have long-term psychiatric symptoms, and they are concerned whether mefloquine could have contributed to their illness. You then go on to say the concern is understandable given the level of discussion and debate in the media and in the scientific and medical communities.

One of the things we deal with in medicine, and in research as well as medicine, is confirmation bias. Do you think there's any role of confirmation bias in some of the claims being made by certain investigators and certain advocates of this point of view as to whether certain individuals may or may not have so-called toxicity to mefloquine?

• (1545)

BGen Andrew Downes: I would say that humans all have bias. On the issue of confirmation bias, I'm not quite sure what you're referring to there. I presume you're referring to the fact that we have a hypothesis on the table and that people are looking to confirm their hypothesis. Is that what you're referring to?

Mr. Doug Eyolfson: Yes.

BGen Andrew Downes: I can't really answer that question. It's quite possible that this is the case. I think when you look at all the studies that are being done and reports that are being generated, there are biases, a number of different kinds of biases. I do think there is a desire among some to prove a theory, prove a hypothesis, but the real evidence for it is not strong. I sense that this discussion has sort of reached an unhealthy level where there are accusations going on

back and forth within the scientific community, which I don't believe has been helpful. I think we need to be having mature discussions on this very important subject and working together to find solutions.

Mr. Doug Eyolfson: Okay. Thank you.

I have another question. We talked about screening. When you're screening for a disease, if we have a group of people who came back from a certain area with a disease, you're screening for it. You look for, let's say, malaria, if they've been to a malaria.... I'm just using that as an example of what you might be screening for in a population. You have evidence to believe that the screening you're going to do is going to confirm the diagnosis. You do a blood test for malaria, and these sorts of things. Now, as to this request for screening for mefloquine toxicity, in the letter from Dr. Nevin, which I have here, the screening tool that he talks about—and I'm obviously condensing this: Do you have neuropsychiatric symptoms and did you take mefloquine—is there any science supporting the contention that this series of questions would in any way, shape or form support the diagnosis of mefloquine toxicity?

BGen Andrew Downes: I don't think those questions really confirm anything. One of the problems is recall bias as well. We know that people often confound the different medications that they've been given, and sometimes that's one of the criticisms of surveys that are conducted after the fact. However, asking people questions gives you perhaps a sense of what the issue might be, but what we lack is a definitive test whereby we can confirm whether that is the case.

I should also point out that matters of the brain are very complicated. We understand very poorly the brain and brain functioning. Particularly in a combat environment, the exposures to multiple different traumas really confound matters a lot as well, so I think asking those questions has no real validity at all.

Mr. Doug Eyolfson: Thank you.

One thing that's been talked about in this discussion by certain proponents of this principle of this toxicity, and I've heard many references to it, is brain stem injury. What is the scientific evidence supporting the fact that there's any injury to the brain stem of people who've taken this drug?

BGen Andrew Downes: Perhaps I'll ask Dr. Jetly to answer that question.

Col Rakesh Jetly: There's actually very little. The only thing that I could find was one study on rats. It gave rats incremental dosages of mefloquine, which was, I think, eventually up to about 7 times the dose of treatment, so much higher than we would use for prophylaxis. They did some testing on the rats that showed some impairment in their functioning that could have to do with balance and things, which would sort of be brain stem. After they were euthanized and stained, they found some abnormalities in the brain stems. That's really it in terms of definitive studies.

Mr. Doug Eyolfson: Just to confirm, this is in rats that received seven times the dose that humans would for prophylaxis.

Col Rakesh Jetly: That's right. There were some old studies on monkeys from the 1940s and 1950s that were using precursors. They were using other quinolones. As the general was saying, there's really a bit of a leap scientifically from the biological studies. There really aren't definitive biological studies in humans that would suggest similar changes.

● (1550)

The Chair: Ms. Blaney.

Ms. Rachel Blaney (North Island—Powell River, NDP): Thank you, all, for being here today.

I'm going to come back to you, Colonel Jetly.

You just answered a question about the research. What research is needed? There seems to be a gap. That's what we've heard across the board. Do you have any recommendations on what type of research would be more helpful to you?

Col Rakesh Jetly: Yes, that's a great question.

The typical way we would study it is doing population-based research. We would do a careful analysis following people over time.

Ms. Rachel Blaney: Can you just make sure that it's nuanced? I think one of the things that we've heard testimony on is that for people going overseas in this particular role, just the normal impacts are often very similar to what could be telling somebody that this is not the right medication for them to be on. They are the beginning symptoms.

Wouldn't the research have to be more closed in or focused on these particular type of folks?

Col Rakesh Jetly: The definitive research, if you want to go right down to it.... If you're saying to demonstrate brain changes, you would have to give half the people mefloquine and half the people not mefloquine, then send them to a war zone and expose them to mTBI, concussions and trauma and then scan them like crazy.

Ms. Rachel Blaney: Basically, is it worth the risk? I understand what you're saying. It's a very ethical point that you're bringing forward.

What has really stuck in my mind is that the symptoms that you receive at the very beginning of taking it, that any normal person who was not going into that kind of situation would start to feel, are the normal feelings and experiences when you first start taking it, like anxiety, nightmares....

Col Rakesh Jetly: You mean the normal adverse drug reactions, which some people would feel. Yes, absolutely.

Ms. Rachel Blaney: Yes, exactly.

I'm saying that if it's the same as what would actually most often happen to someone in that state of having to go overseas in that particular.... How do we know? To me, the biggest concern is that we're trying to ask our folks who are representing us in the military to take a huge risk and how do we know?

Col Rakesh Jetly: I'm a bit confused by the question, but the confounders are huge.

If you take young men and women into a war zone, deprive them of sleep and maybe dehydrate them, with the heightened stress and being away from their family.... We also have epidemiological data

that shows a higher incidence of adverse childhood effects. When you take these people over and expose them to the horrors of war—Rwanda in my circumstance—or humanitarian crises, trying to tease out the difference between the trauma, the mefloquine and the doxycycline is a very difficult thing to do. That's why we have, as the general puts it, not great evidence on both sides.

I think the definitive study would be extremely difficult. I think ultimately as health care practitioners we need to listen to our patients and help them to deal with what they're struggling with.

There isn't a specific treatment that I know of for tinnitus caused by mefloquine, but I do know approaches to tinnitus that we would use, for example. I think what we need to do is have people come forward, compassionately listen to what they're feeling, and then try to address things almost with a symptom-based approach.

Ms. Rachel Blaney: I have some questions about the screening and diagnosing. It sounds, based on your answer, as if this is another challenge we're facing. I'm curious about whether there currently is a process the military is taking for screening and diagnosing folks who have some sort of reaction to mefloquine.

Col Rakesh Jetly: We have lots of screening in place; that's what militaries do. It's not specifically with regard to mefloquine, but after deployment, we have an enhanced post-employment screening. We're really looking for anybody who's having difficulties of any nature after deployment—physical, neuropsychiatric. If they do have concerns, we do a thorough assessment. We look for symptomology that fits certain syndromes, and then we address that.

Ms. Rachel Blaney: Thank you.

Brigadier-General Downes, thank you so much for your report today. I certainly appreciate what you had to say.

One of the things you mentioned in your report is that right now, military personnel and veterans are hearing about mefloquine and wondering if this is part of the symptomology they're experiencing with the multiple challenges they have.

Could you tell us a little about that and how it's rolling out within the work you do?

Also, we know that the surgeon general's report on mefloquine said that 12% of personnel had precautions, and 62% who had received a prescription were not assessed for those precautions.

I'm just wondering about that. I hope I got that correct.

● (1555)

BGen Andrew Downes: That report is from a number of years ago. It was ordered by my predecessor. Although I've read the report a number of times, I don't remember the specific numbers and what it said.

I do know that when we looked at it, we found there were a number of people who were prescribed mefloquine when there were existing contraindications to doing that. We have done a quality-of-care review on those particular files. We've also put in place a training program that all prescribers need to take, which reminds people of these issues. We also have screening forms, and everybody who's prescribed any of the anti-malarial medications has to go through all the contraindications, and sign it. There are black boxes on each one of those forms to highlight the specific contraindications.

We believe we've put in place a robust system. There is no other health system that I'm aware of in Canada that has gone to those lengths.

I should point out too that when Health Canada did their safety review on mefloquine, they found similar issues in the civilian prescribing population as well. This isn't unique to the military. I think this is something that happens in medical practice from time to time, and I do believe we've responded appropriately to it.

The Chair: Thank you.

Mr. Bratina.

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

I'm going to refer directly to the transcribed testimony from a previous meeting, because I want to be fair to the witness, Dr. Nevin, who was being questioned about mefloquine toxicity and quinism. He said the following:

Our group was formed largely to advocate for and to support and promote education and research on this medical condition, which we have termed "quinism". We chose this language very deliberately. We believe that quinism is a disease, that chronic quinoline encephalopathy is a medical condition caused by the poisoning of the brain by these drugs.

The symptoms that I have been describing, the symptoms that are acknowledged as being potentially long term in individuals who take mefloquine, are not just side effects. These symptoms are not just adverse reactions to the drug. These symptoms and the signs that accompany them are manifestations of an underlying disease that has been caused by the poisoning of the central nervous system by these drugs.

There are many reasons why we believe that. The symptoms and signs clustered together, for example, are evidence of a disease. However, we have an increasing understanding with time of the pathophysiology, meaning the disorder in structure and function, of the central nervous system that underlies these signs and symptoms.

When you have a putative pathophysiology, when you think you understand how the body—or in this case, the brain—is being disordered and you have consistent signs and symptoms, you have a disease. It's not merely a syndrome. These aren't merely side effects. It's a disease.

The term "quinism", the disease quinism, encompasses the entirety of the symptoms that are experienced by veterans suffering from mefloquine poisoning.

General Downes, could you respond to that?

BGen Andrew Downes: I'd like to respond to a number of different elements.

The first one is that quinism is not a recognized diagnosis. It doesn't exist in the manual of diagnoses that we use when we're coding things.

It is also a hypothesis, and Dr. Nevin refers to it himself as a hypothesis. A hypothesis is an idea that is not fully supported by research. He's put some evidence together to outline his case. In the

future, evidence might demonstrate that he is correct, but at the moment, the evidence is weak.

Some of the research he is drawing on, for example, some of these rat studies and so on that Colonel Jetly was speaking about a moment ago, refer to brain stem injuries, but some of the symptoms that people are describing would not be consistent with brain stem injuries.

There are some inconsistencies in this idea, and I'm not an expert in the brain and in mefloquine, but I've been reading the work of experts who criticize Dr. Nevin's work. I'm trying to extract the truth from this discussion at the expert level.

I remain unconvinced that this is what's going on, but I think we should not be so arrogant as to dismiss it. I think we have to be open to the possibility and continue to monitor the work that's being done. One day, I hope to have a definitive answer.

• (1600)

Mr. Bob Bratina: Would other factors be included in causing some of the extreme symptoms that we've seen and read about? For instance, use of other not prescribed drugs? We've heard of that happening. We're trying to draw conclusions from very serious incidents. Especially in the past, there have been references to the Canadian Airborne Regiment and so on. How can we say, for sure, that the behaviours were specifically the result of one thing when they could be the result of many things?

BGen Andrew Downes: That's a challenge. Trying to attribute an outcome to an incident or to a medication can be very difficult. When one looks at anecdotes, at single cases or groups of single cases, one might easily overlook other factors that might be at play.

When we were speaking a bit earlier—and there's no evidence for this—what role did heat have to play in this? Were people dehydrated? Was that a stressor? We don't know of other medications some of these people might have been taking. Were other substances being used? We don't know. That's why it's important to look at studies done at a population level where some of these things are controlled or where one can assume, based on the large numbers in the study, that they're being controlled.

The Chair: Thank you.

Ms. Ludwig.

Ms. Karen Ludwig (New Brunswick Southwest, Lib.): Thank you, all, for your testimony here today.

Brigadier-General Downes, you mentioned the contraindications of prescribing mefloquine. If a serving member, prior to being deployed, checked off some of those boxes, might that have restricted him or her from the mission?

BGen Andrew Downes: I suppose it depends on when and where the mission was.

Ms. Karen Ludwig: Let's say Somalia.

BGen Andrew Downes: Somalia: I was a student in those days and not working in the system at that time, so I don't know exactly what took place. From what I have read, screenings weren't done in that sense. There wasn't a check, a questionnaire that was filled out by serving members, but the expectation would have been that people would have had their medical file annotated or the pharmacy record on them would have been kept.

It's difficult at this point to look back at that, because pharmacy records are required to be kept for two years, so some of these records have been lost, not due to malice, but in the normal process of maintaining records.

Ms. Karen Ludwig: I have a question on that. If someone was getting a prescription filled at that time, and they were an active member, would they have been getting a prescription filled at a pharmacy or agency on base, or was it typically off base?

• (1605)

BGen Andrew Downes: Almost certainly it would be on base. I suppose it's possible that some were filled in a civilian pharmacy, but they would have typically been on base, either in a pharmacy or through a regimental unit medical station.

Ms. Karen Ludwig: Okay. Thank you.

My next question is actually regarding the Korean conflict. My father did two tours of duty in Korea. In cases of malaria, or to reduce the risk of malaria, were those soldiers prescribed an anti-malarial drug?

BGen Andrew Downes: I certainly don't know about that. I don't know if anybody else does.

Col Rakesh Jetly: I'm not sure about then. In Africa, for sure; Cambodia, for sure; Korea, I can't be positive.

Ms. Karen Ludwig: To extend further my line of questioning, I'm just wondering about the other types of anti-malarial drugs that had been prescribed in previous conflicts and if there were comparable outcomes or questions regarding the prescriptions and the after-effects.

BGen Andrew Downes: Certainly anti-malarials have been provided for a fairly significant period of time, certainly predating mefloquine. We can't really speak to given missions at this point, but we do know that doxycycline had been used, and chloroquine was used in certain areas where the malaria is not resistant to chloroquine.

All of these medications have side effects. Some of the studies even suggest in terms of the side effect profile that although the particular symptoms are different, the actual numbers of side effects are similar between mefloquine and doxycycline, for example. In fact, the discontinuation rate of the two medications is about the same.

Ms. Karen Ludwig: Thank you.

Although there do not appear to be active studies taking place in Canada, are Canadian officials working closely with our allies in Australia, the United States and even Germany where they have banned it?

BGen Andrew Downes: I'll ask Colonel Jetly to speak to that. He is quite engaged with the international community.

Col Rakesh Jetly: Essentially, the military is a subpopulation of the larger population. Countries are looking. Every opportunity we get to talk to our allies about what they are looking at... The Australians have been looking. They just had a Senate hearing, and they have a few clinics in place where they are looking at people who have neuropsychological problems related to deployment, not specifically because of mefloquine, but if they have the reported problems. We are in communication, and we'll certainly share any information that we gather with them, and likewise. We're on that exchange.

Ms. Karen Ludwig: Dr. Jetly, how is that research being funded? In the case of the Australians, is it the Australian government?

Col Rakesh Jetly: I think it's the Australian government—their VA, I believe.

Ms. Karen Ludwig: In other drugs that have been prescribed, anti-malarial drugs, do we know of any reactions to them?

Further, Mr. Downes, would there be a recommendation that the prescriptions that are filled on base be more closely tracked over time?

BGen Andrew Downes: Things have changed over time. I can tell you how things work right now with prescriptions provided on base. We have a system that, whether a prescription to a military member is obtained in a civilian pharmacy or on base, it is entered into the same system, as long as the individual uses his or her Blue Cross card when they go to a civilian pharmacy.

These things are all tracked through a single system, but we have not had that system throughout our history. We've only had it the last 10 or so years. Nothing is foolproof, but I do think we're in a much better position now than we were in the past to track these sorts of things.

We also have an electronic health record now, since the mid-2000s, which also allows us much better access to information. Previously, when we were using paper-based records, things would be entered there and sometimes papers would get misplaced, as can happen. Now, with things being entered directly into this electronic health record, it is a permanent record that clinicians have access to no matter where the patient is working.

• (1610)

Ms. Karen Ludwig: Thank you.

The Chair: Ms. Wagantall.

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

Thank you, all, for being here.

I'm pleased with what has transpired since the first study this committee did on mental health, which brought forward a number of witnesses who have dealt with mefloquine and its impact on their lives. The surgeon general has put forward a report that resulted in mefloquine's becoming a drug of last resort instead of a priority drug. Health Canada has greatly changed the monograph in regard to this drug. I don't believe that just happened because who knows why. Clearly, around the globe, there's a lot of action on this drug and its impact on armed forces, especially with our allies, with the research that's being done.

I'm greatly disturbed, though, with the fact that we're looking and saying, "Now we're doing this." You are doing a far better job of following the armed forces, determining whether or not it's safe for them to do this based on past history and whatnot. However, we have a significant cohort of individuals who took this drug not knowing what it was. They were forced to use it. They were not allowed to refuse it or they would lose their deployment. It's true that a lot of the testimony to this date has been anecdotal. A lot of times, I don't think you start a study to deal with an issue unless you have that anecdotal evidence first.

I will very quickly ask the question, and I just want a yes or no answer from each of you. In looking at this issue, have you read or do you give any weight to the studies this committee carries out? Have you read the testimony of those veterans who came to this committee? I just want a quick yes or no.

Col Rakesh Jetly: Yes.

BGen Andrew Downes: Yes.

Mrs. Cathay Wagantall: Thank you. I appreciate that.

We have an Order Paper question here, in which I asked how many Canadians had been given this drug over the course of their deployment. I was hoping the response would be from 1995 and onward. It's only from 2003 forward, which is unfortunate. That being said, you do take into account the reality that members move between ranks and may have served during those years in different locations, so the number of prescriptions, 15,844 prescriptions, would include all of that. Even if we went down to half, clearly our armed forces, Veterans Affairs, is aware of who has used mefloquine in our army. Is this correct? Yes or no?

BGen Andrew Downes: No, I don't think it is correct to say we know who took it.

Mrs. Cathay Wagantall: How can you not if you prescribed it and handed it to them when they were on deployment?

BGen Andrew Downes: We don't have lists of who took it. It might be in their medical record, but we would have to pull every record to have a look.

Mrs. Cathay Wagantall: Excuse me, sir, in Somalia every person who was serving in the Canadian Airborne Regiment was handed it as they got off the plane. Would you not have a list of everyone who deployed?

BGen Andrew Downes: Well, on the medical side, we don't have a list of everybody who deployed. Perhaps—

Mrs. Cathay Wagantall: Could you get it?

BGen Andrew Downes: —a list exists somewhere, but—

Mrs. Cathay Wagantall: Please don't tell me that we don't know who has served where. I could put it out on Facebook and I would know every person who was deployed to Somalia.

BGen Andrew Downes: Well, I would challenge that, but I would —

Mrs. Cathay Wagantall: It would be pretty close.

BGen Andrew Downes: Well, I would say, though that—and, sir, perhaps this is a question for you—in the past we have not tracked very well the people who have deployed. I think it would be fair to say that was the case back in the early 1990s.

Mrs. Cathay Wagantall: Okay. Can I ask, then, knowing what our new monograph says about the potential for this to cause permanent injury to these individuals... In Australia they have identified 14 conditions—not symptoms, conditions—that are basically the result of having taken the drug. Can we not say that we are going to do everything we can to reach out to Canadian veterans who took mefloquine to find out if they are suffering from the effects of this drug? We have a new monograph. We have a new report from the surgeon general. None of that information has been in any way disseminated to our veterans, who may have or did take this drug while they were on tour and are experiencing these conditions now. Our government, our armed forces, is not attempting to reach out to them. What is our plan for screening related to mefloquine specifically?

BGen Andrew Downes: Related to mefloquine specifically, we are not planning to do a screening of all people who may have taken this drug. What we are doing is encouraging people who have symptoms to come forward for care, regardless of whether the symptoms are related to mefloquine or something else.

•(1615)

Mrs. Cathay Wagantall: Okay.

BGen Andrew Downes: I can tell you that even back in the 1990s I had a patient who believed his symptoms were related to mefloquine—

Mrs. Cathay Wagantall: Excuse me, sir, I don't want to interrupt, but I just have so much to ask.

BGen Andrew Downes: Okay. That's no problem.

Mrs. Cathay Wagantall: I appreciate that there's nothing specifically being done for mefloquine itself at this point in time. However, from the surgeon general's report—and I realize this isn't your report specifically, but I'm sure you're familiar with it—it says that the CAF "members deploying to Somalia did not participate in the SMS study since the guidelines of the study were not compatible with the operational requirement to deploy to Somalia."

Yet they were given this drug. The whole purpose of front-end loading that drug and being on that drug while they were in Somalia was to be part of this test. That's the reason the Canadian Armed Forces got tens of thousands of this drug and took no other anti-malarial drug with them to Somalia. Is it not a misuse of that drug in that circumstance when we did not comply with the requirements to have that drug as part of that deployment?

BGen Andrew Downes: I'm sure you've seen the Auditor General's report from 1999—

Mrs. Cathay Wagantall: Yes.

BGen Andrew Downes: —that looked at this issue and identified shortcomings, certainly, in our processes surrounding the prescription of mefloquine to deploying members. I should point out that prior to going to Somalia, we also accessed mefloquine for a number of other deployments, and in those particular circumstances, we complied with the requirements of the study.

The Chair: Mr. Chen.

Mr. Shaun Chen (Scarborough North, Lib.): Thank you, Mr. Chair.

I want to thank our witnesses for being here today.

I know from the last meeting where we had witnesses on this topic there was much concern about the number of servicemen and servicewomen who are choosing to use mefloquine. I do know the Canadian Armed Forces made the decision to prescribe the medication only when it had been requested.

One of the previous witnesses has shared that in the U.S., mefloquine accounts for less than 1% of the prescriptions to treat servicewomen and servicemen. Currently, in the Canadian Armed Forces that's at 5%. Can you speak to some of the reasons you might be aware of as to why individuals are opting for mefloquine?

BGen Andrew Downes: I don't think the numbers you have are the most up-to-date numbers.

Mr. Shaun Chen: What would be the up-to-date numbers?

BGen Andrew Downes: Last year, 2018, there were three people who received mefloquine. I don't know how many in total received anti-malarials. So far this year there has been none.

Mr. Shaun Chen: Then, essentially, with respect to last year, are you aware of the reasons that those three individuals opted for this particular drug?

BGen Andrew Downes: I don't know what their individual reasons were, but in order to be able to prescribe mefloquine on request, people have to have taken it before and not had significant symptoms associated with it. Basically, they've demonstrated their tolerance for mefloquine is good. It's under those circumstances that we provide it, assuming there are no other contraindications.

Mr. Shaun Chen: Correct. So somebody might request it if they've taken the drug before and they're able to use it without any adverse side effects. There are other medications that are available. Given this information you've just shared, that so far this year nobody has requested it, and last year there were only three servicemen and servicewomen who requested it, and given the concerns that have been raised around this particular drug, what is the rationale? Although I hear from you that the research is possibly not entirely definitive, what is the rationale to continue to offer this particular drug? Is it because the other options are not suitable for the people who might opt in for this drug? Can you speak more about that?

• (1620)

BGen Andrew Downes: We wanted to have it still in our formulary for cases where the other drugs were contraindicated. If somebody was allergic to the other medications, for example, we still wanted to have this as a possibility. We do prefer to prescribe the others should they not be contraindicated.

Mr. Shaun Chen: In the U.S. there have been veterans who have been compensated for medical conditions that were directly linked to the use of mefloquine. Do you know of any cases in Canada where that has occurred or possible cases moving forward where that might be the same situation?

BGen Andrew Downes: When you say "compensated", are you referring to Veterans Affairs compensation?

Mr. Shaun Chen: I'm not aware. I just understand that in the U.S., some folks have been compensated, veterans specifically.

BGen Andrew Downes: Right. There would be different ways people could be compensated for that. One would be through

litigation, but there would be the other way, which is through Veterans Affairs.

I'll invite Dr. Courchesne to speak to that.

Dr. Cyd Courchesne (Director General, Health Professionals Division, Chief Medical Officer, Department of Veterans Affairs): Thank you.

At Veterans Affairs the message has been consistent: Any service member who has developed any illness or injury as a result of their service can apply. That includes if they believe that mefloquine is a cause of their illness or injury.

We don't compensate for cause, however. We compensate for a diagnosed medical condition. It is possible that some veterans have applied for a disability award for PTSD, but we don't track what the cause of their PTSD is. If you serve and you have a diagnosis of PTSD, you get your disability award and treatment and benefits that go along with that. Every case is looked at on a case-by-case basis, and we have repeatedly invited veterans to come forward.

Mr. Shaun Chen: With respect to the types of compensation that we may have provided to veterans, it's more in terms of dealing with the conditions they currently are in and to assist them. In any of those cases, have we linked specifically the cause of those conditions to the use of mefloquine?

Dr. Cyd Courchesne: Again, we don't award for cause. It could be any cause. Again, these veterans served in a special duty area, and all they need is a record of having deployed and a confirmed diagnosis by their treating physician, and that's enough for us to give them a disability award.

Mr. Shaun Chen: Has there been any litigation—

The Chair: Sorry, you're out of time.

Ms. Wagantall.

Mrs. Cathay Wagantall: Thank you.

In theatre there are a lot of dynamics that the average Canadian wouldn't experience when they're taking this drug. At the same time, the monograph says very clearly that, if you are experiencing anxiety, feeling that people are trying to harm you, depression, seeing or hearing hallucinations—hallucinations that come with this drug—feelings of restlessness.... All these things are common already to a military setting.

You're in a state of fight or flight the whole time you're there, from what I understand. Yet, if this drug is being used, it says that you must stop using it at the onset of anxiety.

My question on this one is: Why are we even continuing to consider it? I know you've said that you encourage them to use the other two first, but they still have the freedom to make that other choice. Do you inform them of the permanent disabilities that can happen with the onset of the first dose of this particular drug, even when they've used it in the past? Are they made aware of how seriously this drug can impact them permanently, for the rest of their lives?

•(1625)

BGen Andrew Downes: I'd just like to clarify a point, and that is that, when we prescribe it to somebody now, it's either because the other anti-malarials are contraindicated or it's because they have chosen to and have taken it before without having significant symptoms. It has sort of been tested, if you will.

There is disagreement amongst experts about whether one pill can cause long-term adverse health effects. We don't say "and one pill"; we say there is a risk. What we tell patients is what's in the drug monograph.

Mrs. Cathay Wagantall: Okay, thank you.

You mentioned the work that's going on among our allies. Is Canada actively involved in any research going on internationally or within Canada in regard to mefloquine?

BGen Andrew Downes: The Canadian Forces is not actively involved in research regarding mefloquine. We are engaged in all sorts of mental health research projects that would certainly be of benefit to all patients who may have—

Mrs. Cathay Wagantall: Okay, so are you aware that in Australia, as part of that research that came up with a definitive list of 14 conditions that an individual can end up with as a result of using mefloquine, they had an entire year where any member of their armed forces or veterans had the opportunity to come forward, as they did to our committee, and testify to what they experienced or felt that they experienced in relation to this drug? I assume that's part of it. The more people you have who can have that conversation, the more you're going to come up with some clearer identifiers. With that testimony, they immediately put into place 24-7 psychological care available to those veterans at any time due to the trauma that they experienced in having to present this testimony.

Does that not say to you that we, as Canadians, in regard to our own veterans, should be taking an active role to determine for ourselves exactly what this drug has done historically to our veterans who are suffering and continue to suffer today the results of having used this drug in a circumstance where they were ordered to take it?

BGen Andrew Downes: I'm not aware of the information that you provided from Australia. I've never read in any report anything about 14 conditions being diagnosed down there.

I don't know, Colonel Jetly, if you've heard of that, but this is—

Mrs. Cathay Wagantall: Gentlemen, you just told me you're totally aware of what is going on internationally, and this was announced weeks ago, the end of their study and what they had determined from it. Can we get a copy of that? It's from the Australian veterans affairs.

BGen Andrew Downes: We'd certainly be very interested to see that.

Mrs. Cathay Wagantall: Okay. I bet you could google it.

The Chair: Ms. Blaney.

Ms. Rachel Blaney: Thank you again for this. It's been a very interesting discussion.

I heard loud and clear that, after January 2018, only three people have taken it. At this point you only take it if you've taken it in the past. When somebody who is currently serving or who is now a

veteran believes that they may have had a physical reaction to mefloquine, what happens next? What is the process for them to come forward, and how does that work? Is it different? I want to know if it's different for people who are still serving and people who are now veterans.

BGen Andrew Downes: The process is a little bit different for veterans versus serving members because the Canadian Forces runs its own health system, whereas veterans get their care through the civilian health system.

Ms. Rachel Blaney: How is it different? If you can only tell me about the serving members, I'm happy with that.

BGen Andrew Downes: I'll tell you about the serving members. For serving members who are concerned about their symptoms and wondering if they may be related to mefloquine, they need to see one of their health care providers—whether that's a physician or a psychologist or what have you—in order to start the discussion on what the concerns are, what the symptoms are, to ask about the exposure to mefloquine, when it was taken, etc., to try to understand the circumstance.

The next step would be potentially a referral to specialists to help manage some of the other symptoms that might be identified, and then treatment would be provided based on the symptoms.

•(1630)

Ms. Rachel Blaney: One of the other things you said earlier today was around tracking. My colleague asked some questions about how we track and how we know. It seems there's some confusion there. I'm just wondering if that has improved. What's being done to sort of look historically and bring forward that information. It seems to me that Canadians want to know, and people who have served their country, whether they're still serving or now are veterans, want to know that information. It's a little frustrating to have this sort of nebulous "we don't know for sure" answer.

BGen Andrew Downes: It's true that we do not have a registry of people who have taken mefloquine. We don't have a formal process by which we're tracking people as a group.

Ms. Rachel Blaney: Is that improving at all? Today we're dealing with mefloquine, but what if in the future we're dealing with something else? Is there any work being done to get these records a little more clear and systematic so that we can find that information when we need to?

BGen Andrew Downes: As I mentioned earlier, we have an electronic health record and we can access information in that health record, but what we don't have is a specific registry of people, a list of names with their symptoms and tests done.

Ms. Rachel Blaney: Do you have anything that talks about medication received?

BGen Andrew Downes: The place we could access that is through the system I mentioned earlier, which we've had in place for perhaps 10 years. I don't remember the exact date.

Ms. Rachel Blaney: From what I understand you are saying, basically, 10 years back, if there was a medication identified as something we should be concerned about, we would be able to pull out a list of people who accessed that medication so that we could address it in the future in this country.

BGen Andrew Downes: I believe we can do that. Certainly we could go through each person, but I'm not sure whether we could just do a data extraction and come up with a list. I'm not 100% sure of that, but I suspect it's possible.

Ms. Rachel Blaney: Is there a way we could find out if that's the case? Could you get that back to the committee at some point?

BGen Andrew Downes: Certainly I could look into that.

Ms. Rachel Blaney: Thank you.

The Chair: That ends our round. I don't know whether anybody had any more questions. We have some time left if anybody does. If not, then I'll thank the witnesses, following which we have to pass a budget.

On behalf of the committee, I thank everybody for attending today and helping to enlighten us on this topic. Thank you for all you do for the men and women who are serving and have served.

Everybody has a budget in front of them. Perhaps you've had a chance to look at it.

I need a motion to pass it.

Okay, Mr. Eyolfson.

Are there any questions on the budget?

(Motion agreed to)

The Chair: There is a motion to adjourn from Mr. Harvey.

(Motion agreed to)

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